EFFECTS OF ENGLISH SPEAKING INSTRUCTION USING DIGITAL GAME ACTIVITIES ON ENGLISH SPEAKING ABILITY OF THAI SECONDARY STUDENTS

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ผลของการสอนพูดภาษาอังกฤษโดยการใช้กิจกรรมเกมส์ดิจิทัลที่มีต่อความสามารถ
ในการพูดภาษาอังกฤษของนักเรียนระดับชั้นมัธยมศึกษา

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Thesis Title	EFFECTS OF ENGLISH SPEAKING INSTRUCTION USING DIGITAL GAME ACTIVITIES ON ENGLISH SPEAKING ABILITY OF THAI SECONDARY STUDENTS
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Field of Study	English as an International Language
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พรพรรณ คงสนทนา : ผลของการสอนพูดภาษาอังกฤษโดยการใช้กิจกรรมเกมส์ดิจิทัลที่มีต่อความสามารถในการพูดภาษาอังกฤษของนักเรียนระดับชั้นมัธยมศึกษา (EFFECTS OF ENGLISH SPEAKING INSTRUCTION USING DIGITAL GAME ACTIVITIES ON ENGLISH SPEAKING ABILITY OF THAI SECONDARY STUDENTS) อ.ที่ปรึกษาวิทยานิพนธ์หลัก: ปราณภา โหมดหิรัญ, 227 หน้า.

การวิจัยนี้มีจุดประสงค์เพื่อ 1) ศึกษาผลของการสอนพูดภาษาอังกฤษโดยการใช้กิจกรรมเกมส์ดิจิทัลที่มีต่อความสามารถในการพูดภาษาอังกฤษของนักเรียนระดับชั้นมัธยมศึกษาตอนต้น 2) ศึกษาความคิดเห็นต่อการสอนพูดภาษาอังกฤษโดยการใช้เกมส์ดิจิทัล กลุ่มตัวอย่างประกอบด้วยนักเรียนชั้นมัธยมศึกษาปีที่ 3 โรงเรียนดาราสมุทร ศรีราชา จำนวน 30 คน ที่ลงทะเบียนเรียนวิชาการสอนพูดภาษาอังกฤษโดยการใช้กิจกรรมเกมส์ดิจิทัลเป็นวิชาเสริม ภาคการเรียนฤดูร้อน ปีการศึกษา 2558 การทดลองใช้เวลาทั้งสิ้น 12 สัปดาห์ การเก็บข้อมูลใช้การรวบรวมเชิงคุณภาพและปริมาณ สถิติที่ใช้ในการวิเคราะห์ความแตกต่างระหว่างความสามารถในการพูดภาษาอังกฤษก่อนและหลังการทดลองคือ สถิติทดสอบค่าที สำหรับข้อมูลเชิงคุณภาพใช้สถิติเชิงพรรณนาและนำเสนอในรูปแบบของความถี่และร้อยละ

ผลการวิจัยพบว่า 1) คะแนนเฉลี่ยการพูดภาษาอังกฤษก่อนและหลังการทดลองของกลุ่มตัวอย่างมีความแตกต่างอย่างมีนัยสำคัญทางสถิติที่ระดับ 0.05   2) ผู้เรียนมีความคิดเห็นเชิงบวกต่อการเรียนผ่านการสอนพูดภาษาอังกฤษโดยการใช้กิจกรรมเกมส์ดิจิทัล โดยนักเรียนเห็นว่าการเรียนผ่านการสอนพูดภาษาอังกฤษโดยการใช้กิจกรรมเกมส์ดิจิทัลนั้นนอกจากจะทำให้นักเรียนนั้นเกิดความสนใจและสนุกสนานกับการเรียนมากขึ้นแล้ว นักเรียนยังสามารถนำความรู้ที่ได้จากการเรียนในห้องเรียนไปปรับใช้ในชีวิตประจำวันได้อีกด้วยเนื่องจากผู้เรียนได้พัฒนาทักษะในการพูดภาษาอังกฤษ และเรียนรู้คำศัพท์และไวยากรณ์มากขึ้น อย่างไรก็ดี ผู้เรียนบางคนมีความเห็นว่ายังประสบปัญหาในการเรียนอยู่บ้าง กล่าวคือ การเรียนการสอนในห้องเรียนนั้นใช้ภาษาอังกฤษเป็นสื่อกลางในการสอนและพูดคุย รวมถึงเวลาในการทำแบบฝึกหัดไม่เพียงพอ

