Corpus To Enhance Verbal Complements Among Low English Proficiency Thai Learners

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Abstract

This study investigated how the corpus-based teaching approach could enhance L2 acquisition of English infinitive and gerund complements among low English proficiency young Thai learners of English. The students were divided into two groups of 32. One group learned English verbal complements through the corpus approach while the other did through the traditional approach. Data were collected through a pretest, a posttest, and an interview. The pretest results revealed low scores on English verbal complements in both groups and, based on a T-test, there was no significant difference regarding their English verbal complement knowledge. After the treatment, both groups could perform significantly better, p < .01. Both teaching approaches were found to have merit. However, the group achieved significantly experimental posttest scores ($\bar{x} = 7.69$) than the control group ($\bar{x} =$ 4.06), p < .01, indicating that the corpus approach is more effective than the traditional one. Moreover, the interview data corroborated the statistical results in that the experimental group had positive attitudes towards the corpus approach. This research has implications for both SLA and pedagogy.

Keywords: the corpus-based teaching approach; the traditional teaching approach; infinitive and gerund complements; L2 acquisition; young Thai learners of English

Introduction

Among various linguistic features, English verbal complements are one of the most problematic topics for Thai learners (Keawchaum & Pongpairoj, 2017; Kitikanan, 2011). In an attempt to enhance the acquisition of English infinitive and gerund complements among low English proficiency young Thai learners of English, we trailed a corpusbased approach. This study compared this corpus teaching approach with the traditional teaching approach. Although the application of the corpus-based approach in language classrooms has been increasingly developed, the use of corpus has been mostly used with the tertiary level students. It is not widespread among primary and secondary schools. This study, therefore, shed light on the applicability of the corpus approach to young learners. Moreover, the findings of this study contributed to the pool of research by providing a more complete account of the implementation of the corpus approach to teach low English proficiency Thai learners of English.

According to Crystal (1992), a corpus is "a collection of linguistic data, either compiled as written texts or as a transcription of recorded speech. The main purpose of a corpus is to verify a hypothesis about language—for example, to determine how the usage of a particular sound, word, or syntactic construction varies" (p. 85). A significant feature in a corpus is a concordance line, which is a line of text taken from a corpus showing results of the search word. A list of search word or node word is displayed together with other words in various contexts in the concordance lines where many linguistic aspects can be observed. Johns (1991) stated that the practice when teachers and

learners make direct use of corpora themselves is called "data-driven learning" (DDL). It is an inductive and discovery-based approach where learners observe a particular phenomenon of a language from concordance lines and figure out how the phenomenon works before testing a hypothesis (Kulsitthiboon & Pongpairoj, 2018). As Schmidt (1990) pointed out, what language learners become conscious of, pay attention to, and notice can determine their learning's outcome.

On the other hand, the traditional teaching approach is considered deductive. According to Beck (2009), this approach's main focuses are lectures, oral recitations, rote learning, and memorization. Students are first presented with grammatical rules and then practice using them. A teacher explains grammatical points explicitly, followed by giving students some exercises. Students then become familiar with the target language patterns.

English verbs can be divided into two categories: finite and nonfinite verbs. A finite verb changes in form to agree with its subject to indicate tenses whereas a non-finite verb does not. Present participles, past participles, and infinitives are considered non-finite verbs. As far as gerunds are concerned, they are derived from verb + -ing and function as nouns.

Many studies have shown that English verbal complements seem to be problematic for non-native English speakers, such as L1 Mexican speakers (Ruiz, 2020), L1 Korean speakers (Lee & Kang, 2021), L1 Indonesian speakers (Unggul & Gulö, 2017), and L1 Arabic speakers (Almulla, 2015). Previous studies in the Thai context also showed that Thai learners found English verbal complements difficult to acquire (Keawchaum & Pongpairoj, 2017; Kitikanan, 2011). According to Kitikanan (2011), errors found among Thai students' verbal complement structures seem to be influenced by negative transfer. Negative transfer happens when the structures of L1 and L2 are dissimilar. Thai students tend to use base forms of verbs instead of 'to-infinitive' or 'gerund' after the main verb (Kitikanan, 2011), for example You need go for a check-up at the hospital', instead of You need to go for a check-up at the hospital' (p.6).

To the best of our knowledge, no studies have investigated the use of a corpus consultation to enhance the acquisition of English infinitive and gerund complements among low English proficiency Thai learners of English and so this study fills a gap.

Literature Review

The Corpus-based Teaching Approach

Implementing the corpus approach in language classrooms is considered an inductive teaching approach, which starts with examples and learners discover rules through contexts by themselves. Students can develop their critical thinking skills when figuring out the language rules. According to Prince and Felder (2006), the inductive teaching approach is a student-centered approach where students actively cooperate in learning activities. Therefore, it is a good way to motivate students' learning process.

Many scholars have pointed out several advantages of using a corpus in language teaching. One of the most significant advantages is that corpora provide learners with authentic materials and real-life examples, which are considered better than made-up examples by the teacher due to authentic usages. As Chareonkul and Wijitsopon (2020) have pointed out, there are huge differences between the language presented in textbooks and the language English native speakers use in real-life. Since examples of authentic communication can be found in a corpus, integrating a corpus into a language classroom can promote real language use to the students. Moreover, using corpora also promotes independent learning outside of the classroom. Learners can use a corpus to search for the language people use by themselves everywhere if they can get access to the internet.

