An Analysis of Sentence Structures Used in English Paragraphs Written by Thai Primary School Students

การวิเคราะห์โครงสร้างประโยค ในงานเขียนระดับย่อหน้าภาษาอังกฤษของนักเรียนไทยชั้นประถมศึกษา

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Abstract

The purposes of this study were to examine sentence structures used in English paragraphs written by Grade 6 students and to compare the sentence structures used by the students with different English proficiency levels. The present study employed a quantitative study approach. The participants were 203 Grade 6 students at a primary school in northeast Thailand. Each was asked to take a proficiency test and write a descriptive paragraph. The frequency, mean, and S.D. were calculated to analyze the sentence structures used in paragraphs written by the students. The chi-square test was also used to compare the differences between the sentence structure occurrences of three groups of students with different proficiency scores. The results showed that the participants most frequently used coordinate main clauses. Moreover, no quotation was found in the paragraph written by the participants. Considering the production unit's length, the clauses' mean length was 6.8. The mean length of sentence and T-unit were 16.24 and 11.15, respectively. The chi-square test revealed that the difference between these three proficiency levels and the performance in employing sentence structures of Grade 6 students is significant at the 0.05 level in terms of using correlative clauses, relative clauses, complement clauses, adverbial clauses, and mean length of clauses. The results proved that different proficiency levels affected the sentence structures employed in paragraph writing. This study can be helpful in EFL writing instruction and English writing teaching material development.

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บทคัดย่อ

บทความวิจัยนี้มีวัตถุประสงค์ เพื่อศึกษาโครงสร้างประโยคในงานเขียนระดับย่อหน้าของนักเรียนชั้นประถมศึกษาปีที่ 6 และเพื่อเปรียบเทียบความแตกต่างของโครงสร้างประโยคระหว่างกลุ่มของนักเรียนที่มีระดับความสามารถทางภาษาอังกฤษที่แตกต่างกัน การวิจัยในครั้งนี้เป็นการวิจัยเชิงปริมาณ โดยศึกษากับนักเรียนระดับชั้นประถมศึกษาปีที่ 6 จำนวน 203 คน ที่โรงเรียนประถมศึกษา แห่งหนึ่งในภาคตะวันออกเฉียงเหนือของประเทศไทย เครื่องมือที่ใช้ในการวิจัยคือ ข้อสอบวัดระดับความสามารถทางภาษาอังกฤษ และงานเขียนระดับย่อหน้าเชิงบรรยาย สถิติที่ใช้ในการวิเคราะห์ข้อมูล ได้แก่ ความถี่ ค่าเฉลี่ย ส่วนเบี่ยงเบนมาตรฐาน และการทดสอบไคสแควร์ เพื่อเปรียบเทียบความแตกต่างของค่าเฉลี่ยระหว่างนักเรียนที่มีระดับความสามารถทางภาษาอังกฤษทั้ง 3 กลุ่ม ผลการวิจัยพบว่า นักเรียนชั้นประถมศึกษาปีที่ 6 ใช้โครงสร้าง coordinate main clauses มากที่สุด โดยโครงสร้างประโยคแบบ quotation ไม่ปรากฏในงานเขียนระดับย่อหน้าของนักเรียน เมื่อพิจารณาความยาวของงานเขียน พบว่า ความยาวเฉลี่ยของอนุประโยค คือ 6.8 ความยาวเฉลี่ยของประโยค คือ 16.24 และความยาวของ T-unit คือ 11.15 ผลการทดสอบไคสแควร์แสดงให้เห็นว่า การใช้โครงสร้างประโยค correlative clauses, relative clauses, complement clauses, adverbial clauses และความยาวเฉลี่ยของอนุประโยคของนักเรียนชั้นประถมศึกษาปีที่ 6 ที่มีระดับความสามารถทางภาษาต่างกันมีความแตกต่างอย่างมีนัยสำคัญที่ระดับ 0.05 ผลการวิจัยสรุปได้ว่า ระดับความสามารถทางภาษาอังกฤษสามารถมีผลต่อการใช้โครงสร้างประโยคในระดับย่อหน้า ทั้งนี้ ผลการวิจัยนับเป็นประโยชน์ ในด้านการสอนและการพัฒนาสื่อการสอนทักษะเขียนภาษาอังกฤษในฐานะภาษาต่างประเทศอีกด้วย

คำสำคัญ: โครงสร้างประโยค งานเขียนระดับย่อหน้าภาษาอังกฤษ นักเรียนชั้นประถมศึกษา คลังคำศัพท์ของผู้เรียนที่เรียนภาษาอังกฤษในฐานะเป็นภาษาต่างประเทศ

Introduction

Effective communication is crucial in all aspects of life, including work and international settings. It is acquired through a societal process where people meet and exchange language (Genç, 2017). English serves as a vital passport for better opportunities in life, serving as a second or foreign language for countries where English is not the first language (Ahmad, 2016). Studying English is important for today's generation as it is an international language used in various aspects of life, requiring mastering listening, speaking, reading, and writing skills (Yulianti et al., 2019).

