



**THE EFFECTIVENESS OF USING GAME-BASED  
LEARNING IN TEACHING ENGLISH VOCABULARY**

**BY**

**MISS NUTNICHIA TANAGO**

**A THESIS SUBMITTED IN PARTIAL FULFILLMENT OF  
THE REQUIREMENTS FOR THE DEGREE OF  
MASTER OF ARTS IN ENGLISH LANGUAGE TEACHING  
LANGUAGE INSTITUTE  
THAMMASAT UNIVERSITY  
ACADEMIC YEAR 2017  
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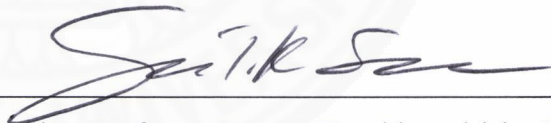
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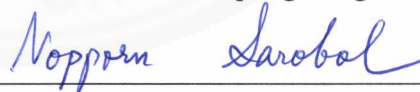
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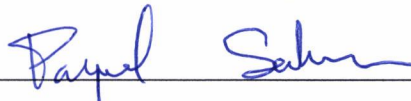
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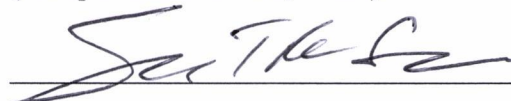
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## ABSTRACT

This study was conducted in order to explore the effectiveness of using Game-Based Learning in teaching English vocabulary and also investigate the students' attitudes towards learning vocabulary through this approach. The participants of the study were 48 first-year non-English major students who enrolled in the course of English Level 1 at a government university in Nakhon Pathom, Thailand. A one-group pretest-posttest design was applied to this study. Three non-digital games were used to teach the students for six weeks. Furthermore, a questionnaire was launched to ask the students about their attitudes towards learning vocabulary with those games. The findings revealed that the students' post-test scores were significantly higher than the students' pre-test scores. Regarding the results from questionnaire, it was found that most of the students agreed that learning vocabulary through Game-Based Learning not only helped them spell words correctly but also helped them memorize the words easier. In addition, the students accepted that learning through this approach was fun and created a good atmosphere in the classroom.

**Keywords:** Effectiveness, Game-Based Learning, teaching English vocabulary, attitudes

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## TABLE OF CONTENTS

	Page
ABSTRACT	i
ACKNOWLEDGEMENTS	ii
TABLE OF CONTENTS	iii
LIST OF TABLES	vii
LIST OF ABBREVIATIONS	viii
CHAPTER 1 INTRODUCTION	1
1.1 Background of the study	1
1.2 Statement of problems	4
1.3 Research objectives	6
1.4 Research questions	7
1.5 Hypothesis of the study	7
1.6 Scope of the study	7
1.7 Limitation of the study	7
1.8 Definition of terms	8
1.8.1 Effectiveness	8
1.8.2 Game-Based Learning (GBL)	8
1.8.2.1 True or false	8
1.8.2.2 Whisper Game	8
1.8.2.3 Word chain	9
1.8.3 English vocabulary	9
1.8.4 Vocabulary learning	9
1.8.5 Attitudes	9

1.9 Significance of the study	9
<b>CHAPTER 2 REVIEW OF LITERATURE</b>	<b>11</b>
2.1 Vocabulary	11
2.1.1 Definitions of vocabulary	11
2.1.2 The importance of vocabulary for language learning	11
2.1.3 Definitions and brief history of vocabulary teaching	12
2.1.4 Methods used in vocabulary teaching	13
2.1.5 Strategies for successful vocabulary teaching	16
2.2 Game-Based Learning (GBL)	17
2.2.1 Definitions and benefits of Game-Based Learning	17
2.2.2 The roles of Game-Based Learning in English language teaching	18
2.2.3 The roles of Game-Based Learning in English vocabulary teaching	20
2.3 Types of games used in English language teaching	21
2.4 Selection criteria for games used in language teaching	22
2.5 Examples of games used for teaching vocabulary in a classroom	23
2.5.1 Erase a word	23
2.5.2 True or false	24
2.5.3 Matchup	24
2.5.4 Vocabulary board game	25
2.5.5 Whisper game	25
2.5.6 Word chain	27
2.6 Attitudes	27
2.6.1 Definitions of attitudes	27
2.6.2 The measurement of attitudes	27
2.7 Relevant research	28
2.7.1 Relevant research in Thailand	28
2.7.2 Relevant research in other countries	29
<b>CHAPTER 3 RESEARCH METHODOLOGY</b>	<b>34</b>

3.1 Research design	34
3.2 Participants	34
3.3 Instruments	35
3.3.1 Pretest and posttest	35
3.3.2 Questionnaire	36
3.4 Materials	38
3.4.1 Textbook	38
3.4.2 Games	38
3.4.3 Lesson plan	39
3.5 Procedures	43
3.6 Data collection	44
3.7 Data analysis	44
CHAPTER 4 RESULTS	46
4.1 The students' pre-test scores and post-test scores in the vocabulary test	47
4.2 The students' attitudes towards learning vocabulary through Game-Based Learning	53
4.2.1 Demographic data of the students	53
4.2.2 The students' attitudes towards learning vocabulary through Game-Based Learning	56
4.2.3 The students' opinions on using Game-Based Learning in vocabulary teaching	59
CHAPTER 5 DISCUSSIONS, CONCLUSIONS AND RECOMMENDATIONS	60
5.1 Summary of the study	60
5.1.1 The objectives of the study	61
5.1.2 The research questions	61
5.1.3 The participants of the study	61
5.1.4 The research instruments	61
5.1.5 The research procedures	62



5.1.6 The data analysis	62
5.2 Summary of the findings	62
5.2.1 Demographic data of the participants	62
5.2.2 The effectiveness of using Game-Based Learning in Teaching English vocabulary	63
5.2.3 The students' attitudes towards learning vocabulary through Game-Based Learning	63
5.3 Discussion	64
5.3.1 Research question 1	64
5.3.2 Research question 2	66
5.4 Conclusion	68
5.5 Recommendations	68
5.5.1 Recommendations for implementing Game-Based Learning effectively	68
5.5.2 Recommendations for further study	69
REFERENCES	70
APPENDICES	
APPENDIX A	76
APPENDIX B	82
APPENDIX C	88
APPENDIX D	92
APPENDIX E	96
APPENDIX F	106
BIOGRAPHY	109

**LIST OF TABLES**

Tables	Page
1 Comparison of the students' pre-test scores and post-test scores in vocabulary test	47
2 Vocabulary achievement of the students after learning vocabulary through Game-Based Learning	48
3 Comparison of the students' pre-test scores and post-test scores considering only words taught with Game-Based Learning	51
4 Comparison of the students' pre-test scores and post-test scores considering only words taught without Game-Based Learning	52
5 Hypothesis testing	52
6 Gender	54
7 Age	54
8 Faculties where the students were studying	55
9 Areas of high school where the students graduated	56
10 Programs the students attended during high school	56
11 The students' attitudes learning vocabulary through GBL	57

## LIST OF ABBREVIATIONS

<b>Symbols/Abbreviations</b>	<b>Terms</b>
CLT	Communicative Language Learning
GBL	Game-Based Learning
GTM	Grammar-Translation Method



# CHAPTER 1

## INTRODUCTION

### 1.1 Background of the Study

To start learning English as a foreign language, one of the primary steps that all language learners need to encounter is vocabulary learning. According to Liangpanit (2013), vocabulary is a vital part of communication. The learners who require to succeed in communicating need to learn and memorize an adequate number of vocabulary items in the target language. If the learners do not have sufficient vocabulary stored in their brain, they will not be able to completely express their ideas or understand other people's utterances (Alfaki, 2015). The more the learners can memorize vocabulary they have learned, the more they can produce clear and meaningful phrases and sentences to convey their thoughts (Sukkrong & Teo, 2010).

Vocabulary plays an important role not only towards verbal communication, but also towards non-verbal communication. The learners will not be able to sensibly guess from a context or understand a text they have read unless they know at least 95% of running words in the text (Nation, 2001; cited in Orawiwatnakul, 2011). Accordingly, vocabulary learning is often seen as more important than grammar learning because it is what the learners need to acquire in order to be able to produce more complex units of language such as phrases, sentences and so on (Ghadessy, 1998; cited in Tunchalearnpanih, n.d.). Without grammar learning, the learners can still convey their thoughts using some words; however, without vocabulary learning, they can convey nothing. As a result, it could be said that vocabulary learning is the basis of the four skills of language learning - listening, speaking, reading and writing - as all these skills cannot be developed without vocabulary knowledge (Russell, 1961; cited in Sukkrong & Teo, 2010).

Because of the significance of vocabulary learning, vocabulary has been taught along with grammar. Vocabulary teaching has been included in all of the teaching methods that have been created in order to teach English language, and it has also shared the same purposes as those teaching methods. The teaching methods used in English language teaching have always been changed and developed in order to

respond to the purposes of language learning in each period of time. English vocabulary teaching has been influenced by the ideologies of two main different teaching methods which have been the most popular among English language teachers for the past fifty years: Grammar-Translation Method (GTM) and Communicative Language Teaching (CLT).

At an early age, the purposes of English language learning were being able to read and understand English literature. Consequently, the focus of teaching was on the learners' reading and writing skills (Larsen-Freeman, 2000). What the learners who were parts of the classroom influenced by Grammar-Translation Method were expected to do was translating texts from the target language to their native language and texts in their native language to the target language as well. Hence, the learners were exposed to lots of language structures, grammar rules and bilingual word lists - the lists of English words with the learners' native language translation. The learners' duty was to memorize all this information as it was useful for completing translation exercises that were created to provide them a chance to practice using what they had learned including new vocabulary. In order to support the learners, the teachers provided direct translation and explanation of new words to the learners by using the learners' native language, and they also used only the learners' native language in the classroom to ensure that the learners would understand what they had to do (Shejbalová, 2006). Therefore, the learners' role in the classroom was relatively passive as all learning processes and classroom activities were produced and controlled by the teachers. It could be said that the students mainly learned the language and vocabulary by listening and drilling.

Later, the purposes of English language learning were changed from the ability to read and understand literature to the ability to communicate. Thus, the focus of teaching also shifted from placing emphasis on language structures to communicative functions of language (Widdowson, 1990; cited in Sreehari, 2012). This was the implementation of Communicative Language Teaching in English language teaching. With this approach, the learners were not only taught to translate the language but also taught how to use it for communication (Van Ek, 1975; cited in Savignon, n.d.). Vocabulary teaching was done with the same purpose, too. Accordingly, the learners were exposed to vocabulary that is often used in the

authentic communication. Instead of providing the learners direct translation or explanation of new words, the teachers started using some concrete teaching materials to demonstrate the meanings of them (Seelig, 2012).

As a result, the teachers' role was changed from the class directors, whose duty was providing all knowledge and related information to the learners, to become just the facilitators who did not provide everything but suggested something to the learners when they needed help. This offered the learners greater opportunity to practice using what they had learned including vocabulary through communicative tasks that involved real communication (Richards, n.d.).

In other words, the learners are able to practice using words they learn by communicating in authentic communication not just by completing exercises as before. Good examples of this characteristic of communicative tasks are usually pair work or group activity. Regarding this characteristic, the learners have a chance to practice using the target language to communicate with other learners who are their partners or group members and the language that is mainly used in the classroom is the target language (Manoliu, 2012). Consequently, the learners' role has been automatically changed from being passive to active because of having much opportunity to gain both knowledge of the language and vocabulary by using them in the real situation.

The invention of the Communicative Language Teaching can show how educational trend has changed from a teacher-centered approach to a learner-centered approach. Hence, plenty of teaching methods have been created in order to respond to this type of trend. One of the teaching methods that is the result of the creation of new approaches is Game-Based Learning (GBL), the teaching approach in which games are used as media to convey learning contents (Mz & Sy, 2008). With this approach, the learners are encouraged not only to learn but also to practice using everything they have learned through games.

This can be considered to be a huge change in English language teaching, especially English vocabulary teaching. The reason is that previously the learners have mainly learned vocabulary in class by listening, and they undoubtedly feel bored with it (Tunchalearnpanih, n.d.). Therefore, using games in vocabulary teaching can

be a good solution for their boredom towards vocabulary learning (Honarmand, Rostampour, & Abdorahimzadeh, 2015).

Teaching vocabulary through this approach can be considered to be useful and interesting: games are fun and competitive, using them in teaching vocabulary can increase the learners' interest towards learning; they are more willing to learn without any enforcement. Not only that, playing games mostly needs more than one player, so the learners will have more chances to communicate with their classmates in order to help each other to reach the goals of the games. With this approach, shy learners, who rarely speak or participate in classroom activities, are automatically engaged with both the teachers and classmates (Sigurðardóttir, 2010). Thus, there is a strong case that using games in teaching vocabulary is beneficial and worth using in vocabulary classes.

In the Thai context, the use of games in English vocabulary teaching is relatively widespread since games can be found as teaching tools in more than one level of Thai education, especially primary education and secondary education (Sukkrong & Teo, 2010; Nirattisai & Chiramanee, 2014; Kunnu, Uipanit, & Sukwises, 2016; Tunchalearnpanih, n.d). Overall, the results of using games in teaching vocabulary to Thai young learners has been satisfying because it could be proved that learning vocabulary through games can help the learners gain more vocabulary achievement (Liangpanit, n.d.). Accordingly, it could be concluded that Game-Based Learning can be regarded as one of the good approaches for Thai teachers to use in teaching English vocabulary, especially teaching vocabulary to young learners.

## **1.2 Statement of Problems**

In Thailand, English language plays an important role in many fields such as business, education, science and technology. As a result, high English proficiency is needed for Thai learners as it affects their lives in many ways, especially their future career path (Wiriyachitra, n.d.). However, despite spending at least twelve years learning English, Thai learners' English proficiency is still low (Noom-ura, 2013). According to Murray & Lang (1997), having low learning proficiency can be caused

by many factors, and one of them is the passive role of learners in the language class. According to Liangpanit (2013), in Thailand, English vocabulary has been taught in the same way as grammar, using a Grammar-Translation Method. To introduce new vocabulary to learners, Thai teachers usually give direct translation to their learners and have them do a lot of translation exercises in order to help them memorize what they have learned. In other words, the focus of this teaching method is on memorization rather than the involvement of the learners in the classroom. Consequently, this teaching method is a teacher-centered approach because the learners' role in the classroom is completely passive. Their responsibilities are just listening, taking notes, memorizing what they have learned and using them as answers in the exercises (Nguyen & Khuat, 2003).

Although the Grammar-Translation Method has been proved to be beneficial by plenty of studies, it still has some negative effects on the learners' learning behaviors and motivation (Sinhaneti & Kyaw, 2012). In accordance with Nirattisai & Chiramanee (2014), as the learners have a little chance to participate in learning activities, they tend to be bored, lack of learning motivation and feel that being responsible for their own learning is unnecessary. In other words, the learners are likely to rely on the teachers more than themselves. This is the reason why effective learning process doesn't occur as much as the teachers expected since creating effective learning process needs the learners' participation in learning activities (Abdullah, Bakar, & Mahbob, 2012). Hence, Thai learners' vocabulary knowledge and other English skills are not much developed in spite of spending much time to learn these things (Teng & Sinwongsuwat, 2015).

All the above-mentioned problems also happen in a course of English Level 1 at a targeted government university in Nakhon Pathom, Thailand. According to the opinions of many teachers who have been responsible for teaching this course, vocabulary is one of learning topics that receives a little interest by the first-year students. When the students' interest towards vocabulary learning is low, they undoubtedly cannot memorize words they have learned in the classroom. Obviously, providing direct translation or explanation of words to the students may not be enough to help them succeed in learning vocabulary.



In an attempt to solve these problems, Game-Based Learning can be considered to be a good option. By using this approach in teaching vocabulary, the students' role in the classroom will be changed from being passive to be active because they will be engaged more in learning activities. Also, the students' learning motivation can be increased because of having more chance to take part in learning activities (Soltanzadeh, Hashemi, & Shahi, 2013). Not only that, it also leads to the increasing of the students' learning achievement since being involved with learning activities results in students' higher learning achievement (Affolter, Gerber, Grund, & Wagner, 2015).

Indeed, learning vocabulary through Game-Based Learning provides the students a chance to experience learning that is more fun than usual, so their learning motivation is likely to be increased because of having fun and being involved in the process of learning as well (Gagné, 1985; cited in Yien et al, 2011). With these qualities of Game-Based Learning, it can be regarded as an approach which was interesting and effective enough to attract the students' attention, and it can help them succeed in learning vocabulary at the same time.

Nowadays, a lot of studies focusing on the use of games in vocabulary teaching have been conducted with Thai students, especially grade 4 students to grade 6 students. Overall, the results of these have been relatively positive (Kunnu, Uipanit, & Sukwises, 2016). Therefore, this current study aims to investigate whether using games in teaching vocabulary to Thai university students will be able to improve their vocabulary knowledge the same as for the students in the lower levels, or not, and also investigate their attitudes towards learning vocabulary through games.