Dazdarevic and Fijuljanin (2014) have mentioned another benefit of using corpora for language teaching; i.e., "it gives students the chance to actually work with language and analyze it." Mueller and Jacobsen (2015) have suggested that online corpora could be used as useful references for language learners. Moreover, Kartal and Yangineksi (2018) have pointed out that corpus tools can promote teaching and learning activities. Indeed, Talhakul (2015) has stated

that introducing the corpus teaching approach into translation classrooms could successfully enrich students' learning experience. Students can examine words or phrases in concordance to see their occurrences in contexts. The corpus approach allows students to have direct involvement with the language because they need to analyze the data and find the solution to linguistic problems themselves. When students consult a corpus, they encounter various authentic examples in a variety of genres and contexts. From among numerous concordance lines, they can select to analyze the lines which suit their interest the most. The corpus approach provides them with the freedom to design their learning process, such as numbers of and types of example sentences they were interested in, rather than relying on examples provided by their teachers.

Previous studies on the use of the corpus teaching approach or DDL among Thai learners of English have also been explored. Kulsitthiboon and Pongpairoj (2018) conducted a study on the effects of cooperative corpus consultation on the acquisition of L2 English adjective + preposition collocations. Their findings suggested that cooperative corpus consultation can facilitate the learning process and promote discussion and cooperation among students. In addition, according to Phoocharoensil (2012), corpus consultation enhances not only vocabulary learning but also grammar and linguistic pattern acquisition. Students will enjoy discovering grammar rules on their own through corpus consultation. The students in the study believed that learning English grammar through concordance lines is better than other learning methods.

Several challenges are, however, involved in implementing a corpus approach in the language classroom. Krieger (2003) mentioned the issue of corpus selection. The teacher needs to make sure that the chosen corpus is suitable for a particular teaching context and is representative of the target register. A corpus does not need to be large in order to be effective. The important thing is that the teacher needs to keep the learning objectives of the class in mind when selecting the corpus.

The Traditional Teaching Approach

The traditional teaching approach has been widely used in schools. Liu and Long (2014) pointed out several advantages of this approach. First, since teachers take control of the whole instruction in the classroom, they can explain language aspects that students do not understand. Second, teachers can adjust the content if it is too difficult or too easy. Additionally, students with low English proficiency levels probably learn better through this teaching approach.

However, there are some problems with the traditional teaching approach. For instance, many scholars have claimed that this teaching approach hardly helps students develop their critical thinking, creativity, problem-solving, and decision-making skills because teachers are the center of the classroom (Phoocharoensil, 2012; Ruiz, 2020; Talhakul, 2015; Thamraksa, 2011). Thamraksa (2011) mentioned that, in this approach, students are passive recipients of learning. Furthermore, it is hard for teachers to take care of every student in the classroom, and so students who have different needs or interests from the majority of students may be overlooked. Liu and Long (2014) also pointed out that a major disadvantage of the traditional teaching approach is that the knowledge and resources provided by teachers might not be sufficient. The contents provided by teachers might not match the learners' interests. Some students may feel that there is no relationship between classroom tasks and their real-life language usages. Students can become quickly overwhelmed and unmotivated, making them lose interest as the subject appears stressful, tedious, and no longer enjoyable (Phungphol, 2005).

According to Ruiz (2020), the majority of English textbooks usually present infinitive and gerund complements in a traditional way; that is, the students need to memorize lists of verbs together with their verbal complements without any further explanations on their uses. Although believing that the traditional teaching approach is one of the typical ways of teaching grammar, Ruiz (2020) claimed that the way the traditional approach presents the lists of verbs through individual and decontextualized words is not an effective way of teaching verbal complements because it does not allow learners to be active in the

acquisition process. As Wherrity (2001) stated, "students are not provided the opportunity to test and develop hypotheses as to the conceptual boundaries of the items" (p. 45). Martinez-Garcia and Wulff (2012) claimed that although the English textbooks present accurate information and grammar, the lists are not complete and mostly do not represent real communicative use. Therefore, students learning through the traditional teaching approach could encounter situations where the rules do not match the real language use. This means that, through this approach, students may have to memorize verbs that are not frequent in real contexts and also may not be able to use the verbs they need if those verbs are not on the list they have memorized.

In regards to the Thai context, Thamraksa (2011) stated that the traditional teaching approach has long been the focus of Thai education. As students are passive learners in the traditional teaching approach, they may feel discouraged and lose motivation for learning. Phoocharoensil (2012) suggested that the traditional teaching approach is not always an effective way to teach grammar. He pointed out that students can easily become bored when learning grammar through this approach, where the teacher is the center of the classroom and directs students to learn mostly through memorization.

Verbal Complement Structures in English

In English, there are three groups of verbal complements:

1) Verbs taking only *infinitives*

Duffley (2012) proposed that "the term to-infinitive is generally used in English grammar to refer to to-sequences such as to be. What is referred to as an *infinitive* is made up of two words. The first word is always the same and bears a remarkable resemblance to the preposition to. Its presence is seen as an infinitive marker, i.e., an element with no meaning of its own whose role is merely to signal the presence of an infinitive. The second element of the infinitive is a verb stem that follows to" (P. 22). Examples of verbs followed by infinitive complements only are want, choose, and decide.

2) Verbs taking only *gerunds*

A gerund, also known as the -ing form, is formed by adding the -ing suffix to the bare *infinitive* form (e.g., talk + -ing = talking) (Duffley, 2012). Examples of verbs followed by gerund complements only are *enjoy*, *finish*, and *recommend*.