Among the four language skills, writing English tends to be particularly challenging (Yulianti et al., 2019). EFL learners who do not use English as a first language tend to experience many difficulties in writing English. They may need more experience in writing skills, a lack of practice, and insufficient time to improve their writing skills (Huy, 2015). Khemanuwong et al. (2020) also showed that English writing is challenging for EFL students due to a lot of stress, anxiety, a lack of English proficiency, and English experiences. Writing in English is even more challenging for young students (Huy, 2015). According to Richard-Amato (1996), young language learners have experienced writing problems because of limited

cognitive and social development and the complexity of foreign language writing. Having considered writing at the sentence level, students still frequently experience difficulties composing each sentence in writing tasks (Chuenchaichon, 2018; Putrayasa et al., 2018). The sentences were ambiguous in structure, so the ideas conveyed through the writing pieces could not be understood well (Putrayasa et al., 2018). These difficulties have been obstacles for young EFL learners around the world.

The problems mentioned above have undoubtedly been obstacles for young EFL learners in Thailand. Even though all Thai EFL students study English for 12 years in primary and secondary schools, the outcomes of this education are still problematic (Noom-ura, 2013). The previous study has investigated the challenges faced by lower-level language learners, particularly those in elementary and middle schools within the Thai context. For instance, Aprilia (2021) examined sentence patterns in Thai students' essays and found that many young Thai students struggled to construct proper English sentences due to their limited grammatical and vocabulary knowledge. The finding suggests that writing difficulties among young Thai EFL learners are often rooted in insufficient knowledge at the sentence level.

Reviewing previous studies suggests that analyzing learners' sentence structures and syntactic features can help teachers better understand learners' difficulties. Results from such syntactic studies provide insights relevant to writing development and writing ability (Kraus, 1957). Learning sentence structures can lead to significant achievements in students' writing abilities. Moreover, research relevant to the current study revealed that there is a relationship between English proficiency levels and syntactic complexity in student writing. For instance, Jiang et al. (2019) analyzed the syntactic complexity of 410 narrative writings by beginner and intermediate L2 English learners across four proficiency levels. Their study revealed a positive relationship between English proficiency levels and syntactic complexity in the narrative tasks composed by young EFL students. Similarly, Martínez (2018) examined the differences in syntactic complexity among students with varying English proficiency levels (lower intermediate and intermediate) in their third and fourth years of secondary school. The findings confirmed that English proficiency levels influence writing quality. Furthermore, Berninger et al. (2011) studied the development of syntactic skills in children from grades one to seven through tasks of writing complete sentences and combining sentences. They found that while most children could write complete sentences, the ability to combine sentences varied notably from fourth grade onward and was linked to syntax and spelling skills. Their research emphasized the growing role of syntax and transcription in transforming ideas into written language during early education. The abovementioned studies underscore the importance of proficiency levels in syntactic complexity, providing a foundational basis for analyzing sentence structures in young learners' writing, as undertaken in the present study. To advance the understanding of sentence structures, it is essential to cultivate awareness of the components of sentence construction in a systematic sequence and to comprehend how writing skills can be enhanced at different proficiency levels. Consequently, it can be concluded that a thorough knowledge of sentence structure significantly contributes to students' writing success.

While several studies have attempted to gain in-depth insight into the sentence structure used by high school and undergraduate students, little attention has been paid to studying the sentence structure used by young students, specifically elementary students

(Grades 1-6). In addition, several studies have emphasized overall sentence structures (e.g., simple sentences, compound sentences, and complex sentences) in young EFL contexts (Ernawati, 2014; Lestari, 2017; Putrayasa et al., 2018). However, high-quality writing is often characterized by accuracy and a richness of sentence structures (Yu, 2021). Despite this, there has been no comprehensive examination of the different connectors employed within these sentence structures. Additionally, there is a lack of research that focuses on the sentence structures utilized by Thai students. Furthermore, no study has taken the crucial step of analyzing the sentence structures used by Thai learners. Given that the challenges of writing skills for young Thai learners primarily lie at the sentence level, understanding the language components they produce is essential. Therefore, the present study adapted the methodological and design frameworks from Berninger et al. (2011), which focus on detailed patterns and the correctness of each sentence structure. These structures include the single independent main clause, non-coordinate main clause, coordinate main clause, correlative clause, relative clause, complement clause, subordinate clause, adverbial clause, quotation, non-clausal independent units, and fragments. Although Berninger's analytical framework was originally designed for L1 English students, it can be effectively adapted to analyze the sentence structures of L2 students. Specifically, the framework's emphasis on different types of syntactic constructions, sentence combining, and the translation of ideas into structured sentences aligns well with the challenges faced by L2 learners. Their study emphasized the development of syntactic awareness, which can be beneficial in improving writing skills for L2 learners. Thus, adapting Berninger's framework can provide a comprehensive approach to analyze and improve the sentence structures in L2 students' writing. Similarly, Lu's (2010) measures were adapted to gauge the length of the production unit, which demonstrated very high reliability in distinguishing written production across various proficiency levels. Lu's method highlights the importance of the production unit's length in effectively measuring syntactic maturity. Thus, researching this topic is crucial, as it can offer many benefits to Thai teachers seeking to improve sentence structure instruction for young students. Ultimately, this research could facilitate students' writing development and enhance their proficiency. Since good writing normally requires accuracy and the richness of language structure, the sentence structure scheme in the present study can be utilized as the writing guideline for practicing and improving students' writing skills. Moreover, analyzing the sentence structures and text length in such a cross-sectional study can be considered as a predictor of L2 writing development and L2 placement level.