### **1.3 Research Objectives**

1. To investigate the effectiveness of using Game-Based Learning in teaching English vocabulary.
2. To investigate the students' attitudes towards learning vocabulary through Game-Based Learning.

#### **1.4 Research Questions**

1. To what extent does Game-Based Learning help the students learn vocabulary effectively?
2. What are the students' attitudes towards learning vocabulary through Game-Based Learning?

#### **1.5 Hypothesis of the Study**

1.  $H_0$ : There will be no statistically significant difference between students' pre-test and post-test scores after learning vocabulary through Game-Based Learning.
2.  $H_1$ : There will be a statistically significant difference between students' vocabulary pre-test and post-test scores after learning vocabulary through Game-Based Learning.

#### **1.6 Scope of the Study**

The current study was conducted to investigate the effectiveness of Game-Based Learning in teaching English vocabulary to first-year non-English major students of a government university in Nakhon Pathom, Thailand, and investigate their attitudes towards learning vocabulary through this approach.

#### **1.7 Limitation of the Study**

The current study was limited to the ability and opinions of the participants, 48 first-year non-English major students of a government university in Nakhon Pathom, Thailand. As data collection took place only at one government university in Nakhon Pathom, the participants' ability and opinions could not represent the students from every university in Thailand. Besides, games that were applied to this study were non-digital games, the games which can be played without electronic devices or online, and every game was used to teach vocabulary in terms of forms and meanings only.

Thus, this study was limited in terms of contexts, and the findings might not be able to be generalized to the whole Thai educational context.

## **1.8 Definitions of Terms**

For clearer understanding of the terms used in this study, below are their meanings:

### **1.8.1 Effectiveness**

According to Cambridge Dictionary, effectiveness is the ability to be successful and produce the intended results. In the current study, the effectiveness can be defined as the students' higher scores of vocabulary test after learning through Game-Based Learning.

### **1.8.2 Game-Based Learning (GBL)**

Game-Based Learning refers to a teaching approach in which games are used to pass on knowledge and skills (Kapp, 2014). In the current study, there were three non-digital games used as teaching materials as follows.

#### **1.8.2.1 True or False**

To play this game, students of each team are required to race each other to answer whether words and definitions determined by the teacher match with each other or not (See Appendix F).

#### **1.8.2.2 Whisper Game**

To play this game, representatives of each team are required to race each other to pass on sentences said by the teacher to other team members, and the last member of each team needs to write the whole sentences on a whiteboard in order to express whether it is similar or different from what the teacher said (See Appendix F).

### **1.8.2.3 Word Chain**

To play this game, students from different teams are grouped together. The first student starts saying a word and its definition he/she knows. Another student repeats what the first student said and also says his/her own word and definitions. All students in the team keep doing the same thing until the last member says his/her own word. If some students make a mistake, the first student starts doing the same thing over again (See Appendix F).

### **1.8.3 English vocabulary**

According to the Cambridge Dictionary, English vocabulary means all the words that exist in the English language. In the current study, English vocabulary was selected from the core book of the university's English Level 1 Course, Empower B1+, in order to be taught and tested.

### **1.8.4 Vocabulary learning**

In accordance with Nation (1974), vocabulary learning refers to the study of words: forms, meanings and functions. In the current study, vocabulary learning refers to gaining knowledge of words in terms of forms and meanings through Game-Based Learning.

### **1.8.5 Attitudes**

Regarding Crisp (2006), attitudes are a set of beliefs that people hold towards a person, thing, event or issue. In the current study, attitudes that were measured were the students' attitudes towards learning vocabulary through Game-Based Learning - advantages, disadvantages and suggestions.

## **1.9 Significance of the Study**

The current study was a significant attempt to evaluate one of the vocabulary teaching approaches that could be not only interesting but also able to be used to increase students' vocabulary knowledge. The researcher of this study believes games

have the outstanding characteristic of being proven to be able to change a boring classroom atmosphere into an enjoyable one. Using games in vocabulary teaching tends to make the students more willing to learn vocabulary more than before. Not only that, this study also provides recommendations on how non-digital games affect ways the students learn and memorize vocabulary, so it might be useful for teachers who are interested in this teaching approach in terms of adoption.

Besides, this study should be helpful to the educational system because the results of the study can be used in future vocabulary course design and development in terms of integrating Game-Based Learning to vocabulary teaching. Moreover, as this study was conducted with university students, it might break the belief that games suit young students only. Furthermore, it might also serve as a future reference for researchers on the subject of vocabulary teaching. And importantly, this study might remind teachers not to stick with the same old teaching methods teachers have been using them for a long time, but look for other teaching methods or materials that fit and are more effective for present-day students.

## **CHAPTER 2**

### **REVIEW OF LITERATURE**

This chapter presents the theoretical frameworks underlying this study including the theory of Game-Based Learning and other relevant research.

#### **2.1 Vocabulary**

##### **2.1.1 Definitions of Vocabulary**

According to Hubbard (1983), vocabulary can be seen as a powerful carrier of meanings: one word contains several meanings and can be used in different contexts. Vocabulary can be classified into two types based on its functions: productive vocabulary and receptive vocabulary. The productive vocabulary refers to words that are produced by humans in terms of speaking and writing. On the other hand, the receptive vocabulary means words that can be received by humans through listening and reading (Graves, August, & Mancilla-Martinez, 2013). Accordingly, it could be said that vocabulary is the most important component of communication as communication cannot be shaped without it.

##### **2.1.2 The Importance of Vocabulary for Language Learning**

Vocabulary can be considered to be the central aspect of language learning as vocabulary knowledge enables language use (Nation, 2001; cited in Alqahtani, 2015). Mebring (n.d.) supported that vocabulary knowledge is the heart of four language skills: listening, speaking, reading and writing, because none of these skills can be developed without vocabulary knowledge (Komorowska, 2005; cited in Kusnierek, 2016). As a result, language learners need to learn an adequate number of words in order to be able to express their own ideas and understand what other people need to convey. It could be said that the ability to use and understand the language depends on the number of

words the learners have learned in that language. The more they learn words, the more they can use and understand the language. To support these ideas, Wilkins (1972) emphasized the importance of vocabulary through one of his famous quotes: the learners who do not have knowledge of grammar might not be able to convey everything they would like to, but the learners who do not have knowledge of words cannot convey anything.

### **2.1.3 Definitions and Brief History of Vocabulary Teaching**

According to Nation (1974), vocabulary teaching refers to providing language learners with knowledge of words: forms, meanings and functions. Consequently, vocabulary teaching is not only providing the learners definitions of words but also teaching them how to properly use words in different contexts (Daniels & Zemelman, 2004; cited in Bintz, 2011).

Although vocabulary teaching can be considered to be the basis of language teaching, it was neglected by most English language teachers for the past few decades. Amiryousefi & Dastjerdi (2010) claimed that there were four main reasons why vocabulary teaching was neglected by the teachers during the past few decades.

Firstly, vocabulary teaching was once viewed less significant than grammar teaching. Secondly, most of specialists in methodology believed that teaching grammar should be done before teaching vocabulary as the learners tend to make many errors in a sentence construction if they know too many words before mastering grammar. Thirdly, it was believed that vocabulary teaching could not be done in the classroom as the learners could learn it best from their own experience. Lastly, it was difficult for the teachers themselves to predict and decide what words should be taught at that time.

Due to the reasons above, there was no particular teaching technique or teaching method for teaching vocabulary in the past. When the learners encountered an unfamiliar word, they usually used dictionary or were given a quick oral definition by the teachers (Moore, n.d.). Generally, it could be said

that vocabulary teaching just intertwined in the teaching methods which had been used in English language teaching (Praia, 2007).

#### **2.1.4 Methods Used in Vocabulary Teaching**

As there was no clear teaching method used in vocabulary teaching, it was intertwined in the teaching methods that had been invented to teach English language. From the late 19<sup>th</sup> to early 20<sup>th</sup> century, vocabulary teaching was done through a Grammar-Translation Method (GTM), the traditional teaching method that was considered to be the most popular and was always being used in teaching English as a foreign language (Shejbalová, 2006). As the main objective of this method was developing the learners' ability to read, understand and translate literature in the target language, vocabulary was also taught with the aim of developing the learners' reading and writing skills (Asl, 2015).

With this method, the teachers facilitated the learners by directly translating and explaining new words to the learners using the learners' native language. Hence, this method was regarded as a teacher-centered approach as the teachers acted as the leaders of the class who provided all of knowledge to the learners and controlled every classroom activity (Lasen-Freeman, 2000). In contrast, the learners' role was just a passive receiver of knowledge. Their role was only memorizing forms and meanings of words they had learned through both teachers' instruction and other teaching materials such as bilingual word lists, the lists of words with the learners' native language translation.

To practice using words they had learned, the learners could do this by doing drills and translation exercises which were translating texts from the target language to their native language and texts in their native language to the target language (Ultraviolet, 2017). Besides, the learners were also exposed to some patterns in which each word was used. Having a chance to see various language patterns and structures helped the learners know what



patterns each word could be used with. Although the Grammar-Translation Method was relatively beneficial, it caused the learners some problems in using new words they had learned.

Due to the limited patterns that the learners were exposed to, they sometimes could not use those words in a real communication in which words were used in different patterns from what they had encountered (Leka, 2012). Therefore, teaching vocabulary through the Grammar-Translation Method was not really effective in terms of providing insufficient opportunity to the learners to get involved with the target language (Mart, 2013).

After the Grammar-Translation Method, a lot of teaching methods were developed. In the late 1920s, the 'Reading Method' was developed. As the name suggested, this method aimed to develop the learners' reading ability. Thus, the learners were provided a lot of chance to develop their intensive and extensive reading skills. For vocabulary teaching, the learners were exposed to basic word lists and texts and were expected to interpret them in their native language. This method was not much different from the Grammar-Translation Method as the learners deductively learned vocabulary.

Later, in the late 1950s, a 'Direct Method' and an 'Audiolingual Method' were developed. In the Direct Method, it was believed that the target language could be taught in the same way as the native language; the learners were encouraged to think in the target language and also use only the target language in the classroom in order to develop their listening and speaking skills. As the focus of teaching was on listening and speaking skills, only every day vocabulary was taught in this method. For the Audiolingual Method, it was similar to the Direct Method because the focus of teaching was on listening and speaking skills. As indicated in its name, the learners learned the target language through oral imitation, memorization and drills. It was believed that exposure to the language automatically led to vocabulary learning, so there was no clear vocabulary teaching method used in this method.

In an attempt to pay more attention to develop the learners' ability to communicate, another teaching approach called Communicative Language Teaching (CLT) was developed with the aim of gaining the learners' communicative competence (Xia, 2010). As this approach focused on meaning and communication, the learners were encouraged to do activities that involved real communication. Accordingly, a lot of communicative activities, which were used to promote the learners' communicative skills, were used in the classroom.

In this approach, what the teachers did was drawing the learners' attention to using the language more than focusing on the forms or structures of the language (Tuan & Doan, 2010). The learners did not need to know the forms of structures of the language since it was more important to know when and whom to use those forms or structures with (Xia, 2010). Instead of memorizing words and sentences in which each word could be used, the learners learned words from the situation of context and were encouraged to use the words they had learned in real communication (Seelig, 2012).

Moreover, they were encouraged to participate in the classroom activities, so they were able to learn by helping each other and learn from each other as well. As a result, the learners played a central role in both communication and interaction. This made the teachers' role change from being the directors of the class into being the facilitators whose duty was not providing all information for the learners but just observing, suggesting and helping the learners when they needed some help.

Nowadays, there are many teaching methods that have been created for teaching vocabulary. Consequently, it is the teachers' duty to select the teaching method or create learning environment that is most effective and suitable for the learners whom they are teaching the most.

### 2.1.5 Strategies for Successful Vocabulary Teaching

In order to provide English language teachers a guideline for selecting teaching methods and teaching materials, including creating effective learning environments for teaching vocabulary, Nation (2015) suggested that the teachers should prepare their lesson plans based on the four following strands: meaning-focused input, language-focused instruction, meaning-focused output and frequency development.

The first strand is providing the meaning-focused input to learners. In this strand, the teachers should encourage the learners to focus on ideas that are in messages they receive during developing their receptive skills: listening and reading. Moreover, the teachers should also help the learners to develop their vocabulary knowledge by having them practice listening to audio stories or reading graded readers that contain new words they ought to learn. To attract the learners' attention to new words, the teachers should not select listening or reading materials in which the learners have background knowledge since their attention will be automatically decreased if they already know some content of what they are listening to or reading.

The second strand is providing the language-focused instruction to the learners. In this strand, the teachers should encourage the learners to focus on features of the language such as forms or patterns: the different forms of words and patterns those words fit into. As a result, the learners can develop their meaning-focused input during learning through this strand because they are taught about words and how to use them at the same time.

The third strand is providing the meaning-focused output to the learners. This strand is opposite to the first strand since the learners' focus should be changed from ideas in messages they received to messages they produce while developing their productive skills: speaking and writing. In this strand, the teachers should encourage the learners to make use of new words they have learned in an unfamiliar situation in order to increase their

understanding of those words. This is to ensure that the learners can apply what they have learned to the real communication.

The fourth strand is providing the learners a chance to access frequency development. In this strand, the teachers should encourage the learners to focus on developing their fluency and the accuracy of what they have learned. The teachers should provide the learners a chance to use new words they have learned in a familiar situation. To practice using words they have learned in the familiar situation can help the learners develop their fluency and accuracy using words and patterns they have learned.

These are four strands that can be considered to be the strategies for successful vocabulary teaching. However, the teachers' success in teaching vocabulary not only depends on these four strands but also relies on many other factors, including the way they apply these strands to teaching.

## **2.2 Game-Based Learning (GBL)**

### **2.2.1 Definitions and Benefits of Game-Based Learning**

In accordance with Kapp (2014), Game-Based Learning (GBL) refers to a teaching approach in which games, both digital and non-digital ones, are included in teaching knowledge and skills. In this teaching approach, games are used as the tools to convey learning contents to learners of each subject (Mz and Sy, 2008). Although this approach is based on using games in teaching, it is not only designed to make the learners have more fun during learning, but also designed to be used to introduce what the learners need to learn in order to achieve the learning goals (Pho and Dinscore, 2015).

Basically, a game is defined as an activity with rules, goals and elements of fun (Hadfield, 1999; cited in Tuan & Doan, 2010). Hence, Game-Based Learning which has games as its main component is affected by a key

characteristic of games, which is enjoyment, so this teaching approach can be used to create learning environments which are not as serious as traditional teaching methods (Kim & Jung, 2015). This makes the learners' anxiety and stress towards learning decrease, and they might learn without realizing they are learning because they are able to gain knowledge as well as enjoyment.

Besides, using games in teaching can also blur some learning content that is considered boring and uninteresting, so the learners' attention and motivation towards learning are enhanced (Druckman, 1995). It could be said that games can be used to create a good atmosphere and learning environment where the learner attention is attracted to the tasks they are doing (Whitton, 2012). Not only that, the reason why the learners' attention and motivation towards learning are increased is the challenges they encounter during playing games because their competitive feelings are promoted as they are challenged to beat games or fellow players (Mubaslat, 2012).

Moreover, games also can be used to develop communication among the learners, too, since the learners are supposed to interact with each other when they are playing and trying to achieve the goals of games (Zapata J. & Awad-Aubad, 2007). Thus, Game-Based Learning is regarded as a learner-centered approach as the learners are likely to be engaged and motivated to participate in learning activities (Ghazal & Singh, 2016).

In conclusion, it is obvious that using games in teaching cannot only make learning processes more interesting but also make the learners become the center of learning and they can direct their own learning (Yolageldili & Arikan, 2011).

### **2.2.2 The Roles of Game-Based Learning in English Language Teaching**

The use of Game-Based Learning is popular and widespread in the classroom of several subjects including English. Georgiou (2010) mentioned that Game-Based Learning can be used to teach all four English language skills: listening, speaking, reading and writing.

According to Richards (2008), most English language learners learn and develop listening skills by doing listening activities such as dictation, cloze listening and so on. These activities can make the learners get bored because the learners tend to be assigned to listen to the same things several times in order to ensure that they understand the contents contained in those materials. Therefore, using games in teaching listening can solve this problem as it can prevent the learners' boredom because it provides the learners a chance to perform some actions or express what they heard instead of listening passively (Rahmawati, 2013).

Another skill which can be taught and developed through Game-Based Learning is speaking skills. Traditional speaking teaching methods are repeating after the teacher, memorizing dialogues and so on. The learners have some problems when they have to communicate with other people in the real life since what they have learned and memorized are sometimes not enough for the real communication (Richards, n.d.). Thus, using games in teaching speaking is helpful as real communication is involved. The learners can practice speaking not only by completing speaking tasks, but also interacting with each other in the real-time situation. Accordingly, the learners' language fluency is developed as well (Sigurðardóttir, 2010; and Tang, n.d.).