3) Verbs taking both *infinitives* and *gerunds*

Certain verbs can be followed by both *infinitives* and *gerunds*. Examples of verbs followed by both infinitive and gerund complements with only a little or no change in meaning are *like*, *prefer*, and *hate*. Examples of verbs followed by both infinitive and gerund complements with a change in meaning are *stop*, *forget*, and *quit*.

Verbal Complement Structures in Thai

Iwasaki and Ingkaphirom (2005) pointed out that some Thai verbs allow 'simple serialization'; that is, two or more main verbs can immediately follow each other without any linker (p.162). This phenomenon is called a serial verb construction (SVC). An example of a serial verb construction is shown below.

(1) khǎw **chob faŋ** pleŋ he like listen music 'He likes to listen/ listening to music'

'chob' and 'faŋ' are in the serial verb construction because the two verbs can immediately follow each other without any overt linker.

Evidently, verbal complement structures in English and Thai are different in many aspects. In English, a finite verb changes its form to agree with the subject and to indicate tenses. Two English finite verbs cannot immediately follow each other. The second verb is a non-finite verb. In Thai, verbs do not change the form to agree with the subject or indicate tenses. Two or more bare verbs can occur alongside without changing form.

Research Questions

The research questions for this study were as follows:

- 1. To what extent can a corpus consultation enhance the acquisition of English infinitive and gerund complements to low English proficiency students?
- 2. Between the traditional teaching approach and the corpus approach, which approach provides a better result in enhancing the acquisition of English infinitive and gerund complements of low English proficiency students?
- 3. What are low English proficiency Thai EFL students' attitudes toward learning English infinitive and gerund complements through a corpus consultation?

Methodology

Participants

The subjects of the study were 64 Thai secondary students from a public school. The school provides the government's national curriculum in the Thai language. All English classes are conducted in Thai. Purposive sampling was used in selecting the population. The participants were classified equally into two groups: a control group and an experimental group. Their age range was between 14 and 15 years old. None of them had lived in an English environment for more than three consecutive months. All the participants were classified as low English proficiency level learners determined by the Oxford Quick Placement Test (OQPT) (Allen, 1992).

The recruitment of the participants was officially allowed by the school principal. The students were asked whether they were willing to do the OQPT. The students were informed of the test and what they needed to do. If they agreed to do the test, they would sign a letter of consent. After finishing the OQPT, the students were asked again if they wanted to take part in the research. If they did, the researcher would explain about the research and give the information sheet and another letter of consent to the students. The participants were informed that they had the right to withdraw from the study at any time without providing any reasons or advanced notification. If the

participants decided not to participate in the study, their decision would not affect their studies in any way.

Research Design

The experimental group learned English verbal complements through the corpus approach, while the control group learned them through the traditional teaching approach. The study was conducted in the fifth week of the first semester. Both participant groups had learned about verbal complements with their teacher before taking the pretest. The experiment lasted five weeks (2 hours a week) and both learner groups were taught by the researcher. In the first week, both groups were required to do a pretest, which lasted 30 minutes. The pretest was designed to examine their knowledge of the verbal complements, to-infinitives and gerunds. Then, another 1.5 hours was an introduction of English verbal complements. The second - fourth weeks were the training and practicing sessions. The posttest was conducted in the fifth week. Even though there was limited time for training and practicing sessions, many previous studies suggested that three training sessions were sufficient for students to comprehend the use of corpus and to be able to understand the linguistic features effectively (e.g., three training sessions in Youssef, 2020; one training session in Kartal & Yangineski, 2018, and Kulsitthiboon & Pongpairoj, 2018; a 90-minute training session in Mueller & Jacobsen, 2015). After the posttest, ten participants from each group were randomly selected for interviews about their attitudes to using a corpus and using the traditional teaching approach in the classroom. Each interview lasted approximately 5 minutes. The lesson plan, teaching materials, and tests were validated by three experts.

Word Selection

There were altogether 20 verbs in this experiment: 10 verbs that take infinitive complements only and 10 verbs that take gerund complements only. Verbs that can be followed by both to-infinitives and gerunds were excluded from the study. The same set of verbs were tested in both the pretest and the posttest. The verbs were taken from

Access 3 Student's Book (Evans & Dooley, 2019), an English coursebook used in the school for grade 9 students. The criteria for word selection was frequency. Verbs in the coursebook were investigated to find the top ten most frequent verbal complements found in Corpus of Contemporary American English (COCA), a free online access corpus, for each group, as shown in Table 1.

Table 1 The Top 10 Most Frequent Verbs Followed by Infinitives Only in COCA and the Top 10 Most Frequent Verbs Followed by Gerunds Only in COCA

The top 1	The top 10 most frequent verbal complements found in COCA								
verbs follow	ed by infinitives only	verbs followed by gerunds only							
verbs	frequency	verbs	frequency						
1. want	1,081,589	1.keep	399,375						
2. ask	247,545	2.imagine	85,129						
3. wait	202,241	3.avoid	73,453						
4. happen	165,830	4.enjoy	71,899						
5. seem	161,012	5.suggest	68,795						
6. hope	147,262	6.miss	63,599						
7. agree	125,499	7.mind	58,580						
8. expect	100,931	8.appreciate	51,387						
9. offer	87,341	9.discuss	47,730						
10. choose	78,987	10.admit	42,327						