Objectives

1. To examine sentence structures used in paragraphs written by Grade 6 students.
2. To compare the sentence structures used in paragraphs written by Grade 6 students with different English proficiency levels.

Research Methodology

The quantitative research method employed in this study aims to investigate the sentence structures used in English paragraphs written by Grade 6 students and to compare the sentence structures used by the students with different English proficiency levels.

1. Participants of the Study

The participants were 203 Grade 6 students at a primary school in Maha Sarakham province. Participants were selected using the convenience sampling method. These students were enrolled in the Fundamental English course (E16101) during the 2023 academic year. The participants and their guardians were informed about the project and asked to sign a consent form before joining the study.

An ethics approval of the study was granted from the university review board (MHESI. 660301.7/419) before recruiting both groups of the participants and collecting all data.

2. Research Instruments

2.1 An English Proficiency Test

An English proficiency test was used to group the students into three levels: high proficiency, intermediate proficiency, and low proficiency. Cambridge English tests are aligned to the Common European Framework of Reference for Languages (CEFR). Moreover, the Cambridge English Language Assessment provides the English level tests for four levels: 1) General English, 2) For Schools, 3) Business English, and 4) Young Learners. Since Grade 6 students were considered A1 level (Office of the Basic Education Commission, 2014), the test for young learners was adapted from the Cambridge University website (Cambridge University Press, n.d.), which provides free tests suitable for determining the English language level. The test comprised 20 items, with each item providing three multiple-choice options. The maximum score was 20. In the present study, to group the students, the students with total test scores ranging between 1 and 6 were considered for the low-proficiency level, 7 to 13 for the intermediate proficiency level, and 14 to 20 for the high-proficiency level. As the study was conducted in the first semester, the test did not examine the students' writing skills specifically but assessed their overall English skills in order to plan the English lesson plans effectively.

2.2 A Writing Task

A writing task was developed and used as a course assignment. The task was designed based on the content of the student's English book, the CEFR framework, and the standard of learner qualities. For the English subject, Grade 6 graduates must be able to "write to ask for and give data about themselves, friends, families, matters around them, their feelings about various matters and activities around them, as well as provide brief justifications" (Ministry of Education, 2008). In addition, the Ministry of Education also declared the Common European Framework of Reference for Languages (CEFR) for Thai students and Grade 6 graduates must be able to "write the information about him/herself and others" (e.g., where they live, who they know and what they own)" (Office of the Basic Education Commission, 2014). Moreover, after reviewing the school's course description, it was found that students are required to apply language features in practical situations, such as reading

aloud, identifying the main idea, engaging in question-and-answer exchanges, interacting, describing, and searching for information. Thus, providing descriptive task for students might help them get familiar with and comprehend the descriptive writing style more effectively. The task required the students to write a paragraph in English under the topic "*My Dream Place to Visit*" (a topic included in the Grade 6 students' textbook) within one hour.

2.3 A Young Learner Written Corpus

The corpus used in this study consists of 203 written paragraphs in English written by the participants who completed the writing task under the topic "*My Dream Place to Visit*." The participants were categorized into three groups based on their English proficiency levels obtained from the proficiency test scores. Table 1 shows 45 low-proficiency students, 123 in the intermediate group, and 35 in the high-proficiency group. The corpus includes a total of 8,244 words: 1,601 produced by low-proficiency students, 4,771 by intermediate-proficiency students, and 1,872 by high-proficiency students.

Table 1

The Young Learner Written Corpus

|	Low proficiency students	Intermediate proficiency students	High proficiency students	Total
Paragraphs	45	123	35	203
Tokens (total words)	1,601	4,771	1,872	8,244
Average length (words)	35.58	38.79	53.49	127.86

3. Data Collection

The data collection was conducted during the first semester of the academic year 2023 (May-June 2023). The time sequence and procedures of the data collection are described as follows (Figure 1). In the first step, the participants were asked to take an English proficiency test to classify them into three groups which are 1) the high-proficiency group, 2) the intermediate-proficiency group, and 3) the low-proficiency group. Then, the teacher designed the writing plan based on a textbook unit of traveling around the world. The writing plan consumed four hours. In the first hour, the lesson's lead-in activity and vocabulary were presented. In the second hour, the structure or expression used in the content and the content were presented. In the third hour, the while-writing activity was assigned and done in the class. Finally, the paragraph writing was assigned as the post-writing activity in the fourth hour. Next, the students' paragraphs as the data were collected by taking pen-paper-based writing tasks.

During the coding of sentence structures, the absence of capital letters and punctuation marks was attributed to temporary inattention rather than an inability to construct sentence structures. Consequently, the researcher did not categorize these omissions as sentence fragments. Similarly, minor misspellings resulting from unintentional errors were not classified as fragment sentences.

Figure 1

Data Collection Procedures

Step 1: Administered the test and grouped the students into
1) high-proficiency students
2) intermediate-proficiency students and
3) low-proficiency students by using an English proficiency test.

Step 2: Assigned a writing task and collected the paragraphs written
by Grade 6 students with different English proficiency levels.

Step 2.1: Teacher designed a writing plan based on
textbook unit on traveling around the world.

Step 2.2: Writing task, named *My Dream Place to Visit*
was provided in the writing lesson.

Step 2.3: Students' paragraphs were collected from all
students and categorized into three groups
based on students'proficiency test scores.