สาขาวิชา   ภาษาอังกฤษเป็นภาษานานาชาติ   ลายมือชื่อนิสิต ....

ปีการศึกษา 2557   ลายมือชื่อ อ.ที่ปรึกษาหลัก ....

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The objectives of this study were 1) to investigate the effects of English speaking instruction using digital game activities of Thai secondary students, and 2) to explore students' opinions towards English speaking instruction using digital game activities. The sample was 30 Grade 9 students at Darasamutr Sriracha School. They were enrolled in English speaking instruction using digital game activities as an intensive course during the summer session in academic year 2015. The experiment lasted for 12 weeks. The data were collected quantitatively and qualitatively. A paired-sample t-test was used to investigate the differences between the mean scores from the pre and post English speaking ability test. The qualitative data were analyzed by using descriptive statistics and shown in frequency and percentage.

The findings of the study revealed that 1) there was a significant difference in students' mean scores on English speaking ability before and after the students' participation in English speaking instruction using digital game activities at the significant level of 0.05 and 2) students had positive opinions towards English speaking instruction using digital game activities. They reported that learning through English speaking instruction using digital game activities was interesting and fun. Besides enjoying with the class, it was found that students were also improved in English speaking ability, vocabulary and grammar. In terms of the limitations, students reported that they had problems with the use of English to communicate in the class and the time allocation to complete the assigned tasks.

Field of Study: English as an   Student's Signature ....

     International Language   Advisor's Signature ....

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CHAPTER I

INTRODUCTION

1.1 Background of the Study

In the era of globalization, English is considered as a vital role in communication. Thai people use English as a main foreign language in order to communicate with the foreigners. They use English in tourism, education, and international affairs. English encourages us to internationally get in touch with new technology and advanced knowledge in the globalized world (Broughton, 1997). Since the economic growth's demands have increased, well-trained students are needed to be as a part of the success of economy. Being proficient in English can be one of the important requirements for the future's achievement as Thai educational system has made many efforts to improve English proficiency of Thai's learners. On the other hand, it is found that Thai's English proficiency level is lower than other developing countries such as Malaysia, Singapore and Philippines (Khamkhien, 2010; Prapphal, 2004; Wiriyachitra, 2001).

In Thailand, English is taught as a foreign language. Thai Basic Education Core Curriculum B.E. 2551 (A.D. 2008) has required the students to learn four strands of English language learning which are 1) Language for Communication 2) Language and Culture 3) Language and Relationship with Other Learning Areas 4) Language and Relationship with Community and the World. For Language for Communication, the students will learn the use of English for listening, speaking, reading, and writing, exchanging data and information, expressing feelings and opinions, interpreting,

presenting data, concepts and views on various matters, and creating interpersonal relationships appropriately (Office of the Basic Education Commission, 2008). Nevertheless, despite of the fact that Language for Communication is considered as one of the important foreign language curriculum in Thailand's education, there are the major concerned problems among Thai learners' English speaking skill. The Thai students' inefficiency in English speaking can reflect in the results of an international speaking test like TOEFL (Test of English as a Foreign Language) that they take a few years later.