Procedures

Procedures in the Corpus-based Teaching Approach

The participants in the experimental group learned how to use the corpus, did paper-based and hands-on activities using corpus consultation. COCA was used in this study because of many significant advantages. The COCA interface and its operation are more userfriendly and convenient than other corpora, so it is relatively easy for low English proficiency young learners to comprehend. The users are not required to have any special linguistic knowledge or advanced computer skills to use COCA. It also provides detailed instructions on each feature. Moreover, COCA users can listen to the pronunciation of each word, see videos with the search word in the text, find related images from Google Images, and see a translation of each word in their preferred language. These features, therefore, can help low English

proficiency learners understand the search words better. Yusu (2014) agreed that COCA is a free online corpus that has advantages over other free corpora. Because of its tremendous advantages, COCA has been widely accepted and used in many studies (e.g., Boulton, 2016; Kartal & Yangineksi, 2018; Kulsitthiboon & Pongpairoj, 2018; Mueller & Jacobsen, 2015; Yusu, 2014). In this experiment, the students were presented with the web interface, how to use the COCA, and how to analyze the concordance lines.

In the training and practicing sessions, the experimental group was introduced to COCA's interface and its features such as List, Collocates, Compare, KWIC, and concordance lines. After that, they practiced using COCA by doing a paper-based concordance task. An example of the paper-based task for the experimental group is shown in Figure 1.

Figure 1

Example of Paper-based Activity (Task 1)

	SEARCH				FREQUENCY	CONTEXT	OVERVIEW					
BLOG	katemats.com	A	В	C	part of what an engineer does all day. This is why	engineers don't want to build a crappy product for	ast, just to get something out on the market					
BLOG	katemats.com	A	В	Ċ	'Il also demonstrate that you are interested in the	m and what they do. People want to know their v	work matters to their peers. # Get their opinion. Ask					
BLOG	katemats.com	A	8	Ç	skill. But landing pages and emails are important	too (at least if you want to reach and convert cus	tomers), so it's helpful to make sure other					
BLOG	sional.wordpress.com	A	В	C	sick and needs a ride to the doctor. Or if your friend	and needs a ride to the doctor. Or if your friends call and want to see a movie, # Look at what you have to do each day						
BLOG	sional.wordpress.com	A	В	C	get better if I get no feedback! And if you have a topic you want to hear more about, I'll be happy to do all the research for							
BLOG	kekbfm.com	A	В	C	31 50 68 Post navigation I want to be the kind of	person my dog is. # It's no secret						
BLOG	keutahrealestate.com	A	В	c	you also have other issues with regards to debts.	# You simply can not avoid dealing with foreclosu	are once it it gets started. # The basic instincts of most					
BLOG	anantonio.jobing.com	Α	В	C	successful " or " self-motivated " the candidate has	s been in previous jobs). Avoid doing this: you're	burying the key points of your message. # However					
BLOG	anantonio.jobing.com	A	В	c	tight profile to be difficult, consider skipping it ent	irely. Many of my resumes avoid using a summar	ry in favor of achievements and quick snippets of brand					

In Task 1, the sentences to be analyzed in the concordance lines were selected by the researcher to ensure that the sentences were not too complicated for the students to comprehend. Verbs in the concordance lines were mixed with both to-infinitive and gerund complements. The students were asked to circle the word that immediately followed the highlighted verb. The objective of the task was for the participants to explore the use of the two verbal complement types in authentic usages. Since COCA represents authentic language use normally difficult for English learners, e.g., some technical vocabulary in some particular genres which could pose a problem for

the learners, the researcher acted as a facilitator to guide students when needed and explained to them if they had any problems.

After finishing with the paper-based activities, the participants did the hands-on activity. In this task, the participants needed to access COCA to search for the correct verbal complements. Examples of the hands-on activity were as follows:

- (2) a. He keeps_____ (talk) to me.
 - b. I hope (see) my old friend next week.

The correct answer for (a) is 'talking' because 'keep' is a verb that needs to be followed by a gerund complement. For (b), the correct answer is 'to see' since 'hope' is a verb that requires a to-infinitive complement.

Procedures in the Traditional Teaching Approach

In the control group, the researcher first explained about English verbal complements and gave the students a list of 20 verbs together with their complements and meanings in Thai. The participants needed to memorize them all. After that, the participants did several exercises, such as multiple choices, dictations, matchings, true/false, and drills.

Examples of exercises used for the control group were as follows:

- (3) a. My mother keeps to telling me to read a lot.
 - b. I expect getting a new job by the end of this month.

The students needed to consider if there were any errors in each sentence. The answer for (3) a. is 'keeps telling' because keep requires a gerund complement, while 'expect to get' is the correct answer for (3) b. because expect is a verb that needs to be followed by an infinitive complement.

Research Instruments

Oxford Quick Placement Test (OQPT)

The Oxford Quick Placement Test (OQPT) (Allen, 1992) was a standardized test to classify the participants into low proficiency groups. The score range for low English proficiency learners was 0-16 as seen in Table 2.

Table 2The English Proficiency Levels according to OQPT Scores

Total scores	Proficiency levels
0–16	A1- Elementary
17–27	A2- Pre-intermediate
28–36	B1- Intermediate
37–44	B2- Upper-intermediate
45–54	C1- Advanced
55–60	C2- Proficient

Pretest and Posttest

A cloze test was used in the pretest and the posttest to measure the participants' to-infinitive and gerund complements knowledge before and after the experiment, respectively. There were 30 items in each test, consisting of 10 target test items and 20 distractors. The 10 target test items were divided equally into two types of verbal complements: 1) 5 test items for verbs + to-infinitives and 2) 5 test items for verbs + gerunds. Different sets of tests but with the same group of targeted verbs were used. The participants had 30 minutes to complete each test. In terms of scoring, each test item was worth 1 point. Thus, the full score of each test was 10. The students were required to read each sentence carefully and change the words in the parentheses to the correct forms. Examples of the target test items are given below.