Step 3: Compiled the written corpus from 203 descriptive paragraphs
in English about *My Dream Place to Visit*, written
by Grade 6 elementary students.

Step 4: Analyzed the data using syntactic analysis adapted from
Berninger et al. (2011) and Lu (2010) measures.

Step 5: Categorized and coded the sentence structure
based on fourteen syntactic measures.

4. Data Analysis

After compiling the written corpus, the students' paragraphs were analyzed to reveal sentence structures. The measures of sentence structures were adapted from Berninger et al. (2011) and Lu (2010) to analyze the sentence structures used by the students. Berninger et al.'s measures offer eleven sentence structures, including fragments, which other studies did not discuss in detail. Lu's measures were adapted to measure the length of the production unit, which achieves very high reliability in distinguishing written production between different proficiency levels. Lu's method emphasizes the production unit's length, effectively measuring syntactic maturity.

Fourteen sentence structure measures (adapted from Berninger et al., 2011; Lu, 2010) were investigated in Grade 6 students' paragraphs, aiming to find the number of occurrences in each sentence structure. Each sentence from the student's paragraph was coded based on the 14 syntactic measures, namely single independent main clauses, non-coordinate main clauses, coordinate main clauses, correlative clauses, relative clauses, complement clauses, subordinate clauses, adverbial clauses, quotations, non-clausal independent units, fragments, mean length of clauses, mean length of sentences, and mean length of T-units. A T-unit is defined as one main clause along with all subordinate clauses and non-clausal structures attached to or embedded within it, essentially representing the shortest grammatically permissible sentence (Hunt ,1966). Table 2 presents a coding scheme based on the syntactic measures established by Berninger et al. (2011) and Lu (2010).

Table 2

A Coding Scheme of Sentence Structure Measures

Type of T-units	Description	Example	Code
Type 1: *Single independent main clauses*	A clause that can stand by itself as a simple sentence	I like math class.	IC
Type 2: *More than one independent clause*			
A. Non-coordinate main clauses	A coordinating conjunction (e.g., And) is placed at the beginning of an independent clause	***And*** then we went to the playground.	NMC
B. Coordinate main clauses	Two independent clauses are combined with a coordinating (and) conjunction	For my birthday, I got a new toy airplane ***and*** I got to go to the zoo.	CMC
C. Correlative clauses	Two independent clauses are combined with a correlative (either …. or) conjunction	***Either*** we will have a party ***or*** we will go to the fair	CC

Type of T-units	Description	Example	Code
Type 3: *T-Units with Dependent Clauses*			
A. Relative clauses	An independent plus relative clause (e.g., who)	The person **who** *lives in that house* is nice.	RC
B. Complement clauses	A clause that complements, or completes a noun, adjective, or verb.	I think **that** *you are nice.*	ComC
C. Subordinate Clauses	A subordinate clause has a subject and a verb, but it cannot stand alone as a sentence. A clause begins with certain words or short phrases called subordinating words (e.g., because)	She helped me **because** *she is nice.*	SC
D. Adverbial clauses	A dependent clause that modifies a verb, adjective, or adverb in its sentence. It acts like an adverb.	Sarah ran **as** *fast* **as** *she could.*	AC
Type 4: *Others*			
A. Quotations	Words or phrases that are taken from someone. They are usually put in quotation marks.	*"Go to your room!"* said my mom.	Q
B. Non-clausal independent units	Free-standing words that are found in spoken language (e.g., The end., Hi!, Very good.)	The end.	NCIU
C. Fragments	A sentence that is missing one of three critical components: a subject, a verb, and a complete thought	*Student in the school.*	F
Type 5: *Length of Production Unit*			
A. Mean length of clauses	The number of words per the number of clauses	-	MLC
B. Mean length of sentences	The number of words per the number of sentences	-	MLS

Type of T-units	Description	Example	Code
C. Mean length of T-units	The number of words per the number of T-units	-	MLT

The English paragraphs written by Grade 6 students were categorized into three groups based on the students' proficiency level. Then, the types of sentence structures were manually coded to count the frequency of their occurrences in three groups: the low-proficiency group, intermediate-proficiency group, and high-proficiency group. This coding process facilitated the analysis of differences in sentence structure usage across the three proficiency levels. Each paragraph was coded by two raters. Inter-coder reliability was conducted, revealing 90% rater agreement. Descriptive statistics, i.e., means, standard deviations, and percentages, were calculated to see the sentence structures used in the paragraphs written by Grade 6 students. Berninger et al.'s (2011) methodological framework was adapted, including an analytical method using the chi-square test. Due to the discrepancies in the sample size, the chi-square test was employed to see if there was a difference between the use of sentence structures among the three groups of students. Examples of students' writing at each proficiency level can be seen in Appendix A.

Findings

This section reports the sentence structures used in the Young Learner Written Corpus and the differences in the use of sentence structures by students with different English proficiency levels.

1. Sentence Structures Used in the Young Learner Written Corpus

The results from the descriptive statistics of the 14 sentence structures are shown in Tables 3 and 4. The occurrences of 14 sentence structures are displayed in Table 3, showing the occurrences of using each sentence structure. The participants most frequently used coordinate main clauses (508 occurrences), single independent main clauses (225 occurrences), subordinate clauses (223 occurrences), relative clauses (21 occurrences), non-coordinate main clauses (19 occurrences), fragments (13 occurrences), complement clauses (11 occurrences), correlative clauses (nine occurrences), adverbial clauses (four occurrences), and non-clausal independent units (one occurrence), respectively. Moreover, no quotations were found in the paragraphs written by the participants.