Apart from listening and speaking skills, Game-Based Learning can also be used to teach and develop the learners' reading skills. Mikulecky (2008) stated that a number of teachers teach reading by translating and showing the learners how to apply a variety of techniques to a text for better understanding. Although those techniques are considered useful, the learners' role in the classroom is still passive. Their duties are just read and complete following assignments the teachers assign. Unsurprisingly, they feel that learning how to develop reading skills is boring (Sinambela, Manik, & Pangaribuan, 2015). Teaching reading through Game-Based Learning can change the learners' attitudes towards learning reading from being boring into enjoying. The learners' role in the classroom is no longer passive because reading activities are changed from an individual activity into group activity in

which the learners can enjoy learning and developing reading skills with others (Ali, Aziz, & Majzub, 2011).

The last of four English language skills that can be learned and developed through Game-Based Learning is writing. Monaghan (2007) claimed that the learners are taught to write from sentences to paragraphs by following the rules of grammar. Moreover, they are expected to write only what the teachers would like them to write. As a result, it can explain why they get bored and think that writing is difficult. Teaching writing by using games can prevent this problem because of enjoyment which can emerge through the use of games. The learners can learn how to have fun with writing since they have their own reasons to write, and they do not need to write anything to satisfy the teachers (Sigurðardóttir, 2010).

### **2.2.3 The Roles of Game-Based Learning in English Vocabulary**

#### **Teaching**

Not only that, most teachers who have experienced teaching English vocabulary through games also agreed with one another that using games in teaching vocabulary is not only useful for helping the learners develop vocabulary knowledge but also useful for helping them develop other related skills. For example, when the learners play a game, they usually discuss with their team members. Therefore, their speaking skills and teamwork skills were automatically developed as they were supposed to help one another to reach the goals of the game (Yahoui, 2012; and Pivec, Dziabenko, & Schinnerl, 2014).

To apply Game-Based Learning to the teaching of English vocabulary, new vocabulary can be taught in terms of form, meaning and function. The following paragraphs will express the ways new words are taught through Game-Based Learning regarding Nation's four strands (Nation, 2015).

One of Nation's strand invented as the strategies for successful vocabulary teaching is a meaning-focused input, which means an opportunity to see the information that is going to be taught. Therefore, through this approach, the learners are provided an opportunity to encounter new words. They can see various forms of new words, how they are spelled or listen to the way they are pronounced through playing game.

A language-focused instruction, how the information is used in different contexts regarding grammar rules, can be applied through this approach as well. After the learners encounter the new words, the teacher can encourage them to memorize those words by showing them how those words are important for the game. In other words, the learners will be given more details about those words or being asked to find more details by themselves in order to increase an opportunity to achieve the goal of the game. By doing this, the learners not only learn more about the new words in terms of their meanings, their parts of speech and so on but also have motivation to memorize them as they are parts of playing game.

After knowing more details about the new words, the learners are expected to apply the words to the game. To do this, it can be said that the learners are receiving a meaning-focused output, which means an opportunity to apply the information to a real-life situation. As most games need the winner, the learners are stimulated to use what they know to achieve the goals of the game. In this strand, the learners not only have fun but also have a chance to practice using the new words.

### **2.3 Types of Game Used in English Language Teaching**

Nowadays, there are many types of game that are used in language teaching. However, games which can be used in teaching language are classified into two main types: linguistic games and communicative games (Hadfield, 1999; cited in Ayu & Murdibjono, n.d.).



The first type is linguistic games. This type of game focuses on developing the learners' language accuracy. Hence, it emphasizes challenging the learners' linguistic knowledge in terms of ability to use language correctly in different contexts such as supplying the correct antonym.

The second type is communicative games. This type of game is completely different from the previous one because it focuses on developing the learners' language fluency. Therefore, it places an emphasis on encouraging the learners to use language for communicating and exchanging their ideas or information with other learners; for example, a game in which two learners compete with each other to identify the differences between two pictures that seem to be alike.

Apart from these two main types of game, there are other minor types of game which are popularly used in the language classrooms. The types of game are classified by their characteristics or by the materials that are used while playing, such as guessing games, word games, digital games, non-digital games and so on. Thus, it can be said that almost every type of game with appropriate adaptation by the teachers can be used in language teaching. For this study, non-digital games were used as teaching materials.

#### **2.4 Selection Criteria for Games Used in Language Teaching**

In accordance with a large number of games which can be applied to language classrooms, it is the teachers' responsibility to select games that are effective and suitable for the learners who are under his or her control. To select games which can be regarded appropriate for teaching language, the teachers should consider the following three factors (Mubaslat, 2012).

First, the teachers should select games that fit the teaching and learning purposes. The teachers ought to select games which are relevant to the contents the learners are learning. A well-selected game should be used as an extra contribution to learning in which the learners are able to practice using their knowledge or skills through it (Sigurðardóttir, 2010).

Second, the teachers should select games that contain the contents which are appropriate for the learners' level of knowledge and language. A well-selected game will offer sufficient challenges that fit the learners' level of knowledge and language. If a game does not provide enough challenge to the learners, they will easily get bored. On the other hand, the learners will be stressed if a game provides too much challenge more than they can deal with (Khine, 2011).

Third, the teachers should select games which match with the learners' characteristics. Basically, there is no game that is suitable for every learner. Some games may be considered effective for one group of learners but ineffective for another group of learners. Hence, selecting games which match with the learners' characteristics such as age, gender, and so on, tends to increase the opportunity for the learners to succeed in developing their knowledge and skills (Sigurðardóttir, 2010).

## **2.5 Examples of Games Used for Teaching Vocabulary in a Classroom**

At the present, there are many types of game that have been invented in order to be used for teaching vocabulary. Both digital games and non-digital games are invented to respond to learners' learning needs that are always changing over time, and also to facilitate the teachers as helping tools for teaching. In this study, the researcher stresses the importance of the non-digital games only, regarding the limited conditions of teaching and the objectives of this study. The following are some examples of non-digital games which can be used to introduce new vocabulary in the class where there are a lot of students.

### **2.5.1 Erase a word**

To play this game, a teacher needs to prepare a marker, duster, whiteboard and a list of words he or she is going to teach. First, the teacher divides students into two teams: team A and team B. Then, the teacher writes two lists of words on the whiteboard. One list is for team A, and the other one is for team B (both lists shared the same set of words). When the teacher gives

the students a starting signal, both team race with each other to find definitions of all the words on their list and also how to pronounce them. The students are allowed to use dictionaries and smartphones as their helpers. If any team can define and pronounce any words on their list correctly, the teacher erases that word from that team's list one by one. The team that can correctly define and pronounce all words on their list before the other team wins the game.

### **2.5.2 True or False**

To play this game, a teacher needs to prepare PowerPoint slides contained words which he or she is going to teach and four big signs (two signs written "true" on them, the other ones written "false" on them). Then, the teacher divides students into two teams: team A and team B and gives each team the two big signs. To start the game, the teacher shows one word on the projector screen, pronounces and reads the definition of it out loud. In order to make the game more challenging, the teacher can read the definition that does not match with the word on the screen. As the word is new to the students, they need to listen carefully and guess whether the definition read by the teacher match with the word on the screen or not. If they agree, they have to raise the sign written "true" up. If they disagree, they have to raise the sign written "false" up. The team that can answer faster with correct answer receives one point. The teacher continues the game by showing another new word and keeps doing the same things until the last word is shown. The team that has higher scores at the end wins the game.

### **2.5.3 Matchup**

To play this game, a teacher needs to prepare a set of word stripes contained words and their definitions mixed together. First, the teacher divides students into teams (approximately 5 people per team). Then, the teacher provides each team the set of word stripes. Every team member's duty is to

match the words with their definitions. The team that can match all words with their definitions fastest with fewest mistakes wins the game.

#### **2.5.4 Vocabulary Board Game**

To play this game, a teacher needs to prepare a marker, duster, whiteboard and a list of words that he or she is going to teach. First, the teacher divides students into two teams: team A and team B. Each team sends one team member as a volunteer to draw lots in order to find whether which team can play first. Then, the teacher writes the list of words on the whiteboard and reads the definition of one word on the list out loud. The team that plays first has to guess which word on the whiteboard that the definition read by the teacher belongs to. If they answer incorrectly, the other can steal a chance to answer. The team that can answer correctly for the first time gets one point, but the team that steals a chance gets only half point. If the team that steals a chance cannot answer, the first team has a chance to answer again in order to gain half point. After one team can answer correctly, the teacher continues reading the definition of the next word. The team that gets the higher scores when all definitions are matched with all words wins the game.

#### **2.5.5 Whisper Game**

To play this game, a teacher does not need to prepare anything except sentences containing words he or she is going to teach. First, the teacher divides students into teams. (approximately 5 people per a team). Each team sends one volunteer in front of the classroom, and every team makes a single line. Then, the teacher says one word with its definition to the volunteers. For example, “Millennials are people who were born after 1980. They are confident, like computers and work well in teams”. The volunteers of every team have to memorize every sentence they heard, come back to their team and whisper those sentences to the team member who is the first person in the

line. Then, that member whispers what he or she heard to the next member who is standing behind him or her. All members of every team continue doing this until the last member of the team is whispered the sentences. To get one point, the last member of the team has to say the sentences he or she heard out loud. The last member of the team that can say the whole sentences correctly brings one point to his or her team. After the teacher reveals the correct sentences to every team, each team sends another volunteer to listen to the teacher's next sentences and does the same thing. The team that has the highest score at the end wins the game.

### **2.5.6 Word Chain**

To play this game, a teacher does not need to prepare anything except a list of words he or she is going to teach. First, the teacher divides students into teams (approximately 5 people per team). Every team makes a circle. Next, the teacher gives one different word to each group. Every group member has to help each other to find the definition of it. The team that has found the definition of the word they are given asks the teacher to check whether the definition they have found are suitable or not. After the teacher has checked the definition of every group's word, he or she has every student count one to five. The students who count the same number are grouped together. When the teacher gives a starting signal, the first member of every group starts saying his or her word with its definition out loud. After that, the next member who is next to him or her on the right hand side repeats what the first member said, both word and definitions, and then says his or her own word with definition. The third member does the same thing until the last member says his or her word with definitions. The team that every member is confident that they can remember all members' words and definitions sit down and wait for the teacher to check their answers. The team which every member can say all the words with their definitions without mistakes wins the game.

## **2.6 Attitudes**

### **2.6.1 Definitions of Attitudes**

According to Crisp (2006), attitudes refer to a set of beliefs that people hold towards a person, thing, event or issue. Basically, attitudes are involved with people's feelings, thoughts and actions, so they play an important role in the way people evaluate and respond to someone or something around them (Pickens, 2005).

In learning contexts, learners' attitudes towards learning are involved with the ways teachers taught, the teaching methods used by the teachers. The learners' attitudes can be positive if the way or methods used by the teachers are suitable for their needs and characteristics, or negative, if they cannot adapt to them (Bertea, 2009). In addition, the learners' attitudes towards learning are associated with academic achievement. The learners who have low academic achievement tend to have more negative attitudes towards learning. Accordingly, it is the teachers' duty to provide the learners a stimulating environment where the learners feel comfortable and enjoy learning so that their positive attitudes will be increased (Veresova & Mala, 2016).

### **2.6.2 The Measurement of Attitudes**

Regarding Krosnick, Judd, & Wittenbrink (n.d.), attitudes cannot be measured directly as attitudes are reflected through people's verbal and nonverbal responses to someone or something. Antonak & Livneh (1995) suggested that attitude measurement is divided into two methods: direct methods and indirect methods.

To measure people's attitudes through the direct methods, people who are the target are directly informed that their attitudes will be measured and will be used as a part of useful information for some studies. With this

method, the people's attitudes are directly measured through their verbal or non-verbal responses. An example of measuring attitudes using this type of method is the survey, interview and so on.

On the other hand, measuring attitudes through the indirect methods, people who are the target are not informed that their attitudes will be measured. To use this type of method, the people's attitudes are measured through their actions or responses towards things. An example of measuring attitudes using this type of method is observation.

For this current study, the participants' attitudes towards learning vocabulary through Game-Based Learning were investigated via close-ended questions and open-ended questions in the questionnaire.

## **2.7 Relevant Research**

### **2.7.1 Relevant Research in Thailand**

Sukkrong & Teo (2010) conducted the quasi-experimental research in order to examine English vocabulary learning achievement and retention of the students who were taught with and without games and their attitudes toward using games in vocabulary teaching. The research was conducted in the first semester of 2009, and the participants were 60 freshmen of Nakhon Si Thammarat Rajabhat University. According to the research processes, the participants were divided into an experimental group of 30 students who were taught with games, and the other 30 students of the control group who were taught without games. The research findings discovered that the achievement and retention of the students who were in the experimental group were higher than those in the controlled group at a significance of .01 and .05 respectively. Besides, the findings also revealed that the students who were taught with games had positive attitudes toward learning vocabulary through games.

Kunnu, Uipanit, & Sukwises (2016) carried out research with the purpose of comparing upper primary school students' development of vocabulary memorization in pre-learning and post-learning where games such as bingo, crossword puzzle, word matching and picture and word spelling were involved. Five categories of word were selected to use in this research: items in school, clothing, food, occupation and weather. The research results expressed that the average testing score in pre-learning and post-learning in word and items in school were different with statistical significance at 0.05. Besides, when considering the average scores of each word category, it was found that the average score of test papers in mixed word and weather had an average testing scores in pre-learning higher than post-learning; the other categories had the average testing scores of pre-learning lower than post-learning.

Tunchalearnpanih (n.d.) conducted a study to investigate the effects of using vocabulary games for improving vocabulary knowledge of Prathom 6 students at Param 9 Kanjanapisek School. Pre-test, post-test and self-reflection records were used as the instruments of the study, and the samples of this study were 40 students who were chosen by simple random sampling. The research findings showed that the post-test scores of most students were higher than the pre-test scores, and the self-reflection from 9 students also reflected in the same way. They agreed that games helped them to remember more words, and their vocabulary knowledge was improved after they studied through games.

### **2.7.2 Relevant Research in Other Countries**

Wang, Shang, & Briody (2011) carried out research to examine the effects of using games on the improvement of young children's English proficiency including vocabulary acquisition and motivation and on anxiety which was caused by peer pressure. In this study, 50 grade-six EFL students from one elementary school were selected as the participants of the research.



The researchers collected the data by using questionnaires, interviews and document collection. As for the questionnaire, it was used to investigate the relationship between two variables: using games and the students' English proficiency. And, interviews were conducted in order to explore the students' attitudes toward learning vocabulary through games. The findings demonstrated that students' vocabulary acquisition and motivation toward learning were improved while their anxiety due to peer pressure were reduced when games were included in learning.

Tuan (2012) conducted a study to examine whether games have an influence on young learners' vocabulary recollection at Ngoi Nha Thong Thai Elementary School (The House of Wisdom Elementary School), Vietnam. Two classes were randomly selected as the experimental group and the control group of the study. The experimental group was exposed to games in recollecting vocabulary whereas the control group was involved in doing exercises without games. The results of the pre-test and two post-tests indicated that the experimental group's performance was better than the control group in recollecting vocabulary.

Yahoui (2012) carried out research to examine the effectiveness of language games in facilitating learning as well as improving students' vocabulary knowledge. In other words, this study aimed to explore the relation between using language games and vocabulary development of first year middle school students. To achieve the mentioned objectives, the data was gathered from a questionnaire which was designed for investigating the teachers' perceptions about the usefulness of using games as a vocabulary teaching technique, and an interview which was designed to collect information about the students' reaction on learning vocabulary through games. The results of the study showed that using language games in vocabulary teaching was effective since it could help the students improve their vocabulary knowledge.

Putri (2013) carried out a study which aimed to improve the vocabulary mastery through the use of games among grade-seven students of

SMP 2 Grabag in the academic year of 2012/ 2013. The data collection was done through observations during the teaching and learning processes, interviewing the students, the English teacher and photographs. The results of this study showed that students' vocabulary mastery was improved by the use of games. This could be seen from the results of classroom observation toward students' achievement in each lesson. Besides, the students' participation in the class was improved, too.

Sulistiyoratri (2013) conducted experimental research with the purpose of investigating whether or not there was a significant effect of using a bingo game on grade-eighth students' vocabulary achievement at SMPN 1 Jelbuk-Jember. Due to the research methodology, the post-test was given to the participants after they had learned vocabulary through the bingo game. The results of t-test analysis toward the students' vocabulary achievement test showed that the statistical value of the t-test was higher than the value of the t-table with the significant level 5% ( $4.37 > 1.99$ ). Therefore, it could be concluded that there was a significant effect in using bingo game on the eighth grade students' vocabulary achievement. As a result, using a bingo game was recommended for teachers as an optional technique in teaching vocabulary.