(4) a. He has agreed _____(lend) me 10,000 THB.
b. I try to avoid _____(go) shopping on weekends.

The correct answer for (4) a. is 'to lend' since 'agree' is a verb that is followed by to-infinitives only. For (4) b., the correct answer is 'going' because 'avoid' is a verb that can be followed by gerunds only.

Interviews

Ten random students from each group were individually interviewed at the end of the experiment about their attitudes to learning through the corpus approach and the traditional teaching approach. Previous studies (e.g., Jamal et al., 2021; Kavanagh, 2022; Kulsitthiboon & Pongpairoj, 2018) also randomly selected only some participants for supplementary data. Each person was interviewed for

5 minutes. From the pilot study, a five-minute interview was sufficient to get enough information in order to meet the objectives of the study. The interviews were conducted by the researcher in the Thai language to ensure that the interviewees completely understood the questions and were able to fully express their opinions. The verbal reports were audio-recorded. The participants were asked whether they had heard of verbal complements as well as gerunds and infinitives before. They were also asked to report what they knew about verbal complements after the treatment. The students from the experimental group were asked if they thought they could use corpus at home to search for verbal complements besides those 20 verbs they had learned, and if they had any obstacles. The students from the control group were asked if they could remember the 20 verbs and their complements within five weeks, and if they had any obstacles. In the end, the interviewees were asked about the advantages and disadvantages of the teaching approach through which they had learned, and if they liked the approach.

The pretest and posttest were validated by three experts. The pretest, the posttest, the interview questions, and lesson plans were approved by the Research Ethics Review Committee for Research Involving Human Research Participants.

Results and Discussions

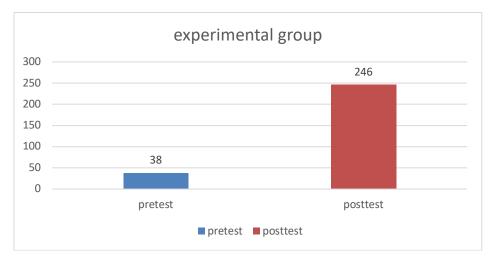
Table 3 and Figure 2 show the results of the pretest and the posttest of the experimental group.

Table 3 The Pretest and the Posttest Results of the Experimental Group

Experimental group	N	Min	Max	\bar{x}	S.D.	df	t	Sig
Pretest	32	0	4	1.19	1.09	31		
Posttest	32	3	10	7.69	1.91	31	15.259	.000

Figure 2

The Pretest and the Posttest Result of the Experimental Group



The results showed that all the participants in the experimental group had low English verbal complements knowledge (x = 1.19, S.D. = 1.09). After three weeks of learning and practicing using COCA, the participants did the posttest in the fifth week. From the posttest, it can be clearly seen that the participants performed a lot better than they did in the pretest. Figure 2 shows how the overall pretest score was 38 out of 320 or 11.88%, and rose sharply to 246 or 76.88% in the posttest. The *t*-test showed that the 32 participants in the experimental group had a mean score of 1.19 (S.D. = 1.09, SE = .193) in the pretest. After receiving the treatment, the participants could perform significantly better with the mean score of 7.69 (S.D. =1.91, SE = .337), t = 15.259, p < .01.

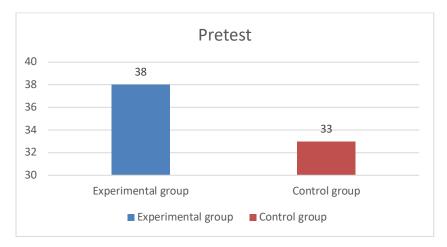
Hence, the results confirm that the corpus approach can be successfully used to significantly enhance English verbal complements knowledge of low English proficiency Thai learners of English.

The results of the pretests and the posttests from both groups were compared to see which approach would provide a better result. The pretest scores from both groups were compared in Table 4 and Figure 3 to confirm homogenous population.

Table 4 The Pretest Results between the Experimental Group and the Control Group

Pretest	N	Min	Max	x̄	S.D.	df	t	Sig
Experimental group	32	0	4	1.19	1.09	31		
Control group	32	0	4	1.03	1.18	31	.571	.572

Figure 3 The Pretest Results between the Experimental Group and the Control Group



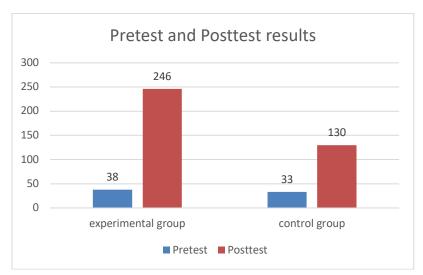
The pretest scores showed that both groups had similar English verbal complements background knowledge. The experimental group's score ($\bar{x} = 1.19$, S.D. = 1.09) was very close to that of the control group $(\bar{x} = 1.03, \text{ S.D.} = 1.18)$. Figure 2 shows the pretest scores of both groups. Out of 320, the experimental group scored 38, while the control group's score was 33. The t-test showed that there was no significantly difference between the experimental group ($\bar{x} = 1.19$, SE = .193) and the control group (\bar{x} = 1.03, SE = .208), t = .571, p > .05. Thus, it could be claimed that the populations in the two groups were homogeneous in terms of their English verbal complements knowledge.