According to Table 4, the single independent main clauses and fragments were most frequently found in low-proficiency students, with mean scores of 1.4 (SD = 1.45) and 0.15 (SD = 0.42), respectively. Intermediate proficiency students used coordinate main clauses with the highest mean score of 2.72 (SD = 1.36). In addition, high-proficiency students most frequently employed the following structures with the highest mean scores: non-coordinate main clauses ($\bar{x}$ = 0.14, SD = 0.35), correlative clauses ($\bar{x}$ = 0.22, SD = 0.59), relative clauses ($\bar{x}$ = 0.28, SD = 0.57), complement clauses ($\bar{x}$ = 0.2, SD = 0.47), subordinate clauses ($\bar{x}$ = 1.54, SD = 1.03), adverbial clauses ($\bar{x}$ = 0.08, SD = 0.28), and non-clausal independent units ($\bar{x}$ = 0.02, SD = 0.16). Considering the length of production units, high-proficiency

students produced the highest mean length of clauses ($\bar{x}$ = 7.19, SD = 2.16) and T-units ($\bar{x}$ = 12.45, SD = 3.92).

Table 3
The Occurrences of Different Sentence Structures

Sentence structures	Occurrences			
	Low level	Intermediate level	High level	Total
	(N = 45)	(N = 123)	(N = 35)	(N=203)
Type 1: Single independent main clauses	63 (28%)	116 (51.56%)	46 (20.44%)	225
Type 2: More than one independent clause				
A. Noncoordinate main clauses	3 (15.79%)	11 (57.89%)	5 (26.32%)	19
B. Coordinate main clauses	97 (19.09%)	335 (65.94%)	76 (14.96%)	508
C. Correlative clauses	0	1 (11.11%)	8 (88.89%)	9
Type 3: T-Units with Dependent Clauses				
A. Relative clauses	1 (4.76%)	10 (47.62%)	10 (47.62%)	21
B. Complement clauses	0	4 (36.36%)	7 (63.64%)	11
C. Subordinate clauses	34 (15.25%)	135 (60.54%)	54 (24.22%)	223
D. Adverbial clauses	0	1 (25%)	3 (75%)	4
Type 4: Others				
A. Quotations	0	0	0	0
B. Non-clausal independent units	0	0	1 (100%)	1
C. Fragments	7 (53.85%)	6 (46.15%)	0	13

Type 5: Length of Production Units

A. Total length of clauses	292.43	823.98	251.77	1368.18
B. Total length of sentences	661.07	2220.27	559.67	3441
C. Total length of T-units	407.57	1469.68	435.64	2312.89

Table 4

Mean Values and SD of Different Sentence Structures from Three Proficiency Levels

Sentence structures	Low (N = 45)		Intermediate (N = 123)		High (N = 35)		Total (N = 203)
	$\bar{x}$	SD	$\bar{x}$	SD	$\bar{x}$	SD	$\bar{x}$
Type 1: Single independent main clauses	1.40	1.45	0.94	1.41	1.31	1.57	1.22
Type 2: More than one independent clause							
A. Non-coordinate main clauses	0.07	0.25	0.09	0.29	0.14	0.36	0.10
B. Coordinate main clauses	2.16	1.28	2.72	1.37	2.17	1.27	2.35
C. Correlative clauses	0	0	0.01	0.09	0.23	0.59	0.08
Type 3: T-Units with Dependent Clauses							
A. Relative clauses	0.02	0.15	0.08	0.35	0.28	0.57	0.13
B. Complement clauses	0	0	0.03	0.18	0.20	0.47	0.07
C. Subordinate clauses	0.76	0.77	1.10	0.94	1.54	1.04	1.13
D. Adverbial clauses	0	0	0.01	0.09	0.09	0.28	0.03
Type 4: Others							
A. Quotations	0	0	0	0	0	0	0
B. Non-clausal independent units	0	0	0	0	0.03	0.17	0.01
C. Fragments	0.16	0.42	0.05	0.22	0	0	0.07
Type 5: Length of Production Units							
A. Mean length of clauses	6.49	1.71	6.70	1.90	7.19	2.16	6.80
B. Mean length of sentences	14.69	10.42	18.05	10.45	15.99	10.52	16.24
C. Mean length of T-units	9.06	3.84	11.95	7.96	12.45	3.92	11.15

2. Differences between the Use of Sentence Structures by Students with Different English Proficiency Levels

The chi-square test was employed to see if there was a difference between the three groups of students' sentence structure occurrences. All occurrences of each sentence structure from Grade 6 students with different proficiency levels were the input in analyzing procedures. Table 5 presents a significant difference in using the sentence structures to write the paragraphs among Grade 6 students with different English proficiency levels. According to Table 5, the chi-square test was performed to evaluate the relationship between sentence structures and students' proficiency levels. The relationship between these variables was significant in using correlative clauses, x^2 (4, N = 203) = 20.24, $p < .001$, for example, *"They are not only amazing but also important for the history of the city."* (High_S1), relative clauses, x^2(4, N =203) = 14.47, $p = .006$, for example, *"It's the country that I most want to visit."* (High_S18), complement clauses, x^2(4, N = 203) = 15.55, $p= .004$), for example, *"I think it might be yummy."* (Intermediate_S3), adverbial clauses, x^2(2, N = 203) = 9.65, $p = .008$, for example, *"I don't want to go where a lot of people go."* (High_S22) and mean length of clauses, x^2(172, N = 203) = 208.79, $p = .029$. This means that the proficiency level affected the sentence structures employed in paragraph writing.