Al-Shaw (2014) carried out a study to examine the use of games as a learning strategy used to acquire new vocabulary. The participants of this study were 27 students who were studying scientific English in grade ten at Rabaa Al-Adawia Secondary School for Girls, Doha-State of Qatar, in the second semester of the academic year 2013. The participants' age ranged between 16 and 17 years of age. The data was collected through three types of instrument: questionnaire, observation and the regular exams. The outcome of this research showed that using games in vocabulary teaching can increase students' ability and motivation in new words memorization. Besides, games also increased students' enthusiasm to learn new vocabulary of scientific English.

Damayanti (2014) conducted research in order to investigate the students' mastery of vocabulary after learning through a word search puzzle game. The participants of this research were 31 grade-fifth students of State Elementary School, Indonesia, in the academy year at 2013/2014. The students were grouped in two classes V A and V B which consisted of 15 and 16 students respectively. The data collection instruments used in this research were a pre-test and post-test. The pre-test was given to the students before the use of the word search puzzle game was included, and, the post-test was given to the students after the use of the word search puzzle game. The results of the research indicated that there was a significant effect from using the word search puzzle technique on students' achievements in vocabulary learning.

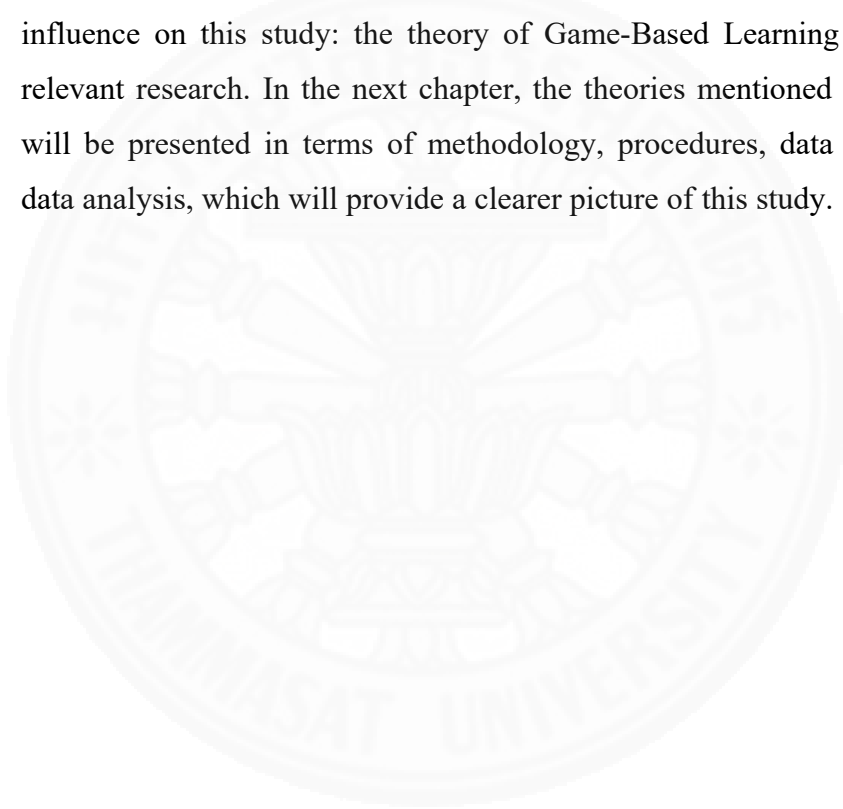
Mehregan (2014) carried out a study to investigate the impact of language games on the vocabulary achievement of Iranian learners. 40 young language learners - the experimental group of 20 and the control group of 20 - were selected as the participant of the study. Four types of games including hangman, flash card memory game, bingo, and odd man out were used in the experimental class. The results of the T-test for the first research question showed statistically significant differences between the experimental group and the control group.

Taheri (2014) conducted research in order to investigate the effects of using language games on elementary students' vocabulary retention. 32 students, whose level of proficiency was the same, were chosen as the participants of the research. They were divided into two groups of 16. The control group was taught through traditional methods of teaching vocabulary such as drills, definitions, etc. The experimental group was taught through language games. The findings revealed that the experimental group performed better than the control group in terms of scores and retention.

Honarmand, Rostampour, & Abdorahimzadeh (2015) carried out a study for the purpose of investigating the effects of using games, especially Tic Tac Toe and flash cards, on the vocabulary learning of young learners who learned English as a foreign language. 50 zero beginners of the Children's

Department at the Iran Language Institute were selected as the participants of the study. They were divided into two groups: control group and experimental group. The control group learned vocabulary through the traditional method while the experimental group learned vocabulary through a Tic Tac Toe game and flash cards. The results of the study showed that games have an important role in teaching vocabulary to zero beginners and had more positive influence than teaching through traditional methods.

Overall, this chapter presents the theoretical frameworks that have an influence on this study: the theory of Game-Based Learning and the other relevant research. In the next chapter, the theories mentioned in this chapter will be presented in terms of methodology, procedures, data collection and data analysis, which will provide a clearer picture of this study.



## CHAPTER 3

### RESEARCH METHODOLOGY

This chapter presents a detailed description of the methodology employed in the study including the research design, participants, instruments and materials, procedures, data collection and data analysis.

#### 3.1 Research Design

The researcher used a quantitative approach for conducting this study. The data was collected in quantitative or numerical form derived from the test, and the researcher used a one-group pretest-posttest design. This design included a pretest measure followed by a treatment and a posttest for a single group. An illustration of the design is as follows:

Group: $O_1$	$X$	$O_2$
$O_1$	=	Pretest
$X$	=	Treatment using language Game-Based Learning (GBL)
$O_2$	=	Posttest

A questionnaire was also launched to investigate the attitudes of the students towards learning English vocabulary through Game-Based Learning.

#### 3.2 Participants

The participants of the current study were 48 first-year non-English major students who enrolled in the course of English Level 1 of the Faculty of Liberal Arts at a government university in Nakhon Pathom, first semester 2017 (The students who could enroll in this course were required to have O-Net score in English Subject from

1% to 60% from the total 100%). They were selected by using convenient sampling as they were the students of the researcher who was responsible for teaching this course.

### 3.3 Instruments

#### 3.3.1 Pretest and Posttest

A pretest and posttest shared the same items (See Appendix A & Appendix B). Both of them contained 30 questions related to vocabulary the students had learned in the class: 20 items contained vocabulary taught with Game-Based Learning and other 10 items contained vocabulary taught with a traditional teaching method, Grammar-Translation Method. The students were assigned to do the pretest before learning vocabulary through Game-Based Learning and do the posttest after learning through this approach. The researcher went through the following steps:

Step 1: The researcher selected the test types. Multiple-choice tests were chosen to use in the study.

Step 2: The researcher studied theories of vocabulary assessment and developed the questions in the test.

Step 3: Three Thai experts who works in the field of English were asked to check the congruence between objectives and items in the test. The data obtained were used to calculate the Item Objective Congruence index (IOC).

The evaluation criteria was used for checking the congruence between objectives and items of the test as follows:

+1 = a test item is considered congruent with the objectives.

0 = a test item is considered neutral in terms of whether it is congruent with the objectives.

-1 = a test item is considered not congruent with the objectives.

The total mean score of the Item-Objective Congruence (IOC) Index is supposed to be higher than 0.5 for acceptable data, and the result was 0.9.

Step 4: Both the pretest and posttest were tried out with 20 first-year non-English major students who were enrolled in the course of English Level 1 of the Faculty of Liberal Arts at the target government university in Nakhon Pathom but were not the samples of this study. After the tests had been tried out, the formula of Kuder-Richardson was applied to find the reliability index of the results, and, the result was 0.82.

Step 5: The pretest and posttest were used with the participants in order to explore their vocabulary knowledge before and after learning vocabulary through Game-Based Learning.

### **3.3.2 Questionnaire**

The questionnaire was used to ask about the students' attitudes towards learning vocabulary through Game-Based Learning. It was conducted in both English and Thai versions, but the participants were asked to complete only the Thai version in order to avoid language ambiguity (See Appendix D). The researcher did the following steps:

Step 1: The researcher created the questionnaire using both close-ended and open-ended questions. The purpose was to investigate the students' attitudes towards learning vocabulary through Game-Based Learning in terms of advantages, disadvantages and other suggestions. The questionnaire consisted of three parts as following:

Part 1: This part was used to investigate the students' background information such as gender, age, faculties where the students are studying, and so on.

Part 2: The students' attitudes towards learning vocabulary through Game-Based Learning.

This part was a close-ended questionnaire which was based on Likert-type scales. The participants were asked to rate their degree of agreement on each statement - from number 1-5. The interpretation of each number is described as follows:

5	=	strongly agree
4	=	agree
3	=	undecided
2	=	disagree
1	=	strongly disagree

Part 3: This part was an open-ended questionnaire. The participants were asked to express their opinions and suggestions towards learning vocabulary through Game-Based Learning in terms of advantages, disadvantages and other suggestions.

Step 2: Before the questionnaire was tried out, three Thai experts who work in the field of English were asked to check the appropriateness of language used in the questionnaire. The data obtained were used to calculate the Item Objective Congruence index (IOC).

The evaluation criteria was used for checking the congruence between objectives and items of the test as follows:

+1 = a test item is considered congruent with the objectives.

0 = a test item is considered neutral in terms of whether it was congruent with the objectives.

-1 = a test item is considered not congruent with the objectives.

The total mean score of the Item-Objective Congruence (IOC) Index is supposed to be higher than 0.5 for acceptable data, and the result was 0.9.

Step 3: The questionnaire was tried out with a group of 20 first year non-English major students who were enrolled in the course of English Level



1 at the university in Nakhon Pathom but were not the samples of this study. After the questionnaire was tried out, the formula of Cronbach's alpha coefficient was applied to find the reliability index of the result, and the result was 0.90.

Step 4: The questionnaire was used with the participants in order to explore their attitudes towards learning vocabulary through Game-Based Learning.

### **3.4 Materials**

#### **3.4.1 Textbook**

The textbook which was used in the study was 'Empower B1+' which was used as the core book for the students in the first semester of the 2017 academic year at the participants' university in Nakhon Pathom, Thailand. To conduct this study, the researcher selected 90 words from unit 1A-3B in 'Empower B1+' and puts 66.66% of the total words (60 words) in the pretest and posttest to test students' knowledge of these words before and after teaching them through Game-Based Learning. The reason why the researcher selected only 66.66% of the whole words to test students' knowledge was that the students should be able to acquire at least 65-70% of what they have learned in order to ensure that they understand it (Laufer & Sim, 1985).

#### **3.4.2 Games**

In this study, there were three non-digital games that were used to teach vocabulary: True or False, Whisper Game and Word Chain (See Appendix F). The reasons why the researcher used these three games as parts of this study was that all of them were non-digital games. Therefore, they can be played anytime and anywhere without technological devices. Another reason was that all of these three games were adaptable in terms of levels of challenge to fit the number of participants, their ages, teaching objectives and learning environment.

### 3.4.3 Lesson plan

In the current study, the researcher created the lesson plans for six weeks in order to plan ahead about what and how to teach the students in each week.

According to the course description, the students who enrolled in English Level 1 Course have to attend this course 2 times per week and 2 hours per a class (vocabulary teaching using Game-Based Learning was done only at the first hour of teaching period). The details of each week are provided below:

**Week 1 – the 1<sup>st</sup> time:** The researcher introduced herself as a teacher, contributed a course syllabus to students and provided them the course description and other necessary details. After that, the teacher had the students introduce themselves one by one in front of the class in order to break the ice among them. After this, the researcher assigned the students to do a pretest containing new vocabulary they were going to learn from unit 1A-3B. To assign the students to do the pretest provided the researcher an opportunity to explore the students' background knowledge on the target vocabulary.

**Week 1 – the 2<sup>nd</sup> time:** The researcher taught writing using the course handouts and had the students practice writing.

**Week 2 – the 1<sup>st</sup> time:** The researcher had the students do a warm-up activity by asking them to think of vocabulary related to the topic of unit 1A as much as they could. To do the warm-up activity, the students were encouraged to get into English mode: being prepared for the activity in which English was used as the main language. Then, the researcher had the students play a game called “True or False” in which they could learn new words by racing with each other to guess and match them with their definitions. The main purposes of this game are to introduce new vocabulary to the students

and stimulating them to memorize that vocabulary via question answer competitions. When the game was finished, the researcher shifted the teaching topic into grammar of the unit 1A. At the end of the class, the researcher asked the students to write at least 2 sentences using the new words and the grammar point they had learned and submit them to the researcher. By having the students do this, the researcher could explore whether the students could remember the vocabulary they had learned or not.

**Week 2 – the 2<sup>nd</sup> time:** The researcher had the students do a warm-up activity by asking them to think of vocabulary related to the topic of unit 1B as much as they could. To do the warm-up activity, the students were encouraged to get into English mode: being prepared for the activity in which English was used as the main language. Then, the researcher had the students play a game called “Whisper Game” in which they could learn new words by racing with other teams to pass on sentences which contained new words they should know with few mistakes in terms of both gist and sentence structure. The main purposes of this game are to introduce new vocabulary to the students and stimulating them to memorize its definition via memory competitions. When the game was finished, the researcher shifted the teaching topic into grammar of the unit 1B. At the end of the class, the researcher asked the students to write at least 2 sentences using the new words and the grammar point they had learned and submit them to the researcher. By having the students do this, the researcher could explore whether the students could remember the vocabulary they had learned or not.

**Week 3 – the 1<sup>st</sup> time:** The researcher helped the students complete listening exercises of unit 1C, taught writing using the course handouts and had the students practice writing.

**Week 3 – the 2<sup>nd</sup> time:** The researcher had the students do a warm-up activity by asking them to think of vocabulary related to the topic of unit 2A as much as they could. To do the warm-up activity, the students were

encouraged to get into English mode: being prepared for the activity where English was used as the main language. Then, the researcher had the students play a game called “Word Chain” in which they could learn new words by racing with other teams to repeat every team member’s words with definitions without mistakes. The main purpose of this game are to introduce new vocabulary to the students and stimulating them to memorize its definition via memory competitions. When the game was finished, the researcher shifted the teaching topic into grammar of the unit 2A. At the end of the class, the researcher asked the students to write at least 2 sentences using the new words and the grammar point they had learned and submit them to the researcher. By having the students do this, the researcher could explore whether the students could remember the vocabulary they had learned or not.

**Week 4 – the 1<sup>st</sup> time:** The researcher had the students do a warm-up activity by asking them to think of vocabulary related to the topic of unit 2B as much as they could. To do the warm-up activity, the students were encouraged to get into English mode: being prepared for the activity in which English was used as the main language. Then, the researcher had the students play a game called “True or False” in which they could learn new words by racing with each other to guess and match them with their definitions. The main purpose of this game are to introduce new vocabulary to the students and stimulating them to memorize its definition via question answer competitions. When the game was finished, the researcher shifted the teaching topic into grammar of the unit 2B. At the end of the class, the researcher asked the students to write at least 2 sentences using the new words and the grammar point they had learned and submit them to the researcher. By having the students do this, the researcher could explore whether the students could remember the vocabulary they had learned or not.

**Week 4 – the 2<sup>nd</sup> time:** The researcher helped the students complete listening exercises of unit 2C, taught writing using the course handouts and had the students practice writing.

**Week 5 – the 1st time:** The researcher had the students do a warm-up activity by asking them to think of vocabulary related to the topic of unit 3A as much as they could. To do the warm-up activity, the students were encouraged to get into English mode: being prepared for the activity where English was used as the main language. Then, the researcher had the students play a game called “Whisper Game” in which they could learn new words by racing with other teams to pass on sentences containing new words they should know with few mistakes in terms of both gist and sentence structure. The main purpose of this game are to introduce new vocabulary to the students and stimulating them to memorize its definition via memory competitions. When the game was finished, the researcher shifted the teaching topic into grammar of the unit 3A. At the end of the class, the researcher asked the students to write at least 2 sentences using the new words and the grammar point they had learned and submit them to the researcher. By having the students do this, the researcher could explore whether the students could remember the vocabulary they had learned or not.

**Week 5 – the 2<sup>nd</sup> time:** The researcher had the students do a warm-up activity by asking them to think of vocabulary related to the topic of unit 3B as much as they could. To do the warm-up activity, the students were encouraged to get into English mode: being prepared for the activity in which English was used as the main language. Then, the researcher had the students play a game called “Word Chain” in which they could learn new words by racing with other teams to repeat every team member’s words with definitions without mistakes. The main purposes of this game are to introduce new vocabulary to the students and stimulating them to memorize its definition via memory competitions. When the game was finished, the researcher shifted the teaching topic into grammar of the unit 3B. At the end of the class, the researcher asked the students to write at least 2 sentences using the new words and the grammar point they had learned and submit them to the researcher. By having the students do this, the researcher could explore whether the students could remember the vocabulary they had learned or not.