Table 5 describes the posttest results of both groups, while Figure 4 compares the pretest and posttest results between the two groups.

Table 5The Posttest Results between the Experimental Group and the Control Group

Posttest	N	Min	Max	χ̄	S.D.	df	t	Sig
Experimental group	32	3	10	7.69	1.91	31		
Control group	32	0	9	4.06	2.51	31	6.005	.000

Figure 4The Pretest and the Posttest Results between the Experimental Group and the Control Group



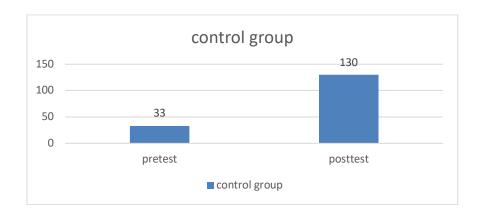
After three weeks of teaching, both groups could improve significantly in the posttest. From Table 8, the experimental group scored (\bar{x} = 7.69, SE = .337) much higher than the control group (\bar{x} = 4.06, SE = .444), t = 6.005, p < .05. Figure 3 shows the overall scores of both groups in the pretest and the posttest. The experimental group scored 38 and 246 in the pretest and the posttest, respectively, while the control group scored 33 in the pretest and 130 in the posttest. These results confirm that the corpus approach can efficiently enhance the learning of English verbal complements by low proficiency Thai learners of English better than the traditional teaching approach.

Although the experimental group did significantly better than the control group, the control group did an impressive job in the posttest as well. Table 6 and Figure 5 described the pretest and the posttest scores of the control group.

Table 6 The Pretest and the Posttest Results of the Control Group

control group	N	Min	Max	\bar{x}	S.D.	df	t	Sig
Pretest	32	0	4	1.03	1.18	31		
Posttest	32	0	9	4.06	2.51	31	6.482	.000

Figure 5 The Pretest and the Posttest Results of the Control Group



The pretest and posttest results reveals that the traditional teaching approach can also be successfully used to teach English verbal complements to low proficiency young Thai learners of English. The t-test showed that the 32 participants in the control group got 1.03 mean score in the pretest (S.D. = 1.18, SE = .21), and 4.06 mean score in the posttest (S.D. = 2.51, SE = .44), t = 6.482, p < .05. From the results, the participants in the control group could improve significantly as well. However, a comparison of the two teaching approaches, as seen in Table 6 and Figure 5, shows that the participants could learn English verbal complements better through the corpus approach than the traditional teaching approach. These results, therefore, confirm that the corpus approach could efficiently enhance the learning of English verbal complements by low proficiency Thai learners of English better than the traditional teaching approach.

Although it is not difficult for high English proficiency learners to remember the 20 verbs and their complements, according to the participants, whose English proficiency was low, remembering these

20 verbs was challenging. At first, they thought that 20 verbs were not too many to remember. Later, they realized that they could barely read most of the words. Therefore, it was quite hard to remember the words when they could not read them. When they encountered those verbs again in the posttest, most of the errors committed by the learners in the control group were using bare infinitives after the targeted verbs. Such errors could be affected by negative transfer as suggested by Kitikanan (2011). The students adopted the serial verb construction from the Thai language into English production. On the other hand, instead of memorizing the verbal complements, the experimental group could see authentic examples by referring to the corpus. Only a small number of the students in the experimental group used the serial verb construction in the posttest. When they explored concordance lines in COCA, they saw many examples of verbal complements in various authentic contexts. Therefore, consulting COCA could enhance their English verbal complements acquisition.

Many advantages of the corpus-based teaching could result in better performance of the experimental group. The participants in the experimental group mentioned that when they were able to find the solution to the language problems themselves, they felt confident and proud, and this motivated them to learn better. This information from the interviews was in line with previous studies (Jamal et al., 2021; Phoocharoensil, 2012; Prince & Felder, 2006). Indeed, many scholars have pointed out that real-life examples in a corpus can help learners understand the language better than made-up examples in the classroom (Chareonkul & Wijitsopon, 2020; Dazdarevic & Fijuljanin, 2014; Jamal et al., 2021). For example, Dazdarevic and Fijuljanin (2014) have claimed that "the use of authentic and real-life examples with foreign learners is more beneficial than examples that are made up by the teacher and do not simulate real life use of language". Moreover, according to Chareonkul and Wijitsopon (2020), there are great differences between the language used in textbooks and those in authentic language and that this it is partly because "the presentation of language in textbooks is based on the pedagogical grammar perspective, which emphasizes rules that are more learning-oriented and easy for learners to learn and understand" (p.282). The current study's results were consistent with various previous studies that have found the corpus approach to provide better results than other language teaching approaches (Dazdarevic & Fijuljanin, 2014; Kartal & Yangineksi, 2018; Mueller & Jacobsen, 2015; Phoocharoensil, 2012). As Dazdarevic and Fijuljanin (2014) have suggested, in the corpus approach, students can observe how language is used in different contexts. Therefore, it is more meaningful to them. As Phoocharoensil (2012) has pointed out the corpus approach could provide an enjoyable way of learning grammar when the students discover language rules through concordance lines. Indeed, he states the corpus teaching approach is considered "a trendy approach in grammar pedagogy". Additionally, as Jamal et al. (2021) have stated students seem happy and enjoy incorporating the use of corpus and technology in language classrooms.