Table 5

The Comparison of Sentence Structures of Grade 6 Students with Different Proficiency Levels

Sentence structures	Level	$\bar{x}$	f	Pearson Chi-Square Test		
				x^2	df	Sig.
Single independent main clauses	Low	1.40	63			
	Intermediate	0.94	116	15.04	14	0.376
	High	1.31	46			
Non-coordinate main clauses	Low	0.07	3			
	Intermediate	0.09	11	1.411	2	0.494
	High	0.14	5			
Coordinate main clauses	Low	2.16	97			
	Intermediate	2.72	335	19.73	14	0.139
	High	2.17	76			
Correlative clauses	Low	0	0	20.25	4	0.000*
	Intermediate	0.01	1			

Sentence structures	Level	$\bar{x}$	f	Pearson Chi-Square Test		
				x^2	df	Sig.
	High	0.23	8			
Relative clauses	Low	0.02	1			
	Intermediate	0.08	10	14.48	4	0.006*
	High	0.29	10			
Complement clauses	Low	0	0			
	Intermediate	0.03	4	15.55	4	0.004*
	High	0.20	7			
Subordinate clauses	Low	0.76	34			
	Intermediate	1.10	135	17.83	10	0.058
	High	1.54	54			
Adverbial clauses	Low	0	0			
	Intermediate	0.01	1	9.65	2	0.008*
	High	0.09	3			
Quotations	Low	0	0			
	Intermediate	0	0	-	-	-
	High	0	0			
Non-clausal independent units	Low	0	0			
	Intermediate	0	0	4.82	2	0.090
	High	0.03	1			
Fragments	Low	0.16	7			
	Intermediate	0.05	6	8.57	4	0.073
	High	0	0			
Mean length of clauses	Low	6.50	292.43			
	Intermediate	6.70	823.98	208.79	172	0.029*
	High	7.19	251.77			

Sentence structures	Level	$\bar{x}$	f	Pearson Chi-Square Test		
				x^2	df	Sig.
Mean length of sentences	Low	14.69	661.07			
	Intermediate	18.05	2220.27	192.22	186	0.307
	High	15.99	559.67			
Mean length of T-units	Low	9.06	407.57			
	Intermediate	11.95	1469.68	227.17	194	0.052
	High	12.45	435.64			

p < 0.05

Discussion

This study aimed to investigate sentence structures used in paragraphs written by Grade 6 students and compare them to the sentence structures used by students with different English proficiency levels. As seen by the occurrences, mean scores, and standard deviations, there were differences in using sentence structures and length of production units.

1. The Sentence Structures Used in the Young Learner Written Corpus

According to the results, 10 out of 11 sentence structures were found in the paragraphs written by Grade 6 students. The coordinate main clauses were most frequently employed by Grade 6 students, while non-clausal independent units were found the least. However, quotations were not found in any written paragraphs. This is in line with the study of Berninger et al. (2011), in which the most common sentence structures observed in young students (from first to seventh grade) were single independent clauses and single independent clauses introduced by coordinating conjunction. It can also be assumed that most Grade 6 students could write the paragraphs with various structures when instructed to do so. However, the absence of quotations in the descriptive task revealed interesting issues regarding the writing instruction and the writing genre differences. Teachers should plan well-prepared syntactic instruction for these students to improve their sentence structure knowledge, leading to better writing achievement. In other words, this study highlights the need to make writing instruction interesting and understandable for young students. Moreover, different types of writing had a big influence because writing requires different styles and arrangements. The teacher may be aware of the sentence constructions that caused difficulties for the students and provide them with accurate knowledge about syntactic features. This would help them apply the accurate usage of various sentence structures in their real lives (Berninger et al., 2011; Ernawati, 2014; Sojisirikul & Vasuvat, 2014).

After examining the sentence structures across various proficiency levels, it was found that low-proficiency students used single independent main clauses most frequently, while intermediate-level students used these structures least. These findings align with previous research indicating that younger writers tend to use single independent main clauses more frequently than their more skilled counterparts (Berninger et al., 2011; Boonyarattanasoontorn, 2017; Khemanuwong et al., 2020; Promsupa et al., 2017; Putrayasa et al., 2018). It can be concluded that the single independent main clause is the simplest structure for the low-proficiency level group. By focusing on non-coordinate main clauses, the findings indicate that the group with high proficiency levels tended to use such structures more than the other groups. After examining occurrences of fourteen different sentence structures, it was noted that while the most common structure in all three groups was the coordinate main clauses, it was most frequently used in the intermediate group. Correlative clauses were more prevalent in the high-proficiency group than in the other groups, with the low-proficiency group not producing any correlative sentences in their writing.