**Week 6 – the 1<sup>st</sup> time:** The researcher helped the students complete listening exercises of unit 3C. After that, the researcher assigned the students to complete a posttest and questionnaire in order to explore their vocabulary knowledge after learning through Game-Based Learning and their attitudes towards learning through this approach.

### 3.5 Procedures

Step 1: The researcher studied theories of vocabulary assessment and attitude measurement in order to develop the questions in the pretest, posttest and questionnaire.

Step 2: The pretest, posttest and questionnaire were reviewed by the researcher's advisor and another three experts in the field.

Step 3: The pretest, posttest and questionnaire were piloted with 20 first-year non-English major students who enrolled in the English Level 1 Course but not the same group as the participants of the study.

Step 4: A group of 48 first year non-English major students, who were enrolled in the course of English Level 1 at a government university in Nakhon Pathom, were assigned to complete the pretest. The test time was approximately one hour.

Step 5: The researcher created the lesson plan based on applying games to teaching English vocabulary. This lesson plan was designed for six weeks and approved by the researcher's advisor and three experts in the field.

Step 6: The researcher ran the class based on the lesson plan. The students were taught vocabulary through Game-Based Learning for six weeks. After that, they were assigned to complete both the posttest and questionnaire. The test time was approximately one hour.

### 3.6 Data collection

Step 1: The pretest and posttest were used at the beginning and the end of the semester in order to compare the participants' vocabulary knowledge before and after learning vocabulary through Game-Based Learning.

Step 2: The questionnaire was distributed to the participants for them to complete it after the end of the semester in order to explore the participants' attitudes towards learning vocabulary through Game-Based Learning.

### 3.7 Data analysis

The pre-test and post-test scores were calculated to find any significant difference by finding the average of the scores. To find the Standard Deviation (S.D.) and the significance of pre-test scores and post-test scores, the t-test was applied in the study.

The quantitative results which were gained from the close-ended questions in the questionnaire were calculated to find any significant difference by finding the average of the scores and the Standard Deviation (S.D.). The interpretation of the average score of the close-ended questionnaire was as follows:

4.50 – 5.00	=	Very high
3.50 – 4.49	=	High
2.50 – 3.49	=	Moderate
1.50 – 2.49	=	Low
1.00 – 1.49	=	Very low

The quantitative results which were gained from the opened-ended questions in the questionnaire revealed the students' opinions on learning vocabulary through Game-Based Learning by using content analysis.





## CHAPTER 4

### RESULTS

This chapter reports the results of the study based on the data from quantitative methods in order to achieve the research objectives. The results of the study were collected from the pretest, posttest and questionnaire completed by the 48 first-year non-English major students who were the participants of this study. The data obtained from the research instruments revealed findings to answer the two research questions:

1. To what extent does Game-Based Learning help students learn vocabulary effectively?
2. What are students' attitudes towards learning vocabulary through Game-Based Learning?

The findings of the study are presented in terms of tables and description. The results of the data analysis are divided into 2 parts:

#### 4.1 The students' pre-test scores and post-test scores in vocabulary test

This part reports the results by comparing scores of the students in the vocabulary test before and after learning vocabulary through Game-Based Learning.

#### 4.2 The students' attitudes towards learning vocabulary through Game-Based Learning

This part reports the results of students' attitudes towards learning vocabulary through Game-Based Learning.

#### 4.1 The students' pre-test scores and post-test scores in vocabulary test

The findings in this part illustrates comparison of the students' pre-test scores and post-test scores in the vocabulary test and also vocabulary learning achievement of the students after learning vocabulary through Game-Based Learning. This section aims to answer the first research question of the study. Mean scores, standard deviations and descriptive analysis are presented.

**Table 1. Comparison of the students' pre-test scores and post-test scores in vocabulary test**

Test	N	Mean	S.D.	T	Df	P
Pretest	48	9.44	4.70	7.56	47	.00**
Posttest	48	14.27	5.41			

\*\* Significant level at .05

N = Number of students

Mean = Mean score

S.D. = Standard deviation

T = T-distribution

\*\* = Significant level at .05

According to Table 1, the average score of the pretest was 9.44 with the standard deviation at 4.70, while the average score of the posttest was 14.27 with the standard deviation at 5.41. It showed that the students' post-test scores were higher than pre-test scores with the statistical t-distribution value of 7.56.

**Table 2. Vocabulary learning achievement of the students after learning vocabulary through Game-Based learning**

Student	Score (30)	
	Pretest (P1)	Posttest (P2)
1	24	27
2	14	22
3	13	15
4	12	19
5	14	18
6	5	15
7	6	12
8	19	13
9	5	26
10	15	18
11	17	20
12	10	9
13	5	7
14	14	16
15	9	18
16	10	11
17	14	16
18	8	18
19	10	16
20	4	16
21	10	9
22	13	21
23	5	10
24	18	21
25	12	14

**Table 2. (Continued)**

Student	Score (30)	
	Pretest (P1)	Posttest (P2)
26	4	9
27	9	21
28	9	14
29	7	13
30	10	8
31	16	23
32	3	7
33	9	18
34	7	7
35	8	7
36	8	16
37	4	9
38	4	10
39	10	18
40	6	7
41	9	9
42	9	14
43	7	12
44	4	9
45	5	9
46	8	13
47	10	19
48	1	6
<b>Mean</b>	<b>9.44</b>	<b>14.27</b>

In order to explore the vocabulary learning achievement of the students after learning vocabulary through Game-Based Learning, the students' pre-test scores, post-test scores, differences between pre-test scores and post-test scores and the square of the sum of differences between pre-test scores and post-test scores were placed in the formula below to test for any significant differences between the pre-test scores and post-test scores of the students using t-test dependent sampling (Luan Saiyod & Angkana Saiyod, 1993) as follows:

$$t = \frac{\sum D}{\frac{\sqrt{N\sum D^2 - (\sum D)^2}}{N-1}}$$

When t = Vocabulary learning achievement of the students after learning vocabulary through Game-Based Learning

D = Differences between pre-test scores and post-test scores

$\sum D$  = The sum of differences between pre-test scores and post-test scores

$\sum D^2$  = The square of the sum of differences between pre-test scores and post-test scores

N = Numbers of the whole students

$$t = \frac{\sum D}{\frac{\sqrt{N\sum D^2 - (\sum D)^2}}{N-1}}$$

$$t = \frac{293}{\frac{\sqrt{48(2044) - (293)^2}}{48-1}}$$

$$t = \frac{293}{\frac{\sqrt{98112 - 85849}}{47}}$$

$$t = \frac{293}{\frac{\sqrt{12263}}{47}}$$

$$t = \frac{293}{16.15}$$

$$t = 18.14$$

According to the calculation, the significant difference between the pre-test scores and post-test scores was 18.14. It could be interpreted that vocabulary learning achievement of the students after learning vocabulary through Game-Based Learning was higher than before learning vocabulary through this approach.

To ensure the effectiveness of using Game-Based Learning in teaching English vocabulary, the researcher inserted some words that were not taught through Game-Based Learning, but by a traditional teaching method, to both pretest and posttest in order to find the differences between the development of the students' knowledge of words which were taught with and without Game-Based Learning.

**Table 3. Comparison of the students' pre-test scores and post-test scores considering only words taught with Game-Based Learning**

Test	N	Mean	S.D.	T	Df	P
Pretest	48	6.58	3.48	9.69	47	.00**
Posttest	48	11.13	4.15			

\*\* Significant level at .05

As shown in Table 3 shows the average score of the pretest was 6.58 with the standard deviation at 3.48, while the average score of the posttest was 11.13 with the standard deviation at 4.15. It showed that there was a significant difference between the students' pre-test scores and post-test scores with the statistical t-distribution value of 9.69.

**Table 4. Comparison of the students' pre-test scores and post-test scores considering only words not taught with Game-Based Learning**

Test	N	Mean	S.D.	T	Df	P
Pretest	48	2.83	1.80	1.15	47	.00**
Posttest	48	3.15	1.74			

\*\* Significant level at .05

As shown in Table 4, the average score of the pretest was 2.83 with the standard deviation at 1.80, while the average score of the posttest was 3.15 with the standard deviation at 1.74. It showed that there was no significant difference between the students' pre-test scores and post-test scores with the statistical t-distribution value of 1.15.

In brief, the students' post-test scores for the vocabulary test in terms of words taught with Game-Based Learning was obviously higher than the pre-test scores, while their post-test scores of words that were taught with the traditional teaching method was almost not higher than the pre-test scores. It could be interpreted that the students could memorize words taught with Game-Based Learning better than words that were not taught with this approach.

**Table 5. Hypothesis testing**

	Posttest	Pretest
Mean	14.27	9.44
Variance	29.31	22.17
Observations	48.00	48.00
Pearson Correlation	0.62	
Hypothesized Mean Difference	0.00	

**Table 5. (Continued)**

	<b>Posttest</b>	<b>Pretest</b>
Df	47.00	
t Stat	7.56	
P(T<=t) one-tail	0.00	
t Critical one-tail	1.68	
P(T<=t) two-tail	0.00	
t Critical two-tail	2.01	

According to Table 5, t Stat was 7.56 while t Critical two-tail was 2.01. It means that  $t \text{ Stat} > t \text{ Critical two-tail}$ ;  $H_1$  which states that there will be a statistically significant difference between students' vocabulary pre-test and post-test scores after learning vocabulary through Game-Based Learning is accepted. On the other hand,  $H_0$  which states that there will be no statistically significant difference between students' vocabulary pre-test and post-test scores after learning vocabulary through Game-Based Learning is rejected.

## **4.2 The students' attitudes towards learning vocabulary through Game-Based Learning**

### **4.2.1 Demographic data of the participants**

This part reports the demographic data of the 48 first-year non-English major student who were the participants of this study. There were five items included: gender, age, faculties where the participants were studying, areas of school where they graduated, and programs they attended during high school.



**Table 6. Gender**

<b>Gender</b>	<b>Frequency (N = 48)</b>	<b>Percentage (%)</b>
Male	9	18.75
Female	39	81.25
<b>Total</b>	<b>48</b>	<b>100</b>

According to Table 6, the majority of the participants (81.25%) were female, while 18.75% of them were male.

**Table 7. Age**

<b>Age</b>	<b>Frequency (N = 48)</b>	<b>Percentage (%)</b>
18 years old	15	31.25
19 years old	28	58.33
20 years old	3	6.25
21 years old	1	2.08
28 years old	1	2.08
<b>Total</b>	<b>48</b>	<b>100</b>

As can be seen from Table 7, most of the participants (58.33%) were 19 years old. 31.25% of them were 18 years old. 6.25% of them were 20 years old, and only 2.08% of them were 21 years old and 28 years old.

**Table 8. Faculties where the participants were studying**

<b>Faculty</b>	<b>Frequency (N = 48)</b>	<b>Percentage (%)</b>
Arts	2	4.16
Accountancy	1	2.08
Applied Thai Traditional Medicine	2	4.16
Business Administration	2	4.16
Engineering	10	20.83
Environment	2	4.16
Liberal Arts	1	2.08
Medical Technology	3	6.25
Medicine	1	2.08
Nursing	10	20.83
Public Health	6	12.5
Science	7	14.58
Social Science and Humanities	1	2.08
<b>Total</b>	<b>48</b>	<b>100</b>

In term of faculties where the participants were studying, Table 8 illustrated that the majority of the students (20.83%) were studying at the Faculty of Engineering and the Faculty of Nursing, equally. 14.58%, 12.5% and 6.25% of the participants were studying at the Faculty of Science, Faculty of Public Health and Faculty of Medical Technology, respectively. 4.16% of the participants were studying at the Faculty of Arts, the Faculty of Applied Thai Traditional Medicine, the Faculty of Business Administration and the Faculty of Environment, equally. 2.08% of the participants were studying at the Faculty of Accountancy, the Faculty of Liberal Arts, the Faculty of Medicine and the Faculty of Social Science and Humanities, equally.

**Table 9. Areas of high school where the participants graduated**

<b>School's location</b>	<b>Frequency (N = 48)</b>	<b>Percentage (%)</b>
Bangkok	16	33.33
Other provinces	32	66.66
<b>Total</b>	<b>48</b>	<b>100</b>

With regard to geographical areas of the school where the participants graduated, Table 9 shows that the majority of the participants (66.66%) graduated from schools located in the provinces, while 33.33% of them graduated from schools located in Bangkok.

**Table 10. Program the participants attended during high school**

<b>Program</b>	<b>Frequency (N = 48)</b>	<b>Percentage (%)</b>
Regular program	48	100
International program	0	0
<b>Total</b>	<b>48</b>	<b>100</b>

Table 10 reveals that 100% of the participants attended the regular education during high school. None of them attended an international program.

#### **4.2.2 The students' attitudes towards learning vocabulary through Game-Based Learning**

The findings in this section reveal the students' attitudes towards learning vocabulary through Game-Based Learning. This section aims to answer the second research question of the study. Mean scores, standard deviations, level of interpretation, ranking and descriptive analysis are presented. Below is the meaning of the level of interpretation.

### Level of Interpretation

Mean Scores	Interpretation of the score
4.50-5.00	Very high
3.50-4.49	High
2.50-3.49	Moderate
1.50-2.49	Low
1.00-1.49	Very low

**Table 11. The students' attitudes towards learning vocabulary through Game-Based Learning**

Items	Mean	S.D.	Rank	Level of Satisfaction
1. Learning vocabulary through games is fun.	4.37	.530	2	High
2. Learning vocabulary through games creates good atmosphere in the classroom.	4.35	.601	3	High
3. Learning vocabulary through games provides you more chance to participate in learning.	4.27	.643	5	High
4. Learning vocabulary through games helps you memorize words easier.	4.35	.601	4	High
5. Learning vocabulary through games helps you memorize more words.	4.27	.706	6	High
6. Learning vocabulary through games helps you spell words correctly.	4.41	.678	1	High
7. Learning vocabulary through games provides you a chance to practice using words you have learned.	4.02	.757	12	High
8. Learning vocabulary through games provides you a chance to practice making a decision.	4.25	.729	7	High

**Table 11. (Continued)**

Items	Mean	S.D.	Rank	Level of Satisfaction
9. Learning vocabulary through games makes you feel more enthusiastic about learning vocabulary.	4.25	.699	8	High
10. Learning vocabulary through games encourages you to learn how to solve unexpected problems.	4.27	.729	9	High
11. Learning vocabulary through games develops your creativity.	4.10	.721	11	High
12. Learning vocabulary through games makes you have good attitudes towards vocabulary learning.	4.22	.721	10	High
<b>Total</b>	<b>4.26</b>	<b>.111</b>		<b>High</b>

According to Table 11, which presents the students' attitudes towards learning vocabulary through Game-Based Learning, it can be concluded that the top four items that had the highest level of agreement consisted of item 6 "Learning vocabulary through games helps you spell words correctly." (Mean score = 4.41), item 1 "Learning vocabulary through games is fun." (Mean score = 4.37), item 2 "Learning vocabulary through games creates good atmosphere in the classroom." (Mean score = 4.35), and item 4 "Learning vocabulary through games helps you memorize words easier" (Mean score = 4.35). The top four items were considered a high level of interpretation.

On the other hand, the three items that were rated the lowest level of agreement were item 12 "Learning vocabulary through games makes you have good attitudes towards vocabulary learning." (Mean score = 4.22), item 11 "Learning vocabulary through games develops your creativity." (Mean score = 4.10), and item 7 "Learning vocabulary through games provides you a chance to practice using words you have learned" (Mean score = 4.02). However, all items were still considered a high level of interpretation.

The overall mean score of the students' attitudes towards learning vocabulary through Game-Based Learning was 4.26, which was at a high level.

### **4.2.3 The students' opinions on using Game-Based Learning in teaching English vocabulary**

The students' opinions from the opened-ended questions in the questionnaire were grouped as follows:

#### **Advantages of Game-Based Learning**

According to the students' opinions on advantages of learning vocabulary through Game-Based Learning, most of the students agreed that learning vocabulary through this approach not only made them memorized vocabulary easier but also made them had fun during learning vocabulary. Moreover, they also thought learning vocabulary through Game-Based Learning provided them a chance to interact with new friends as they were grouped with classmates whom they did not know during playing game.

#### **Disadvantages of Game-Based Learning**

However, there were different points of views from the students who commented that there were some disadvantages of learning vocabulary through Game-Based Learning. Some students viewed that learning vocabulary through this approach took too much time, so it sometimes could be seen as a time-consuming activity. Not only that, some students commented that they received insufficient opportunity to speak English while learning vocabulary through this approach. They also thought that instead of learning vocabulary through this approach, they would rather learn vocabulary by using the words in an authentic situation.

## **CHAPTER 5**

### **DISCUSSION, CONCLUSIONS AND RECOMMENDATIONS**

This chapter presents a summary of the study, a summary of the findings, discussions, conclusions, and recommendations for further research.