The experimental group had a very positive attitude towards using the corpus. At first, they may get confused because using a corpus was totally new to them. They felt shocked and overwhelmed with much information. However, when they practiced searching and analyzing the concordance lines, they became more familiar with them. Finally, most of them could do well and enjoyed using COCA. All of them mentioned that COCA was beneficial and could help them understand English verbal complements well. Many of them also pointed out that a corpus is a very interesting tool that helps them to expand their English knowledge by themselves. Some of them said that they really like concordance lines because they could see various examples from real life use.

The interview data therefore confirmed the concept of corpusbased teaching proposed by many researchers (Dazdarevic & Fijuljanin, 2014; Kartal & Yangineksi, 2018; Kulsitthiboon & Pongpairoj, 2018; Mueller & Jacobsen, 2015; Phoocharoensil, 2012). That is, the corpus approach could be effectively used to enhance L2 acquisition and the participants have positive attitudes towards this approach.

However, although all participants were really impressed with COCA, they encountered some problems as well. The main issue that many of them talked about was the registration process. They said it was hard for them to register because they found many problems; for example, they did not get a confirmation email, or the system kept asking them to select the country although they had done it. They were also distracted from time to time when the system asked them to apply for paid membership after a couple of searches. Search limitation was also a problem for some who reached the day search limitation, as they needed to wait 24 hours to start searching again.

The control group had a positive attitude towards learning English verbal complements through the traditional teaching approach. They thought that learning by remembering the words, their complements, and meanings worked for them. They all agreed that 20 words were not too much to remember. One of the interviewees said that the traditional teaching approach was suitable for low English proficiency learners because all they needed to do was remembering the right complements. However, they admitted that the traditional way of rote learning or memorizing was exhausting and time-consuming. Although the students said that they could remember all the 20 words, it was just short-term memory.

Conclusion and Implications

The corpus approach provided better results in enhancing the acquisition of English verbal complements to low proficiency young Thai learners of English than the traditional approach. Moreover, the learners had positive attitudes toward the corpus approach.

The findings of this study have implications for SLA and pedagogy. The study confirmed that SLA could be enhanced by particular learning strategies. As Hanafiah et al. (2021) has suggested although there is no single strategy that has been proven to be the best learning strategy for SLA, successful language learners should be aware of their learning strategies. Likewise, as Younas et al. (2020) have stated the role of teachers in classrooms is vital to L2 learners' motivation. If the learners are motivated, they tend to acquire their L2

better. Moreover, learning and motivation are related to each other. Therefore, teachers should not only be instructors, but also role models, mentors, and consultants. More importantly, teachers should act as facilitators and promote learner autonomy. Proper teaching strategies are also a key to promoting students toward successful SLA. The results of this study indicate that the corpus teaching approach, where teachers act as facilitators and allow students to discover language rules by themselves, can efficiently enhance SLA.

For pedagogical implications, the corpus-based teaching approach is quite new in the Thai school context. Although it is evident that corpus is a useful tool in learning a language, proper training is still needed in order to ensure an effective teaching-learning process. For example, students should be introduced to linguistic features. Then, they must be introduced to the corpus and the concordance lines, their functions, how they work, and how they can be used to solve language problems. The explanation and training must be clear. Moreover, various examples and exercises should be provided to the students to practice how to use the corpus. In this way, students will be more confident in using the corpus and can maximize the benefits of implementing the corpus in the classroom.

Limitations and Recommendations

Some limitations of the study are as follows. First, this research focused on verbs followed by English infinitive or gerund complements. Further studies might include verbs that take both verbal complements and also other grammatical points such as lexical bundles, metaphor and tenses. Second, the duration for this study was five weeks (10 hours), 6 hours for training and practicing. This may have affected the learning ability of some learners since learners might need a different amount of time to comprehend a linguistic feature. Further studies might provide a longer period for training and practicing using the corpus to ensure that every participant fully understands all linguistic features and can use the corpus effectively. Moreover, a delayed posttest can be used to investigate if the results from the posttest could still be confirmed.

References

- Allan, D. (1992). Oxford Placement Test 2. Oxford University Press.
- Almulla, N. (2015). The role of frequency in L2 structure accuracy: Acquiring the English infinitive–gerund construction by Arabic L1 speakers [Unpublished master's thesis]. California State University.
- Beck, R. H. (1956). The three R's plus: What today's schools are trying to do and why. University of Minnesota Press.
- Boulton, A. (2016). Integrating corpus tools and techniques in ESP courses. *ASp*, 69, 113–137. https://doi.org/10.4000/asp.4826
- Chareonkul, C., & Wijitsopon, R. (2020). The English present perfect in authentic use and textbooks: A corpus-driven study. *PASAA*, 60, 275–308.
- Crystal, D. (1992). An encyclopedic dictionary of language and languages. Blackwell.
- Dazdarevic, S., & Fijuljanin, F. (2014). Corpus approach to analysing gerund vs infinitive. *International Conference on Language, Culture and Literary Studies*, 13(3), 1–17.
- Duffley, P. J. (2012). The English gerund-participle: A comparison with the infinitive. Peter Lang.
- Evans, V., & Dooley, J. (2019). *Access 3 student's book* (5th ed.). Express Publishing.
- Hanafiah, A. D., Abdul Kadir, F., Kamaruddin, S. M., Hussin, S. N., & Hashim, H. (2021). Language learning strategies employed by successful language learners. *International Journal of Academic Research in Business and Social Sciences*, 11(6), 1363–1378. https://doi.org/10.6007/ijarbss/v11-i6/10095
- Iwasaki, S., & Ingkaphirom, P. (2005). *A reference grammar of Thai*. Cambridge: Cambridge University Press.
- Jamal, J., Shafqat, A., & Afzal, E. (2021). Teachers' perceptions of incorporation of corpus-based approach in English language teaching classrooms in Karachi, Pakistan. *Liberal Arts and*