Regarding the test results from the two international English proficiency tests: 2010 TOEFL and 2012 EF EPI (Education First English Proficiency Index), Thailand was ranked 116th out of the overall 163 countries in the TOEFL test and ranked 53rd from 60th as the world's lowest rank and was classified as 'very low proficiency.' Likewise, amongst Southeast Asian countries, Thai's TOEFL score was also in a bottom rank when compared to those countries whose scores were in a good average. For speaking part in 2010 TOEFL test, Thai test takers got an average score of 18 while Myanmar, Indonesia, Malaysia, and Philippines got 19, 20, 21, and 23 respectively (Educational Testing Service, 2011; EF English Proficiency Index, 2012). The poor results of the test were questioned whether they were affected from the teaching and learning process in English classes in Thai schools.

According to the studies of Maskhao (2002) and Siritanarath (2007), it was found that most students in Thailand did not have much chance to speak English in their English classroom because the teachers did not provide enough speaking activities as they focused on grammar, vocabulary, and reading from the textbooks.

Students were mostly passive learners as they just sat and listened to their teacher spoke without having any practices. However, digital games could encourage students to communicate interactively among themselves. Digital games also provided students more chances to express their opinions and ideas. They promoted the collaborative learning environments as learners shared information to one another (Felicia, 2009). Another problem was that the students were too shy to speak English with the teachers and classmates because of the interference from their Thai mother tongue (Jaiyai et al., 2005). Digital games had an emotional effect on learners by increasing the self-esteem and engaged them into many social activities (Felicia, 2009). Lastly, it was found that most students were poorly-motivated and lacked of focusing on their own English studies or the English lessons which the teacher was going to teach (Jaiyai et al., 2005). Therefore, digital games provided the abilities to motivate and engage learners because digital games were included with auditorial and visual stimulation which made students enjoy and immerse into a game environment (Felicia, 2009).

Among many studies trying to solve problems about students' engagement to speak English, Warschauer & Healey (1998) claimed that games had usually been used as a tool to enhance the learners' motivation and authentic communicative practices. They assumed that this was because games were pleasant to play and if games can be used in teaching and learning English, students can learn English in a fun way. Digital games used in class could therefore create a fun environment that captures the learners' interest and the teachers' instructional process. Therefore, when learners engaged in the games, they would enjoy playing them while studying the targeted language use at the same time. As the language learning happened in an

environment which was free of stress like in digital games, the retention of vocabulary was also increased because it was presented in a playful and joyful atmosphere (Hitosugi et al., 2014).

In the last five years, many educators had been interested in the potential of digital games to use in the language classroom as digital games could appeal young learners to put an attention in them rather than in other popular media such as televisions, films, or books (Gee & Hayes, 2011). An advancement of personal computer and game console, commercial off-the-shelf (COTS) digital games which intended to entertain in free time (Ito, 2010) could be beneficial to English language teaching.

In language classroom, digital games could provide an opportunity to develop learners' skills and engaged them to be more effective in their study of English language (Squire, 2007). Games also developed authentic digital environment and improve learners' motivation, levels of participation, and interaction between computers and users (Jenkins, 2006; Panteli & Chiasson, 2008) so that their ability and confidence would be improved not only making them be more eager to take part in the activities, but also enhancing their confidence in every kind of English interaction (Wu et al., 2011). Especially in English speaking classes, game activities could provide opportunities for students to speak and engaged them to speak more with a feeling of wanting to express themselves while involving in playing the games (Dwiyantii, 2009). This could positively affect the learners' interest and motivation to increase their English speaking ability (Chandra, 2008).

The advantages of adopting digital game for language learning have shone the light on the potential for learning and retaining knowledge, keeping learners' interest, having confidence to speak English, and getting involved with the lesson actively.

In sum, this research would investigate English speaking instruction with the use of digital game activities to improve English speaking ability. In addition, this research would also investigate the student's opinions towards the use of digital game activities to improve English speaking ability.

1.2 Research Questions

1. To what extent does English speaking instruction using digital game activities have effects on English speaking ability of Thai secondary students?