#### **5.1 Summary of the Study**

This study aimed to explore the effectiveness of using Game-Based Learning, a teaching approach in which games, non-digital ones, are included in teaching knowledge and skills (Kapp, 2014), in teaching English vocabulary to first-year non-English major students of a government university in Nakhon Pathom, Thailand, and the students' attitudes towards learning vocabulary through this approach.

Game-Based Learning has attracted wide interest among English language teachers since the advantages of using it can be seen in plenty of studies in many countries including Thailand. However, there have been few studies done regarding the effectiveness of using Game-Based Learning in teaching English vocabulary to Thai students in university level, especially the students of a provincial government university. Also, first-year non-English major students' attitudes towards learning vocabulary through Game-Based Learning have been little mentioned in other studies. Therefore, this current study was conducted in order to fill a gap in studies undertaken regarding the vocabulary learning achievement of Thai first-year non-English major students. The focus was vocabulary acquisition after learning vocabulary through Game-Based Learning and also the student attitudes towards learning vocabulary through this approach.

The objectives of the study, the research questions, as well as the participants, the research instruments, procedures and data analysis of the present study are summarized as follows:

### **5.1.1 The objectives of the study**

The current study was conducted in order to investigate two main issues: the effectiveness of using Game-Based Learning in teaching English vocabulary, and the students' attitudes towards learning vocabulary through this approach.

### **5.1.2 The research questions**

There were two research questions that the researcher aimed to reply in this study:

- 1) To what extent does Game-Based Learning help the students learn vocabulary effectively?
- 2) What are the students' attitudes towards learning vocabulary through this approach?

### **5.1.3 The participants of the study**

The participants of this study were 48 first-year non-English major students who enrolled in the course of English Level 1 at a government university in Nakhon Pathom, Thailand.

### **5.1.4 The research instruments**

There were two instruments used in this study. The first instrument was the pretest and posttest which shared the same 30 multiple-choice questions: 20 questions asking about vocabulary taught with Game-Based Learning, and 10 questions asking about vocabulary not taught with Game-Based Learning. The second instrument was the questionnaire which was divided into three parts: the participants' background information, the participants' attitudes towards learning vocabulary through Game-Based



Learning and their opinions in terms of advantages and disadvantages towards learning through this approach.

### **5.1.5 The research procedures**

To conduct this study, the participants were assigned to do the vocabulary pretest in order to explore their background knowledge of vocabulary they were going to be taught. Then, they were taught vocabulary using Game-Based Learning for six weeks. After that, they were assigned to do the vocabulary posttest in order to explore a change of their vocabulary knowledge. Also, they were asked to do the questionnaire to express their attitudes towards learning vocabulary through this approach.

### **5.1.6 The data analysis**

In this study, the participants' pre-test scores and post-test scores of vocabulary test were analyzed to find any significant difference by finding the average of the scores. To find the standard deviation and the significance of the pre-test scores and post-test scores, the t-test was applied in the study. The collected data which were gained from the close-ended questions in the questionnaire were analyzed to indicate the average scores and the standard deviation. And, the quantitative results which were gained from the opened-ended questions in the questionnaire were analyzed by using the content analysis.

## **5.2 Summary of the findings**

### **5.2.1 Demographic data of the participants**

The findings showed that the majority of the participants (81.25%) were female. Most of the participants (58.33%) were 19 years old. For their

educational information, most of the participants (41.66%) were studying at the Faculty of Engineering and the Faculty of Nursing, equally. (14.58%, 12.5% and 6.25% of the participants were studying at the Faculty of Science, Faculty of Public Health and Faculty of Medical Technology, respectively.) 4.16% of them were studying at the Faculty of Arts, the Faculty of Applied Thai Traditional Medicine, the Faculty of Business Administration and the Faculty of Environment, equally. 2.08% of them were studying at the Faculty of Accountancy, the Faculty of Liberal Arts, the Faculty of Medicine and the Faculty of Social Science and Humanities, equally. And, 66.66% of the participants graduated from the schools which are not in Bangkok, and all of them attended a regular program during high school.

### **5.2.2 The effectiveness of using Game-Based Learning in teaching English vocabulary**

The students' vocabulary knowledge was explored through 30 items of multiple-choice test in order to indicate their vocabulary knowledge before and after learning vocabulary through Game-Based Learning.

The findings revealed that the participants' average score for the pretest was 9.44 with the standard deviation at 4.70, and the average score of the posttest was 14.27 with the standard deviation at 5.41. It can be seen that the post-test scores was higher than the pre-test scores with the statistical t-distribution value of 7.56. In other words, the participants' vocabulary knowledge was significantly increased after learning vocabulary through Game-based Learning.

### **5.2.3 The students' attitudes towards learning vocabulary through Game-Based Learning**

The students' attitudes towards learning vocabulary through Game-Based Learning were explored through 12 close-ended questions and 3 open-ended questions in the questionnaire. The questionnaire items were related to

the participants' attitudes towards learning vocabulary through Game-Based Learning.

The findings revealed that there were the top four items, which were close-ended questions, in the questionnaire that were rated to be the highest level of agreement by the participants. There were item 6 "Learning vocabulary through games helps you spell words correctly", item 1 "Learning vocabulary through games is fun", item 2 "Learning vocabulary through games creates good atmosphere in the classroom", and item 4 "Learning vocabulary through games helps you memorize words easier".

For open-ended questions in the questionnaire, most of the participants agreed that learning vocabulary through Game-Based Learning not only helped them memorized new vocabulary but also made them had fun during learning. However, the participants thought that learning through this approach took too much time, and some of the participants would rather learn new vocabulary from the real communication.

### **5.3 Discussion**

This section presents a discussion of the results of the study and how they relate to other previous related studies. The use of Game-Based Learning is supported by many researchers in the field of teaching English as a foreign language, so it is worth discussing the results of the studies to compare how the results of the current study are similar to or different from others.

#### **5.3.1 Research question 1: To what extent does Game-Based Learning help the students learn vocabulary effectively?**

According to the first research question, which explored the effectiveness of using Game-Based Learning in teaching English vocabulary to the first-year non-English major students at a government university in Nakhon Pathom, Thailand, the analysis of the students' pre-test and post-test scores of vocabulary test revealed that their post-test scores were higher than

pre-test scores. Although the researcher had calculated the scores of words taught with and without games separately, the results still indicated that the students' post-test scores of words taught with games were obviously increased, while the students' post-test scores of words not taught with games was almost not increased. Accordingly, it could be interpreted that the students' vocabulary knowledge was significantly increased after learning vocabulary through Game-Based Learning

The mentioned findings were in line with the study of Tuan (2012) which aimed to examine whether games have an influence on young students' vocabulary recollection or not. The findings of both studies might be caused by one of the characteristics of games that is fun. When the students had fun with what they were doing, they were likely to view the learning atmosphere around them more relaxed and were able to memorize things better and faster (Wierus & Wierus, 1994; cited in Govindasamy, 2013).

In addition, the findings of the study also supported the study of Tunchalearnpanih (n.d.) which aimed to investigate the effects of using vocabulary games for improving vocabulary knowledge of grade 6 students. The cause of the increasing of the students' vocabulary post-test scores after playing games, in both studies, could be assumed that it was because of one of the characteristics of games that usually needs the winner. Therefore, it causes competitive feelings among players. Consequently, the students who learned vocabulary through games tended to be motivated by the competitive feelings. The more the students have high learning motivation, the more they have high learning effort and energy, and the results of this were shown through their scores (Ormrod, 2014).

Moreover, the findings collected from this study were similar to the results of the study of Sulistyoratri (2013) which explored vocabulary achievement of grade 8 students after being taught with games. Another reason why the students from both studies could perform better in the vocabulary posttest might be affected by one of the characteristics of games which is the ability to capture the students' attention. Hence, the students were likely to concentrate more on learning activities since their attention was

attracted by the game. When the students concentrated on what they were doing, they tended to be able to maintain it better (Mubaslat, 2012).

Furthermore, these findings were similar to the study of Damayanti (2014), which was conducted in order to find the effectiveness of using word games in teaching vocabulary to grade 5 students. It could be said that the increasing of the students' vocabulary learning achievement considering from the differences between the pre-test scores and post-test scores, which were shown through both studies, might be affected by the characteristic of games that is the ability to lower the students' anxiety, so they can learn things better (Richard-Amato, 1988; cited in Tuan & Doan, 2010).

### **5.3.2 Research question 2: What are the students' attitudes towards learning vocabulary through Game-Based Learning?**

Concerning the second research question, which explored the first-year non-English major students' attitudes towards learning vocabulary through Game-Based Learning, the answers from the questionnaire were analyzed. The findings revealed that most of the participants agreed that learning vocabulary through Game-Based Learning was fun and could create good atmosphere in the classroom. Moreover, they also accepted that learning vocabulary through this approach not only helped them memorize words easier but also improved their spelling skills.

The findings of this current study indicated that the students agreed with the idea that Game-Based Learning helped them spell words correctly and also helped them memorize words easier. This was similar to the study of Sukkrong & Teo (2010) which examined English vocabulary learning achievement and retention of first-year students of Nakhon Si Thammarat Rajabhat University who were taught with and without games and their attitudes towards using games as teaching methods. The results of the prior study found that after the students learned vocabulary through games, they felt that learning to spell and memorize new words was not as difficult as before.

Not only that, the students also expressed that they had fun and felt more enthusiastic towards learning after learning vocabulary through this approach. These findings are consistent with the study of Kunnu, Uipanit & Sukwises (2016) which was conducted to explore the learning achievement of upper primary education students, who were studying at English Club for 7 weeks, before and after learning vocabulary through games. The results of the study pointed out that during learning through games, the students were observed to be more fun and enthusiastic than learning through traditional teaching methods.

In addition, the students revealed that their feelings about being a part of learning were increased as they were provided more chance to participate in learning activities. The mentioned findings were similar to what Wang, Shang & Briody (2011) demonstrated in their study: during learning vocabulary through games, grade 6 EFL students who were the participants of the study tended to be willingly involved in learning activity more than before.

Moreover, the students accepted that learning through Game-Based Learning changed an atmosphere in the classroom to be more positive. This was consistent with the study of Yahoui (2012) which aimed to identify the effectiveness of language games in learning vocabulary. The results of that study showed that games can be used to create a good learning situation and create an enjoyable learning atmosphere in the classroom.

Furthermore, the students could not deny that they could remember more words after learning vocabulary through Game-Based Learning. The findings were also in line with the study of Al-Shaw (2014) that aimed to examine the implementing of games as an effective learning strategy to acquire new vocabulary. The findings of that study revealed that the students' ability of memorizing words was obviously improved after learning through games.

## **5.4 Conclusion**

This current study aimed to explore the effectiveness of using Game-Based Learning in teaching English vocabulary to the first-year non-English major students of a Thai Government university in Nakhon Pathom, and the students' attitudes towards learning vocabulary through this approach. Concerning the effectiveness of using Game-Based Learning in teaching English vocabulary, it can be concluded that Game-Based Learning helps the students learn vocabulary effectively since the students' post-test scores on the vocabulary test were higher than pre-test scores. This result illustrated that the students' vocabulary knowledge was obviously developed after the students learned vocabulary through Game-Based Learning.

Concerning the students' attitudes towards learning vocabulary through Game-Based Learning, the results of the questionnaire indicated that most of the students agreed that learning vocabulary through Game-Based Learning was fun and helped to create a good atmosphere in the classroom. In addition, they also agreed that learning vocabulary through Game-Based Learning could improve their spelling skills and helped them memorize more words in an easier way. In conclusion, it can be interpreted that the students had positive attitudes towards learning vocabulary through Game-Based Learning as it helped them learn vocabulary better.

## **5.5 Recommendations**

### **5.5.1 Recommendations for implementing Game-Based Learning effectively**

Based on the findings of this study, some suggestions are proposed for Thai EFL teachers.

**5.5.1.1** Time of teaching should be well-managed. Since some of the participants of this study mentioned that learning through this approach took too much time, it is the teachers' responsibility to manage time

well in order not to cause the students bored or affect other teaching contents.

**5.5.1.2** Training or workshop should be arranged for the teachers. In order to increase the teachers' knowledge and confidence in using Game-Based Learning in the classroom, the teachers should have an opportunity to attend the training or workshop related to this teaching approach in order to ensure that they have sufficient knowledge of Game-Based Learning and be able to apply it to the classroom effectively.

## **5.5.2 Recommendations for further research**

Based on the findings and conclusions of the study, the following recommendations are made for future research.

**5.5.2.1** For further research, other qualitative methods such as interview, classroom observation or the teachers' reflection can be adopted in order to access more in-depth information. Besides, in terms of credibility, further research can be done with a larger number of participants.

**5.5.2.2** As the participants of this research were Thai first-year non-English major students of a government university in Nakhon Pathom, Thailand, further research can be conducted with students in other levels of education, such as sophomores, juniors, or seniors, to determine any similarities and differences in the results.

**5.5.2.3** As the teaching topic of this research was vocabulary, further research can be conducted by selecting other teaching topics, such as grammar, in order to determine any similarities and differences of the results of using the games approach.



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**APPENDICES**

## APPENDIX A

### PRETEST

#### Part I

**Items 1-15: 10 items x 1 mark each = 15 marks**

**Direction: Match the letter with its definition below.**

A. luxury	B. niece	C. beard	D. worth
E. nephew	F. immigrant	G. device	H. moustache
I. wealthy	J. appreciate	K. aristocrat	L. attitude
M. lively	N. impression	O. generation	P. principle
Q. career	R. bring up	S. identify	T. contact

- \_\_\_\_\_ 1. A daughter of your brother or sister
- \_\_\_\_\_ 2. A person of high social rank
- \_\_\_\_\_ 3. A person who has come to a different country in order to live there permanently
- \_\_\_\_\_ 4. A person who can give you useful information that will help you at work or socially
- \_\_\_\_\_ 5. An object or machine that has been invented for a particular purpose
- \_\_\_\_\_ 6. Having a particular value, especially in money
- \_\_\_\_\_ 7. Being full of energy and enthusiasm
- \_\_\_\_\_ 8. To care for a child until he or she is an adult
- \_\_\_\_\_ 9. To recognize someone or something and say or prove who or what that person or thing is
- \_\_\_\_\_ 10. The hair that some men grow on the lower part of their face



- \_\_\_\_\_ 11. To know how good someone or something is
- \_\_\_\_\_ 12. A basic idea or rule that explains how something happens
- \_\_\_\_\_ 13. A feeling or opinion about something or someone
- \_\_\_\_\_ 14. All the people of about the same age within a society or within a particular family
- \_\_\_\_\_ 15. An idea or opinion of what something or someone is like

## Part II

**Items 16-30: 15 items x 1 mark each = 15 marks**

**Direction: Choose the best answer for each items**

16. My sister \_\_\_\_\_ that being alone is better than being with family, so she moved out of our home. However, we still \_\_\_\_\_ with each other. She always calls me every week.

- a. criticized, keep in touch
- b. realized, keep in touch
- c. criticized, spend time
- d. realized, spend time

17. Sean is \_\_\_\_\_ person. He likes being around with friends. \_\_\_\_\_, he has just hold the big birthday party.

- a. sociable, recently
- b. charming, constantly
- c. sociable, constantly
- d. charming, recently

18. \_\_\_\_\_ were the first generation that has seen the introduction of home computer, but the generation that use computer more often are \_\_\_\_\_.

- a. Veterans, Baby Boomers
- b. Baby Boomers, Generation X
- c. Generation X, Millennials
- d. Millennials, Generation X

19. My friend and I are \_\_\_\_\_. We are both \_\_\_\_\_ because we always stay positive in every situation.

- a. different, optimists
- b. different, pessimists
- c. similar, optimists
- d. similar, pessimists

20. This \_\_\_\_\_ is very \_\_\_\_\_. I cannot stop playing it.

- a. app, old-fashioned
- b. browser, addictive
- c. app, addictive
- d. browser, old-fashioned

21. I do not like communicating with a \_\_\_\_\_. It is quite difficult for me to \_\_\_\_\_ someone whom I do not know before.

- a. stranger, ring up
- b. relative, get to know
- c. stranger, get to know
- d. relative, ring up

22. Many people like Jenny because she always makes people fun and laugh. She has a good \_\_\_\_\_. I want to have that kind of \_\_\_\_\_.

- a. sense of belonging, quality
- b. sense of humour, quality
- c. sense of belonging, personality
- d. sense of humour, personality

23. Abraham is \_\_\_\_\_ in many languages. He can speak 3 languages and can \_\_\_\_\_ all of them into his native language.