- Social Sciences International Journal (LASSIJ), 5(1), 611-629. https://doi.org/10.47264/idea.lassij/5.1.40
- Johns, T. (1991). From printout to handout: grammar and vocabulary teaching in the context of data-driven learning. CALL Austria, 10, 14–34.
- Kartal, G. & Yangineksi, G. (2018). The effects of using corpus tools on EFL student teachers' learning and production of verb-noun collocations. PASAA, 55, 100-125.
- Kavanagh, B. (2022). Norwegian in-service teachers' perspectives on language corpora in teaching English. Nordic Journal of Language Teaching and Learning, 9(2), 90–106. https://doi.org/10.46364/njltl.v9i2.933
- Keawchaum, R., & Pongpairoj, N. (2017). The role of frequency on the acquisition of L2 English Infinitive and Gerund complements by L1 Thai learners. PASAA, 54, 29-57.
- Kitikanan, P. (2011). Thai EFL Students' ability to use the Gerund and to-infinitive. The International Journal of the Humanities: Annual Review, 9(2), 279-290. https://doi.org/10.18848/1447-9508/cgp/v09i02/43131
- Krieger, D. (2003). Corpus linguistics: What it is and how it can be applied to teaching. The Internet TESL Journal, IX(3). http://iteslj.org/Articles/Krieger-Corpus.html
- Kulsitthiboon, S., & Pongpairoj, N. (2018). Cooperative corpus consultation for acquisition of adjective preposition collocations. GEMA Online® Journal of Language Studies, 18(3), 57-72. http://doi.org/10.17576/gema-2018-1803-04
- Lee, I.-C., & Kang, M.-K. (2021). Exploring non-finite verbs of the English language. Asia-Pacific Journal of Convergent Research Interchange, 7(2), 33–43. https://doi.org/10.47116/apjcri.2021.02.04
- Liu, C., & Long, F. (2014). The discussion of traditional teaching and multimedia teaching approach in college English teaching. International Conference on Management, Education and Social Science (ICMESS 2014), 31–33.

- Martinez-Garcia, M. T., & Wulff, S. (2012). Not wrong, yet not quite right: Spanish ESL students' use of gerundial and Infinitival complementation. *International Journal of Applied Linguistics*, 22(2), 225–244. https://doi.org/10.1111/j.1473-4192.2012.00310.x
- Mueller, C. M., & Jacobsen, N. D. (2015). A comparison of the effectiveness of EFL students'use of dictionaries and an online corpus for the enhancement of revision skills. *ReCALL*, *28*(1), 3–21. https://doi.org/10.1017/S0958344015000142
- Phoocharoensil, S. (2012). Language corpora for EFL teachers: An exploration of English grammar through concordance lines. *Procedia - Social and Behavioral Sciences*, 64, 507–514. https://doi.org/10.1016/j.sbspro.2012.11.060
- Phungphol, Y. (2005). Learner-centered teaching approach: A paradigm shift in Thai education. *ABAC Journal*, *25(2)*, 5–16.
- Prince, M. J., & Felder, R. M. (2006). Inductive teaching and learning methods: definitions, comparisons, and research bases. *Journal of Engineering Education*, 95(2), 123–138. https://doi.org/10.1002/j.2168-9830.2006.tb00884.x
- Ruiz, S. (2020). *To-infinitives and gerunds: Meaningful learning as an alternative to rote learning* [Unpublished master₃'s thesis].

 University of Guadalajara.

 https://riudg.udg.mx/bitstream/20.500.12104/80892/1/MCUCSH10015FT.pdf
- Schmidt, R. (1990). The role of consciousness in second language learning. *Applied Linguistics*, 11(2), 129–158. https://doi.org/10.1093/applin/11.2.129
- Talhakul, W. (2015). A corpus-based approach to teaching translation: Can it be implemented in Thai undergraduate classrooms? *NIDA Journal of Language and Communication*, *20*(24), 63–85.
- Thamraksa, C. (2011, August 27). Student-centered learning:

 Demystifying the myth. Student centered learning Thailand.

 http://sclthailand.org/2011/08/student-centered-learning-demystifying-the-myth

- Unggul, G. M., & Gulö, I. (2017). An analysis of Gerund and To Infinitive in argumentative essays. Teknosastik, 15(1), 1-6. doi:10.33365/ts.v15i1.14
- Wherrity, M. P. (2001). The gerund/infinitive contrast in English verb complementation [Unpublished doctoral dissertation]. The State University of New Jersey.
- Younas, M., Quingyu X., Noor U., & Khalid S. (2020). Teachers' motivation in ESL learning development at higher education level: An empirical study. Revista Argentina de Clinica Psicologica [Argentine Journal of Psychological Clinic], 29, 594-605. doi:10.24205/03276716.2020.762
- Youssef, A. (2020). The effectiveness of corpus-based approach on vocabulary learning gains and retention in Saudi tertiary EFL context. Journal of English Language Teaching and Applied *Linguistics*, 2(3), 1–15. https://doi.org/10.32996/jeltal.2020.2.3.1
- Yusu, X. (2014). On the application of Corpus of Contemporary American English in vocabulary instruction. International Education Studies, 7(8), 68-73. doi:10.5539/ies.v7n8p68