2. What are the opinions of Thai secondary students towards English speaking instruction using digital game activities?

1.3 Objectives of the Study

The objectives of the study were to:

1. Investigate the effects of English speaking instruction using digital game activities on English speaking ability of Thai secondary students.

2. Explore the opinions of Thai secondary students towards English speaking instruction using digital game activities.

1.4 Statements of Hypotheses

1. Students who learn through English speaking instruction using digital game activities will gain higher average scores on the posttest than the pretest at the significant level of 0.05.

2. Students will have positive opinions towards learning through English speaking instruction using digital game activities.

1.5 Scope of the Study

1. The population of this study was grade 9 students of Darasamutr Sriracha School. The sample was the students who enrolled in English speaking instruction using digital game activities as an intensive course during the summer session in academic year 2015. The researcher conducted the experiment at this school as a convenient and voluntary sampling.

2. This study planned to investigate English speaking instruction using digital game activities on English speaking ability. According to the interview with the school's teacher, the English speaking ability of Darasamutr School students was lower-intermediate because the students had not been encouraged enough to speak English in the class as they were just sitting passively and listening to their teachers. Since there were many changes in the education in the 21st century, an implementation of digital literacy such as computers had played an important role in language classroom as many educators included an advancement of technology in teaching and learning routine.

1.6 Definition of Terms

1.6.1 English Speaking Instruction Using Digital Game Activities

English speaking instruction referred to the interactive activity between students and teachers in teaching and learning, where the teacher offered students information and strategies to enhance their English speaking skills (Rodgers, 2014).

In this study, the three-step approach, outlined by Harmer (2007), was used in the tasks of instruction including Engage, Study and Activate. The tasks included vocabulary and situational speaking activities which were drawn from digital games and real life situations.

Digital game activities referred to the use of digital games in personal computers as learning activities in approaches to teach second language in the classroom. These digital games provided students chances to input their own content into games. In this study, the three-step sequence framework of Digital Game-enhanced L2 Learning Activities, outlined by Reinhardt & Sykes (2011), was represented as the use of digital game activities in the language class which included Explore, Examine and Extend. This framework could be a tool to increase students' motivation which activated the senses of pleasure and completion.

English speaking instruction using digital game activities referred to the interactive teaching and learning process that enhanced knowledge of the second language features and English speaking ability through the use of the three-step sequence framework of the Digital Game-enhanced L2 Learning Activities, which included Explore, Examine and Extend, integrated with the ESA Teaching Model, which includes Engage, Study and Activate as for the main instruction. In the class, the teacher taught students through English speaking instruction using digital game activities by using three steps which were Explore-Engage, Examine-Study, and Extend-Activate to instruct students in the class.

1.6.2. English Speaking Ability

English speaking ability was the ability of the students to express ideas consistently and clearly, to pronounce words correctly, to use various and appropriate vocabulary, and to produce grammatical structures in order to form information correctly. This ability could be measured by the scores from the pretest and posttest of English speaking ability test. The scores could be evaluated by using the scale for evaluating English speaking ability adopted from the Ministry of Education of Ecuador (2012).

1.6.3. Thai Secondary Students

Thai secondary students in this study referred to the 30 students in grade 9 (Matthayomsuksa 3) who participated in the English speaking instruction using digital game activities at Darasamutr Sriracha School as an intensive course during a summer session in academic year 2015.

1.7 Significance of the Study

This study will provide English teachers with the guidance to enhance students' English speaking ability as it introduces English teachers with some insights into how to apply digital game activities in the English speaking instruction as well as how questions should be used in order to enhance students' English speaking ability. Furthermore, the data from test and lesson plans can help develop new ways of teaching, material design, and assessment of English speaking course to serve Thai secondary students with different oral abilities.