Similarly, complement clauses, adverbial clauses, and non-clausal independent units were more commonly found in the high-proficiency group compared to the other groups. Fragments were present in both the low and intermediate proficiency groups. This could be attributed to the fact that students at intermediate and high proficiency levels may better understand and retain complex sentence structures than those in the low proficiency group (Berninger et al., 2011; Cahyono et al., 2016; Martínez, 2018; Piyapasuntra, 2009). It might be because the intermediate and high proficiency groups have a richer vocabulary and a more robust background in the English language. Furthermore, this suggests that proficiency levels indicate the potential for advancement in mastering more intricate sentence structures (Promsupa et al., 2017; Putrayasa et al., 2018). Therefore, low and intermediate proficiency students should be screened to identify their English language learning needs and to plan appropriate language instruction.

In addition, the more insightful results from the low-level group's mean score indicated that the students in the low-proficiency group produced no correlative clauses, complement clauses, adverbial clauses, quotations, and non-clausal independent units. Nevertheless, upon examination of the intermediate group, it became apparent that the students did not use quotations or non-clausal independent units. In contrast, the high-level group did not produce any fragments in their writing. These results are consistent with Berninger et al.'s (2011) study that the number of complex sentence structures increased for the more proficient compared to the lower-proficiency writers, and the fragments occurred less in the advanced writers.

In terms of sentence structures, it can be concluded that the complexity of sentence structures can influence how students with varying levels of English proficiency utilize them (Thongyoi & Poonpon, 2020). This is evidenced by the lower proficiency group opting for simpler structures and including fragments more frequently than the other groups. These students may benefit from tailored instruction to enhance their skills in syntactic construction within written language. It can be inferred that the complexity of certain sentence structures presents difficulties for young students with lower proficiency levels. This suggests that writing

practice provided to students of different proficiency levels should be varied and adapted to accommodate these differences.

When examining the length of the production units, it was observed that students with high proficiency levels had a higher mean length of clauses and T-units than students with low and intermediate proficiency levels. One possible interpretation of these results is that the high-level group's longer clauses and T-units could be attributed to their proficiency in the English language, as suggested by Hunt (1970), indicating that students with higher proficiency levels may have better retention of vocabulary and comprehension of complex structures. This aligns with previous studies (e.g., Ortega, 2003; Thongyoi & Poonpon, 2020) which found that advanced-level EFL students tended to produce more syntactic complexity than those with lower proficiency levels. Moreover, the results were supported by Lu (2010) in that the length of production unit measures was highly reliable to examine if each of these measures significantly differentiates between different proficiency levels. This study also supports Cooper's study (1976) which investigated syntactic complexity measures and stated that Hunt's method of measuring syntactic maturity could be successfully applied to measuring second language acquisition. It can be seen that syntactic complexity can be considered a predictor of writing quality (Berninger et al., 2011; Chuenchaichon, 2018; Cooper, 1976; Lu, 2010; Thongyoi & Poonpon, 2020).

2. Differences between the Use of Sentence Structures by Students with Different English Proficiency Levels

This study's examination of syntactic complexity in the writing of Grade 6 students with different English proficiency levels contributes significantly to the understanding of language acquisition and writing development in young EFL learners. The results of the present study indicated notable variations in sentence structure among various proficiency levels, aligning with the findings of Berninger et al. (2011), Jiang et al. (2019), and Martínez (2018) in their investigations of young EFL writers. These studies highlighted the impact of language proficiency levels on sentence comprehension. Compared to other studies, the present study's results align with those of Berninger et al. (2011), who examined sentence structures in narrative writings from grades one to seven. The findings demonstrate distinct patterns in the utilization of correlative clauses, relative clauses, complement clauses, and adverbial clauses, with students in higher grades employing these structures more frequently. Analysis of the length of production units revealed a significant disparity in the average length of clauses, consistent with the earlier research conducted by Hwang et al. (2020). In their study, syntactic complexity was used to characterize learner proficiency and revealed that students with higher proficiency can produce more complex sentence structures. Having considered the sentence structures, most of the sentence structures were found to be increased consistently across different proficiency levels (non-coordinate main clauses, correlative clauses, relative clauses, complement clauses, subordinate clauses, adverbial clauses, mean length of clauses, and mean length of t-units). This can be caused by grammatical awareness, which can efficiently support syntactic awareness at sentence level in the lower proficiency group (Berninger et al., 2011). To promote the students' syntactic comprehension, grammatical awareness at the word level should also be emphasized in the language instruction. It can be concluded that the proficiency

level affected the sentence structures employed in paragraph writing by young students since different level groups can understand the complex structures based on their knowledge background.

Conclusion and Recommendations

To examine the syntactic elements found in paragraphs written by Grade 6 students, the occurrences were analyzed. The findings showed that the students employed all sentence structures except for quotations. The high prevalence of simple structures among young students indicates a lack of awareness and understanding of language complexity. In particular, students with lower proficiency levels tended to avoid constructing complex structures like correlative clauses, relative clauses, complement clauses, adverbial clauses, quotations, and non-clausal independent units.

The findings revealed a significant correlation between the three proficiency levels concerning using sentence structures. The differences in the utilization of correlative clauses, relative clauses, complement clauses, and adverbial clauses were evident, with students with higher proficiency employing these structures more frequently. It can be inferred that the proficiency levels affected the selection of sentence structures employed in paragraph writing by young students, as students at different levels demonstrate their ability to understand the complex structures based on their knowledge background.