- a. fluent, translate
- b. enormous, translate
- c. fluent, express
- d. enormous, express

24. The teacher \_\_\_\_\_ students to \_\_\_\_\_ their writing skills by assigning them to write a short essay.

- a. reminds, improve
- b. encourages, improve
- c. reminds, impress
- d. encourages, impress

25. Nathan does not \_\_\_\_\_ with Daniel. They always \_\_\_\_\_ with each other every time they meet.

- a. get together, adapt
- b. get on, adapt
- c. get together, argue
- d. get on, argue

26. I feel so \_\_\_\_\_ for this interview because I am one of two \_\_\_\_\_ who tends to get this job.

- a. embarrassed, candidates
- b. nervous, candidates
- c. embarrassed, representatives
- d. nervous, representatives

27. During my \_\_\_\_\_, I wanted to be a runner. Therefore, I ran and exercised a lot. Now, I do not want to be a runner anymore, but \_\_\_\_\_ is still my favorite activity that I always do when I have free time.

- a. neighborhood, blackout
- b. childhood, workout
- c. neighborhood, workout
- d. childhood, blackout

28. My father like \_\_\_\_\_ communication more than phone communication because he always feels \_\_\_\_\_ hearing the phone's ringing.

- a. face-to-face, annoyed
- b. direct, messy
- c. face-to-face, messy
- d. direct, annoyed

29. Although I usually make a lot of \_\_\_\_\_ during working, my boss always sees my effort. He often supports and \_\_\_\_\_ me for working hard.

- a. mistakes, recommends
- b. disasters, recommends
- c. mistakes, praises
- d. disasters, praises

30. Jacky and Joey are \_\_\_\_\_ twins, but their habits are different. Jacky is \_\_\_\_\_ because all of his actions and decisions are based on reasons, but Joey is different. He always does everything based on emotions.

- a. identical, experienced
- b. practical, experienced
- c. identical, sensible
- d. practical, sensible



## APPENDIX B

### POSTTEST

#### Part I

**Items 1-15: 10 items x 1 mark each = 15 marks**

**Direction: Match the letter with its definition below.**

A. luxury	B. niece	C. beard	D. worth
E. nephew	F. immigrant	G. device	H. moustache
I. wealthy	J. appreciate	K. aristocrat	L. attitude
M. lively	N. impression	O. generation	P. principle
Q. career	R. bring up	S. identify	T. contact

- \_\_\_\_\_ 1. A daughter of your brother or sister
- \_\_\_\_\_ 2. A person of high social rank.
- \_\_\_\_\_ 3. A person who has come to a different country in order to live there permanently
- \_\_\_\_\_ 4. A person who can give you useful information that will help you at work or socially
- \_\_\_\_\_ 5. An object or machine that has been invented for a particular purpose
- \_\_\_\_\_ 6. Having a particular value, especially in money
- \_\_\_\_\_ 7. Being full of energy and enthusiasm
- \_\_\_\_\_ 8. To care for a child until he or she is an adult
- \_\_\_\_\_ 9. To recognize someone or something and say or prove who or what that person or thing is

- \_\_\_\_\_ 10. The hair that some men grow on the lower part of their face.
- \_\_\_\_\_ 11. To know how good someone or something is
- \_\_\_\_\_ 12. A basic idea or rule that explains how something happens
- \_\_\_\_\_ 13. A feeling or opinion about something or someone
- \_\_\_\_\_ 14. All the people of about the same age within a society or within a particular family
- \_\_\_\_\_ 15. An idea or opinion of what something or someone is like

## Part II

**Items 16-30: 15 items x 1 mark each = 15 marks**

**Direction: Choose the best answer for each items.**

16. My sister \_\_\_\_\_ that being alone is better than being with family, so she moved out of our home. However, we still \_\_\_\_\_ with each other. She always calls me every week.

- a. criticized, keep in touch
- b. realized, keep in touch
- c. criticized, spend time
- d. realized, spend time

17. Sean is \_\_\_\_\_ person. He likes being around with friends. \_\_\_\_\_, he has just hold the big birthday party.

- a. sociable, recently
- b. charming, constantly
- c. sociable, constantly
- d. charming, recently

18. \_\_\_\_\_ were the first generation that has seen the introduction of home computer, but the generation that use computer more often are \_\_\_\_\_.

- a. Veterans, Baby Boomers
- b. Baby Boomers, Generation X
- c. Generation X, Millennials
- d. Millennials, Generation X

19. My friend and I are \_\_\_\_\_. We are both \_\_\_\_\_ because we always stay positive in every situation.

- a. different, optimists
- b. different, pessimists
- c. similar, optimists
- d. similar, pessimists

20. This \_\_\_\_\_ is very \_\_\_\_\_. I cannot stop playing it.

- a. app, old-fashioned
- b. browser, addictive
- c. app, addictive
- d. browser, old-fashioned

21. I do not like communicating with a \_\_\_\_\_. It is quite difficult for me to \_\_\_\_\_ someone whom I do not know before.

- a. stranger, ring up
- b. relative, get to know
- c. stranger, get to know
- d. relative, ring up



22. Many people like Jenny because she always makes people fun and laugh. She has a good \_\_\_\_\_. I want to have that kind of \_\_\_\_\_.

- a. sense of belonging, quality
- b. sense of humour, quality
- c. sense of belonging, personality
- d. sense of humour, personality

23. Abraham is \_\_\_\_\_ in many languages. He can speak 3 languages and can \_\_\_\_\_ all of them into his native language.

- a. fluent, translate
- b. enormous, translate
- c. fluent, express
- d. enormous, express

24. The teacher \_\_\_\_\_ students to \_\_\_\_\_ their writing skills by assigning them to write a short essay.

- a. reminds, improve
- b. encourages, improve
- c. reminds, impress
- d. encourages, impress

25. Nathan does not \_\_\_\_\_ with Daniel. They always \_\_\_\_\_ with each other every time they meet.

- a. get together, adapt
- b. get on, adapt
- c. get together, argue
- d. get on, argue

26. I feel so \_\_\_\_\_ for this interview because I am one of two \_\_\_\_\_ who tends to get this job.

- a. embarrassed, candidates
- b. nervous, candidates
- c. embarrassed, representatives
- d. nervous, representatives

27. During my \_\_\_\_\_, I wanted to be a runner. Therefore, I ran and exercised a lot. Now, I do not want to be a runner anymore, but \_\_\_\_\_ is still my favorite activity that I always do when I have free time.

- a. neighborhood, blackout
- b. childhood, workout
- c. neighborhood, workout
- d. childhood, blackout

28. My father like \_\_\_\_\_ communication more than phone communication because he always feels \_\_\_\_\_ hearing the phone's ringing.

- a. face-to-face, annoyed
- b. direct, messy
- c. face-to-face, messy
- d. direct, annoyed

29. Although I usually make a lot of \_\_\_\_\_ during working, my boss always sees my effort. He often supports and \_\_\_\_\_ me for working hard.

- a. mistakes, recommends
- b. disasters, recommends
- c. mistakes, praises
- d. disasters, praises

30. Jacky and Joey are \_\_\_\_\_ twins, but their habits are different. Jacky is \_\_\_\_\_ because all of his actions and decisions are based on reasons, but Joey is different. He always does everything based on emotions.

- a. identical, experienced
- b. practical, experienced
- c. identical, sensible
- d. practical, sensible



## **APPENDIX C**

### **QUESTIONNAIRE**

#### **Exploring first-year non-English major students' attitudes towards learning vocabulary through Game-Based Learning**

This questionnaire is a part of thesis for a Master's degree in English Language Teaching (ELT), Language Institute, Thammasat University

This questionnaire is designed to examine first-year non-English major students' attitudes towards learning vocabulary through Game-Based Learning. Please answer all of the questions to the best of your knowledge. Your answers will be kept confidential. The questionnaire is divided into 3 parts as follows:

Part 1: General and demographic information

Part 2: Students' attitudes towards learning vocabulary through Game-Based Learning

Part 3: Opinions and Suggestions

**Part 1: General and Demographic Information**

Direction: Please answer the questions or mark ( / ) in the box provided for the answer that related to you.

1. Age: \_\_\_\_\_

2. Gender:  Male  Female

3. Faculty: \_\_\_\_\_ Major: \_\_\_\_\_

4. The location of high school where you graduated:

Bangkok  Other provinces

5. The educational program that you attended during high school

English or international program

Regular program

## Part 2 Students' attitudes towards learning vocabulary through Game-Based Learning (GBL)

Direction: Please mark / in a box that best describes the degree of your agreement with each statement.

- 5 = Strongly Agree  
 4 = Agree  
 3 = Undecided  
 2 = Disagree  
 1 = Strongly Disagree

Statements	Level of agreement				
	5	4	3	2	1
1. Learning vocabulary through games is fun.					
2. Learning vocabulary through games creates good atmosphere in the classroom.					
3. Learning vocabulary through games provides you more chance to participate in learning.					
4. Learning vocabulary through games helps you memorize words easier.					
5. Learning vocabulary through games helps you memorize more words.					
6. Learning vocabulary through games helps you spell words correctly.					
7. Learning vocabulary through games provides you a chance to practice using words you have learned.					
8. Learning vocabulary through games provides you a chance to practice making a decision.					

**Table (Continued)**

Statements	Level of agreement				
	5	4	3	2	1
9. Learning vocabulary through games makes you feel more enthusiastic about vocabulary learning.					
10. Learning vocabulary through games encourages you to learn how to solve unexpected problems.					
11. Learning vocabulary through games develops your creativity.					
12. Learning vocabulary through games makes you have good attitudes towards learning vocabulary					

**Part 3: Opinions and Suggestions**

Direction: Please give opinions or suggestions for the following topics.

1. What are the advantages of learning vocabulary through Game-Based Learning?

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.....

.....

2. What are the disadvantages of learning vocabulary through Game-Base Learning?

.....

.....

.....

3. Are there any opinions and suggestions about implementing Game-Based Learning in teaching vocabulary?

.....

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## APPENDIX D

### แบบสอบถามเพื่อการวิจัย

เรื่อง ทักษะคิดของนักศึกษาที่มีต่อการเรียนคำศัพท์ภาษาอังกฤษ  
โดยวิธีการเรียนรู้ผ่านเกมส์ (Game-Based Learning)

แบบสอบถามนี้มีวัตถุประสงค์เพื่อสำรวจทักษะคิดของนักศึกษาชั้นปีที่ 1 ที่มีต่อการเรียนคำศัพท์ภาษาอังกฤษโดยวิธีการเรียนรู้ผ่านเกมส์ คำตอบของท่านจะไม่ได้รับการเปิดเผยและจะนำไปใช้เพื่อประโยชน์ในการทำวิจัยเพื่อพัฒนาการเรียนการสอนภาษาอังกฤษเท่านั้น จึงขอความกรุณาท่านในการตอบคำถามตามความเป็นจริง แบบสอบถามนี้ประกอบด้วย 3 ส่วน ได้แก่

ส่วนที่ 1 ข้อมูลทั่วไปของผู้ตอบแบบสอบถาม

ส่วนที่ 2 ทักษะคิดของนักศึกษาที่มีต่อการเรียนคำศัพท์ผ่านวิธีการเรียนรู้ผ่านเกมส์

ส่วนที่ 3 ความคิดเห็นและข้อเสนอแนะเพิ่มเติม



## ส่วนที่ 1 ข้อมูลทั่วไปของผู้ตอบแบบสอบถาม

คำชี้แจง กรุณาทำเครื่องหมาย / ลงใน  หรือเติมข้อความที่ตรงกับความเป็นจริงเกี่ยวกับตัวท่านมากที่สุดลงในช่องว่าง

1. อายุ \_\_\_\_\_
2. เพศ  ชาย  หญิง
3. คณะ \_\_\_\_\_ วิชาเอก \_\_\_\_\_
4. สถานที่ตั้งของโรงเรียนมัธยมที่จบการศึกษา  
 กรุงเทพฯ  จังหวัดอื่นๆ
5. หลักสูตรที่เข้าเรียนในระดับมัธยม  
 หลักสูตรภาษาอังกฤษหรือหลักสูตรนานาชาติ  
 หลักสูตรภาษาไทย

ส่วนที่ 2 ทักษะคตินักศึกษาที่มีต่อการเรียนคำศัพท์ภาษาอังกฤษผ่านวิธีการเรียนรู้ผ่านเกมส์  
คำชี้แจง โปรดพิจารณาข้อความต่อไปนี้และทำเครื่องหมาย / ลงในช่องว่างที่ตรงตามความคิดเห็น  
 ของท่านมากที่สุด

- ระดับ 5 หมายถึง เห็นด้วยมากที่สุด  
 4 หมายถึง เห็นด้วยอย่างมาก  
 3 หมายถึง เห็นด้วยปานกลาง  
 2 หมายถึง เห็นด้วยน้อย  
 1 หมายถึง เห็นด้วยน้อยที่สุด

รายการ	ระดับความคิดเห็น				
	5	4	3	2	1
1. การสอนคำศัพท์ภาษาอังกฤษด้วยวิธีการเรียนรู้ผ่านเกมส์เป็นวิธีการสอนที่สนุกสนานและไม่น่าเบื่อ					
2. การสอนคำศัพท์ภาษาอังกฤษด้วยวิธีการเรียนรู้ผ่านเกมส์ช่วยเสริมสร้างบรรยากาศที่ดีในห้องเรียน					
3. การสอนคำศัพท์ภาษาอังกฤษด้วยวิธีการเรียนรู้ผ่านเกมส์ช่วยให้ผู้เรียนมีส่วนร่วมในการเรียน					
4. การสอนคำศัพท์ภาษาอังกฤษด้วยวิธีการเรียนรู้ผ่านเกมส์ช่วยให้ผู้เรียนสามารถจดจำคำศัพท์ได้ง่ายขึ้น					
5. การสอนคำศัพท์ภาษาอังกฤษด้วยวิธีการเรียนรู้ผ่านเกมส์ช่วยให้ผู้เรียนสามารถจดจำคำศัพท์ได้มากขึ้น					
6. การสอนคำศัพท์ภาษาอังกฤษด้วยวิธีการเรียนรู้ผ่านเกมส์ช่วยให้ผู้เรียนสะกดคำได้อย่างถูกต้อง					
7. การสอนคำศัพท์ภาษาอังกฤษด้วยวิธีการเรียนรู้ผ่านเกมส์ส่งเสริมให้ผู้เรียนได้ฝึกฝนการใช้คำศัพท์ที่ได้เรียนมา					
8. การสอนคำศัพท์ภาษาอังกฤษด้วยวิธีการเรียนรู้ผ่านเกมส์ช่วยให้ผู้เรียนได้ฝึกฝนทักษะทางการตัดสินใจ					

(ต่อ)

รายการ	ระดับความคิดเห็น				
	5	4	3	2	1
9. การสอนคำศัพท์ภาษาอังกฤษด้วยวิธีการเรียนรู้ผ่านเกมส์ช่วยให้ผู้เรียนมีความกระตือรือร้นในการเรียนคำศัพท์					
10. การสอนคำศัพท์ภาษาอังกฤษด้วยวิธีการเรียนรู้ผ่านเกมส์ส่งเสริมให้ผู้เรียนรู้จักการแก้ปัญหาเฉพาะหน้า					
11. การสอนคำศัพท์ภาษาอังกฤษด้วยวิธีการเรียนรู้ผ่านเกมส์ช่วยให้ผู้เรียนพัฒนาพลังความคิดสร้างสรรค์					
12. การสอนคำศัพท์ภาษาอังกฤษด้วยวิธีการเรียนรู้ผ่านเกมส์ทำให้ผู้เรียนมีทัศนคติที่ดีต่อการเรียนคำศัพท์					

ส่วนที่ 3 ความคิดเห็นและข้อเสนอแนะเพิ่มเติม

คำชี้แจง โปรดตอบคำถามและแสดงความคิดเห็นในหัวข้อต่อไปนี้

1. ท่านคิดว่าการเรียนคำศัพท์ภาษาอังกฤษโดยวิธีการเรียนรู้ผ่านเกมส์มีข้อดีอย่างไร โปรดอธิบาย

.....

.....

.....

2. ท่านคิดว่าการเรียนคำศัพท์ภาษาอังกฤษโดยวิธีการเรียนรู้ผ่านเกมส์มีข้อเสียอย่างไร  
โปรดอธิบาย

.....

.....

.....

3. ท่านมีข้อเสนอแนะเกี่ยวกับการเรียนคำศัพท์ภาษาอังกฤษ โดยวิธีการเรียนรู้ผ่านเกมส์หรือไม่  
โปรดอธิบาย

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## APPENDIX E

### LESSON PLAN

**Class:** English Level 1

**Method:** Game-Based Learning & other teaching methods

**Time:** 2 hours (120 minutes) per day & 2 times per week

**Period:** 6 weeks

**Target students:** 48 first-year non-English major students

**Objectives:**

- 1) Students' basic English listening, speaking, reading and writing skills are improved.
- 2) Students are able to remember new words in terms of forms and meanings.