However, this study has some limitations that warrant further investigation. While it explored the use of sentence structures among Grade 6 students with different English proficiency levels, the research was constrained by a small sample size. Future studies should aim to increase participant numbers for a more comprehensive analysis. In addition, as this study focused on participants within intact groups, future researchers could explore diverse sampling methods for a broader perspective. Additionally, this study did not explore how writing skills evolve with age. Future studies could examine how sentence structures change across different age groups of participants. Moreover, the study solely examined descriptive writing; future research could explore variations in sentence structures across different types of written paragraphs.

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Appendix A
Samples of Descriptive Paragraphs Written by Thai Grade 6 Students

The writing task required students to write a paragraph in English on the topic "My Dream Place to Visit" (a topic included in the Grade 6 textbook) within one hour. Thirty words were required as the minimum length of the paragraph and the paragraph was written in descriptive style.

1. Descriptive Paragraphs Written by Thai Grade 6 Students with High-Proficiency Level
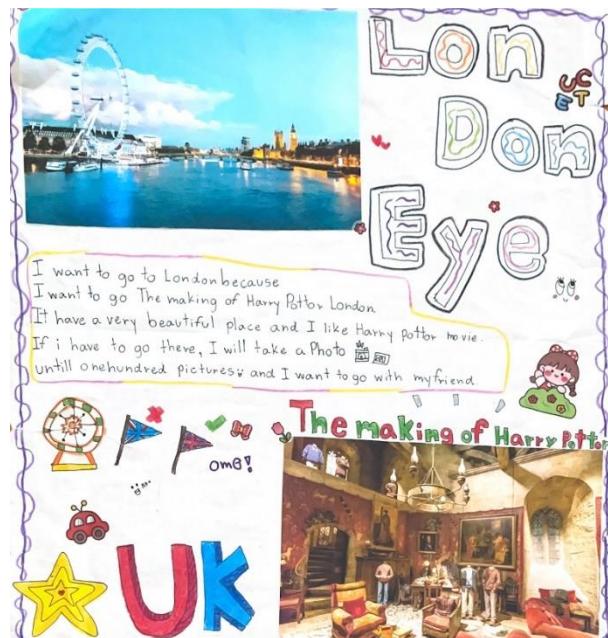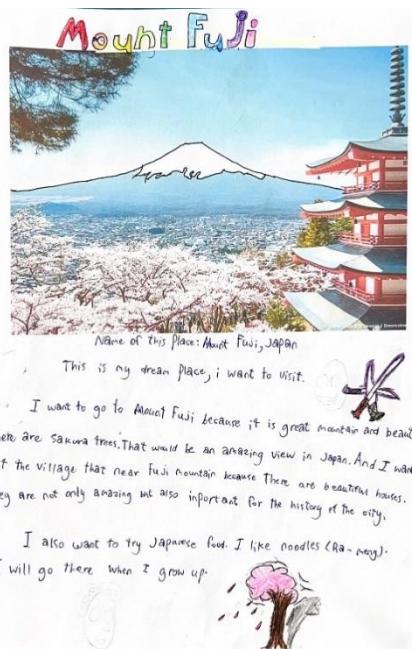
3. Descriptive Paragraphs Written by Thai Grade 6 Students with Intermediate-Proficiency Level
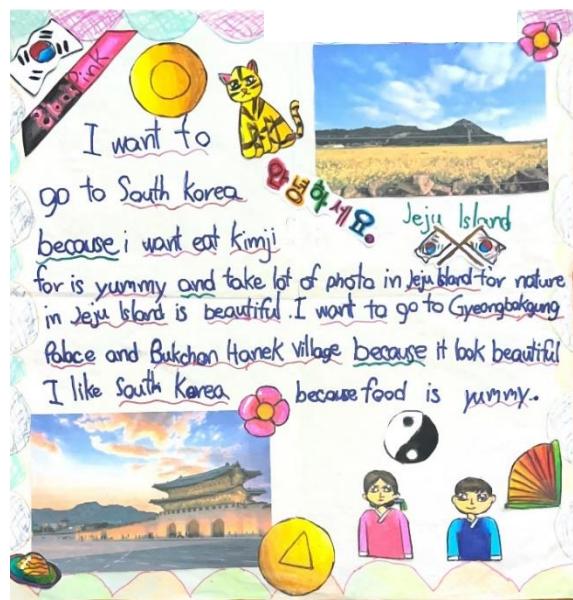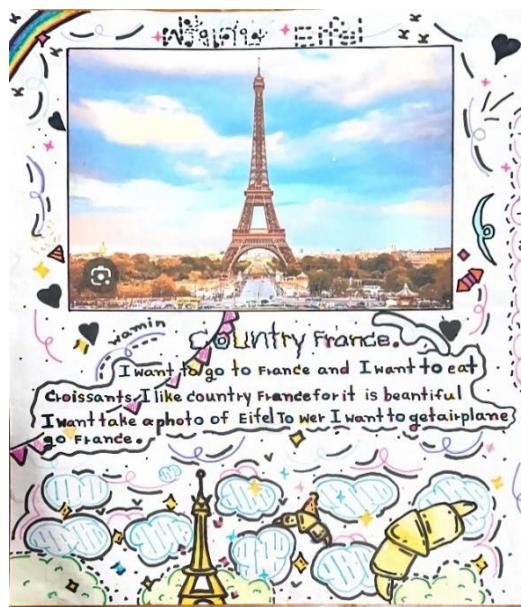
3. Descriptive Paragraphs Written by Thai Grade 6 Students with Low-Proficiency Level