**Week 1: the 1<sup>st</sup> time**

<b>Time</b>	<b>State</b>	<b>Procedures</b>	<b>Purposes</b>	<b>Materials</b>
10 mins	-	<b>T</b> distributes a course syllabus and introduces herself and the course to <b>Ss</b> .	To explain to <b>Ss</b> what the course is about and inform them about other necessary details they are required to know	1. Course syllabus 2. Textbook 3. Graded reader 4. Handouts
5 mins	-	<b>T</b> asks <b>Ss</b> to prepare themselves for self-introduction.	To break the ice among <b>Ss</b>	-
30 mins	-	<b>Ss</b> introduce themselves in front of the class one by one.		
60 mins	-	<b>T</b> assigns <b>Ss</b> to do a pretest contained new vocabulary they are going to learn from unit 1 to unit 3.	To test <b>Ss's</b> background knowledge on new vocabulary	Pretest

**Week 1: the 2<sup>nd</sup> time**

<b>Time</b>	<b>State</b>	<b>Procedures</b>	<b>Purposes</b>	<b>Materials</b>
10 Mins	-	<b>T</b> informs <b>Ss</b> about a topic they are going to learn.	To inform <b>Ss</b> about the learning objectives	Handouts
50 mins	-	<b>T</b> teaches <b>Ss</b> how to write an outline of a paragraph.	To introduce <b>Ss</b> to the outline writing	Handouts
50 mins	-	<b>Ss</b> practice writing an outline of a paragraph.	To provide <b>Ss</b> a chance to practice gathering and managing ideas	Handouts

**Week 2: the 1<sup>st</sup> time**

<b>Time</b>	<b>State</b>	<b>Procedures</b>	<b>Purposes</b>	<b>Materials</b>
5 mins	-	<b>T</b> informs <b>Ss</b> about what they are going to learn from unit 1.	To inform <b>Ss</b> about learning objectives and what they will be able to do after learning unit 1	Textbook
15 Mins	Pre activity	1. <b>T</b> encourages <b>Ss</b> to think of vocabulary that is involved with the topic of unit 1A. 2. <b>T</b> introduces <b>Ss</b> to the game named “True or False” (See Appendix F), explains the playing rules and demonstrates how to play it.	1. To explore <b>SS</b> ’s background knowledge on vocabulary 2. To inform <b>Ss</b> about the objectives of the game and ensure that they understand how to play it	1. Two signs written “True” 2. Two signs written “False”
30 Mins	During activity	<b>Ss</b> play the game.	To teach new vocabulary to <b>Ss</b>	1. Two sign written “True” 2. Two sign written “False”
40 mins	-	<b>T</b> teaches grammar point of unit 1A to <b>Ss</b> .	To teach other skills e.g. grammar to <b>Ss</b>	Textbook
15 mins	Post activity	<b>T</b> assigns <b>Ss</b> to write 1-2 sentences contained at least 2 words they have learned from the game using grammar point of that unit.	To test <b>SS</b> ’s knowledge of new vocabulary and grammar point they have learned	-

### The list of new vocabulary of Unit 1A

#### The list of vocabulary that was taught with the game called “True or False”

No.	Part of Speech	Vocabulary
1	N.	Veteran
2	N.	Baby Boomer
3	N.	Generation X
4	N.	Millennial
5	N.	opinion
6	N.	optimist
7	V.	express
8	V.	prefer
9	V.	increase
10	V.	adapt
11	V.	compare
12	Adj.	similar
13	Adj.	loyal
14	Adj.	independent
15	Adj.	confident

#### Week 2: the 2<sup>nd</sup> time

Time	State	Procedures	Purposes	Materials
15 Mins	Pre activity	1. T encourages Ss to think of vocabulary that is involved with the topic of unit 1B. 2. T introduces the game named “Whisper Game” (See Appendix F) to Ss, explains the rules and demonstrates how to play it.	1. To explore SS’s background knowledge on vocabulary 2. To inform Ss the objectives of the game and ensure that they understand how to play it	-
40 mins	During activity	Ss play the game.	To teach new vocabulary to SS	-
40 mins	-	T teaches grammar point of unit 1B to Ss.	To teach other skills e.g. grammar to Ss	Textbook

**Week 2: the 2<sup>nd</sup> time (Continued)**

<b>Time</b>	<b>State</b>	<b>Procedures</b>	<b>Purposes</b>	<b>Materials</b>
15 mins	Post activity	T assigns Ss to write 1-2 sentences contained at least 2 words they have learned from the game using grammar point of that unit.	To test Ss's knowledge of new vocabulary and grammar point they have learned	-

**The list of new vocabulary of Unit 1B****The list of vocabulary that was taught with the game called "Whisper Game"**

<b>No.</b>	<b>Part of Speech</b>	<b>Vocabulary</b>
1	N.	journey
2	N.	instrument
3	N.	aim
4	N.	progress
5	N.	challenge
6	V.	remind
7	V.	translate
8	V.	memorise
9	V.	repeat
10	V.	create
11	Adj.	fluent
12	Adj.	exhausted
13	Adj.	enormous
14	Adj.	freeze
15	Adj.	tiny

**Week 3: the 1<sup>st</sup> time**

<b>Time</b>	<b>State</b>	<b>Procedures</b>	<b>Purposes</b>	<b>Materials</b>
30 mins	-	<b>T</b> helps <b>Ss</b> to complete remaining exercises of unit 1C.	To provide <b>Ss</b> a chance to develop other skills that are not involved with vocabulary	Textbook
40 mins	-	<b>T</b> teaches <b>Ss</b> to write a topic sentence and other types of sentences used in a paragraph.	To teach <b>Ss</b> how to write a good topic sentence and other types of sentences	Handouts
40 mins	-	<b>Ss</b> practice writing a topic sentence and the other types of sentences.	To provide <b>Ss</b> a chance to practice writing a topic sentence	Handouts

**Week 3: the 2<sup>nd</sup> time**

<b>Time</b>	<b>State</b>	<b>Procedures</b>	<b>Purposes</b>	<b>Materials</b>
5 mins	-	<b>T</b> informs <b>Ss</b> about what they are going to learn from unit 2.	To inform <b>SS</b> about the objectives of learning and what they will be able to do after learning unit 2	-
15 mins	Pre activity	1. <b>T</b> encourages <b>Ss</b> to think of vocabulary that is involved with the topic of unit 2A. 2. <b>T</b> introduces the game named “Word Chain” (See Appendix F) to <b>Ss</b> , explains the rules and demonstrates how to play it.	1. To explore <b>Ss</b> ’s background knowledge on vocabulary 2. To inform <b>Ss</b> the objectives of the game and ensure that they understand how to play it	-
30 mins	During activity	<b>Ss</b> play the game.	To teach new vocabulary to <b>Ss</b>	-
40 mins	-	<b>T</b> teaches grammar point of unit 2A to <b>Ss</b> .	To teach other skills e.g. grammar to <b>Ss</b>	Textbook
15 mins	Post activity	<b>T</b> assigns <b>Ss</b> to write 1-2 sentences contained at least 2 words they have learned from the game using grammar point of that unit.	To test <b>Ss</b> ’s knowledge of new vocabulary and grammar point they have learned	-



### The list of new vocabulary of Unit 2A

#### The list of vocabulary that was taught with the game called “Word Chain”

No.	Part of Speech	Vocabulary
1	N.	Disaster
2	N.	Candidate
3	N.	Career
4	N.	Knowledge
5	N.	Employee
6	N.	Employer
7	N.	Contact
8	N.	CV
9	V.	Type
10	V.	Realize
11	V.	Offer
12	V.	Apply
13	V.	Impress
14	Adj.	Nervous
15	Adj.	Embarrass

#### Week 4: the 1<sup>st</sup> time

Time	State	Procedures	Purposes	Materials
15 mins	Pre activity	1. <b>T</b> encourages <b>Ss</b> to think of vocabulary that is involved with the topic of unit 2B. 2. <b>T</b> introduces the game named “True or False” (See Appendix F) to <b>Ss</b> , explains the rules and demonstrates how to play it.	1. To explore <b>SS</b> 's background knowledge on vocabulary 2. To inform <b>SS</b> the objectives of the game and ensure that they understand how to play it	Textbook
30 mins	During activity	<b>Ss</b> play the game.	To teach new vocabulary to <b>Ss</b>	1. Two signs written “True” 2. Two signs written “False”
40 mins	-	<b>T</b> teaches grammar point of unit 2B to <b>Ss</b> .	To teach other skills e.g. grammar to <b>Ss</b>	Textbook

**Week 4: the 1<sup>st</sup> time (Continued)**

<b>Time</b>	<b>State</b>	<b>Procedures</b>	<b>Purpose</b>	<b>Materials</b>
15 mins	Post activity	T assigns Ss to write 1-2 sentences contained at least 2 words they have learned from the game using grammar point of that unit.	To test Ss's knowledge of new vocabulary and grammar point they have learned.	-

**The list of new vocabulary of Unit 2B****The list of vocabulary that was taught with the game called "True or False"**

<b>No.</b>	<b>Part of Speech</b>	<b>Vocabulary</b>
1	N.	App
2	N.	Browser
3	N.	Icon
4	N.	text message
5	N.	Username
6	N.	Device
7	N.	Workout
8	N.	Beards
9	N.	Moustaches
10	V.	Install
11	V.	Select
12	V.	Identify
13	Adj.	Addictive
14	Adj.	old-fashioned
15	Adj.	Worth

**Week 4: the 2<sup>nd</sup> time**

<b>Time</b>	<b>State</b>	<b>Procedures</b>	<b>Purposes</b>	<b>Materials</b>
30 mins	-	T helps Ss to complete remaining exercises of unit 2C in the textbook.	To provide Ss a chance to develop other skills that are not involved with vocabulary	Textbook
10 mins	-	T explains about the handouts to Ss and inform what they are going to learn from the handouts.	To inform Ss the objectives of learning	Handouts

**Week 4: the 2<sup>nd</sup> time (Continued)**

<b>Time</b>	<b>State</b>	<b>Procedures</b>	<b>Purposes</b>	<b>Materials</b>
30 mins	-	T teaches Ss to write a paragraph.	To teach Ss how to write a good paragraph	Handouts
30 mins	-	Ss practice writing a paragraph.	To provide Ss a chance to practice writing a paragraph	Handouts

**Week 5: the 1<sup>st</sup> time**

<b>Time</b>	<b>State</b>	<b>Procedures</b>	<b>Purposes</b>	<b>Materials</b>
5 mins	-	T informs Ss about what they are going to learn from unit 3.	To inform Ss about the objectives of learning and what they will be able to do after learning unit 3A	Textbook
15 mins	Pre activity	1. T encourages Ss to think of vocabulary that is involved with the topic of unit 3A. 2. T introduces the game named “Whisper Game” (See Appendix F) to Ss, explains the rules and demonstrates how to play it.	1. To explore Ss’s background knowledge on vocabulary 2. To inform Ss about the objectives of the game and ensure that they understand how to play it	Textbook
30 mins	During activity	Ss play game.	To teach new vocabulary to Ss	-
40 mins	-	T teaches grammar point of unit 3A to SS.	To teach other skills e.g. grammar to Ss	Textbook
15 Mins	Post activity	T assigns Ss to write 1-2 sentences contained at least 2 words they have learned from the game using grammar point of that unit.	To test Ss’s knowledge of new vocabulary and grammar point they have learned	-

**The list of new vocabulary of Unit 3A****The list of vocabulary that was taught with the game called “Whisper Game”**

<b>No.</b>	<b>Part of Speech</b>	<b>Vocabulary</b>
1	N.	stranger
2	N.	personality
3	N.	relative

(Continued)

No.	Part of Speech	Vocabulary
4	N.	sense of humour
5	N.	interest
6	N.	aristocrat
7	N.	immigrant
8	N.	luxury
9	N.	paragliding
10	V.	have s.th in common
11	V.	get on
12	V.	get to know
13	Adj.	wealthy
14	Adj.	struggle
15	Adj.	lively

Week 5: the 2<sup>nd</sup> time

Time	State	Procedures	Purposes	Materials
15 Mins	Pre activity	1. T encourages Ss to think of vocabulary that is involved with the topic of unit 3B. 2. T introduces the game named "Word Chain" (see appendix F) to Ss, explains the rules and demonstrates how to play it.	1. To explore Ss's background knowledge on vocabulary 2. To inform Ss the objectives of the game and ensure that they understand how to play it	Textbook
30 Mins	During activity	Ss play game.	To teach new vocabulary to Ss	-
40 mins	-	T teaches grammar point of unit 3B to Ss.	To teach other skills e.g. grammar to Ss	-
20 Mins	Post activity	T assigns Ss to write 1-2 sentences contained at least 2 words they have learned from the game using grammar point of that unit.	To test Ss's knowledge of new vocabulary and grammar point they have learned.	-

### The list of new vocabulary of Unit 3B

#### The list of vocabulary that was taught with the game called “Word Chain”

No.	Part of Speech	Vocabulary
1	N.	nephew
2	N.	niece
3	N.	childhood
4	N.	generation
5	N.	twin
6	N.	teenager
7	V.	raise
8	V.	argue
9	V.	grow up
10	V.	grow apart
11	V.	get together
12	V.	hang out
13	V.	ring up
14	V.	ring up
15	V.	take after

#### Week 6: the 1<sup>st</sup> time

Time	State	Procedures	Purposes	Materials
40 Mins	-	T helps Ss to complete remaining exercises of unit 3C in the textbook.	To provide Ss a chance to develop other skills that are not involved with vocabulary	Textbook
60 mins	-	T assigns Ss to do the post-test contained new vocabulary they have learned through the games.	To test Ss's knowledge on vocabulary they have learned through games	Posttest
10 mins	-	T assigns Ss to complete the questionnaire to explore Ss's attitudes towards learning vocabulary through the games.	To explore Ss's attitudes towards learning vocabulary through Game-Based Learning	Questionnaire

## **APPENDIX F**

### **LIST AND RULES OF GAMES USED IN THE STUDY**

#### **1. True or False**

Before having students play this game, a teacher needs to prepare PowerPoint slides contained new vocabulary with definitions and 4 big signs (two written “true” on them, and the others written “false” on them). First, the teacher divides the students into two teams: team A and team B. Second, the teacher gives each team the two big signs: one written “true” on it, and the other one written “false” on it. Third, the teacher shows one word on the screen, pronounces it and reads the definition aloud. As the word shown on the screen is new to the students, the students of each team has to guess whether the definition read by the teacher match with the word on the screen or not (to make the game more challenging, the teacher can read the definitions that do not match with the word on the screen.). The team which think the word matches with the definition raises the sign written “true” up. On the other hand, the team that think the word does not match with the definition raises the opposite sign. The team that can correctly answer gets 1 point. After showing the correct answer, the teacher has the students pronounce and read the correct definition of that word aloud together. The teacher continues the game by showing the next word and continues doing the same thing until the last word is shown to the students. At the end, the team that gets higher scores is the winner of this round.

For the second round (this round is optional and omittable), the teacher will show one definition on the screen and pronounce one word. The students of both teams are required to listen carefully and race each other to raise the sign up in order to answer that the definition shown on the screen matches with the word the teacher has pronounced or not. The team that can answer faster with correct answer gets 2 point, and the team that gets higher scores at the end is the winner of this round.

To be the winner of this game, one team is required to get higher scores than the other team in both two round. Finally, the team that is the winner of the game will receive a reward by the teacher.

## 2. Whisper Game

Before having students play this game, the teacher needs to prepare a word list included each word's definition on it. First, the teacher divides the students into small groups. Second, the teacher asks every group to make a single line facing the whiteboard and asks them to send one volunteer to be in front of the class. Third, the teacher shows one sentence which includes one word with its definition to the volunteers. For example, *twins are two children who were born at the same time to the same mother.* Fourth, the teacher reads the whole sentence for the volunteers. Fifth, the volunteers come back to their group and whisper what they heard to another member who is the first person of the line. Sixth, that member whispers what he or she heard to the next member who is behind him or her, and the third member continues doing the same thing until the last member is whispered the sentence. After the last member is whispered the sentence, he or she needs to write it on the whiteboard. The teacher's duty is checking whether he or she can correctly write the whole sentence or not. Every group that the last member can correctly write the whole sentence gets 1 point, and the group that gets the highest scores at the end wins this game.

## 3. Word Chain

Before having students play this game, the teacher needs to prepare a word list included each word's definition on it. First, the teacher divides the students into small groups. Second, the teacher gives each group one different word. Third, each group finds the definition of the word in which the group is responsible for. Fourth, the teacher checks whether the definition each group has found is suitable or not. If the teacher says yes, every member of the group starts memorizing the word as well as the definition. Fifth, the teacher has every student count 1-4 in order to regroup them. The students who count the same number are grouped together and make a circle. Sixth, each first member of the new group starts saying his or her word with definition, and then another member who is next to the first one repeats what his or her friend said followed by his or her own word with definition. The third member

continues doing the same thing until the last member says all members' words with definitions. Every group that all members can run through all words with definitions without making mistakes or making few mistakes gets 1 point.





**BIOGRAPHY**

Name	Ms. Nutnicha Tanago
Date of Birth	December 15, 1991
Educational Attainment	2014: Bachelor of Arts Majoring in English (2 <sup>nd</sup> class honor) Mahidol University
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