CHAPTER II

LITERATURE REVIEW

This study investigates the effects of English speaking instruction using digital game activities on English speaking ability of Thai secondary students. Related literature and research are reviewed to gain sufficient background knowledge for the study. The related literature review firstly presents a general description of English speaking instruction. Then, the digital games in language instruction are explained. Third, the related studies about the use of digital game activities to enhance English speaking ability are also presented. All details are as follows.

2.1 English Speaking Instruction

This section discusses English speaking instruction in five parts which include the definitions of functions of speaking, teaching English speaking, English speaking ability, classroom activities for English speaking instruction, and assessment of English speaking ability which also describes criteria of English speaking ability.

2.1.1 Functions of Speaking

Many language researchers had made an attempt to categorize the function of speaking for human interaction. Jones (1996), Burns (1998), and Richards (2008) had divided the functions of speaking into three functions which were *talk as interaction*, *talk as transactional*, and *talk as performance*. The activities in each function were different as they required the different instructional methods.

For *talk as interaction*, this referred to the normal conversation like greeting, having a brief talk, or describing experiences which were considered as a fundamental of social aspects. The conversation could be either formal or informal depending on the situations surrounding the speakers. Thus, talk as interaction could be described with several features as follows:

1. Had a primarily social function

2. Reflected role relationships

3. Reflected speaker's identity

4. May be formal or casual

5. Used conversational conventions

6. Reflected degrees of politeness

7. Employed many generic words

8. Used conversational register

9. Was jointly constructed

For *talk as transaction*, the things which were said or done become the central focus in the situation. The central focus referred to the message which made the speaker himself/herself understand clearly and correctly, excluding the social interaction which was intended to conveyed between two speakers. Examples of *talk as transaction* were presented as follows:

1. Having classroom group discussions and problem-solving activities

2. Having a class activity which students designed a poster

3. Discussing needed computer repairs with a technician

4. Discussing sightseeing plans with a hotel clerk or tour guide

5. Making a telephone call to obtain flight information

6. Asking someone for directions on the street

7. Buying something in a shop

8. Ordering food from a menu in a restaurant

In addition, Burns (1998) differentiated the *talk as transaction* into two types. The first type referred to the situations which focused on giving and receiving information and the focus on the message which was said or completed such as asking someone for directions. The second type referred to the situations involved with asking for products or services such as checking in the hotel or ordering food in a restaurant.

For the last function of speaking, ***talk as performance***, this referred to the public speaking which involved with the transmission of information to the audience or peers. Examples of *talk as performance* were presenting in front of the class, giving public announcements, and giving speeches. The form of *talk as performance* usually came in terms of monologue as the message was memorized and spoken in patterns than dialogues which the speakers took turn speaking. Unlike *talk as interaction and transaction*, this function was evaluated by the effectiveness or the impact of the listener. The main features of talk as performance were presented as follows:

1. A focus on both messages and audience

2. Predictable organization and sequencing

3. Importance of both form and accuracy

4. Language was more like written language

5. Often monologic

2.1.2 Teaching English Speaking

There were many different ways to teach English speaking. Some focused on direct teaching while others focused on a communicative way. The Presentation-Practice-Presentation [PPP; Maurer (1997)] appeared to be more direct teaching; whereas, Engage-Study-Activate [ESA; Harmer (2007)] was more communicative. The details of two approaches were as follows:

Maurer (1997) proposed three steps for teaching English speaking in an EFL class which were Presentation, Practice, and Production. The details of each step were presented below.

1. Presentation step

In this step, the teacher introduced the topics or the situations to the students. Then, the teacher clarified vocabulary and grammar elements which were essential for the lesson. Students could speak out the story or dialogue and then concluded the main idea. After that, they were prepared to understand the language content so that they could participate in the English speaking activities which were presented in the next step.

2. Practice step

After the students had finished studying vocabulary, grammar elements, and content, they had an opportunity to practice speaking English on a series of activities. The teacher could assign students two to three different role playing activities which

required them to discuss and explore different ideas from different topics or situations in group works or pair works.

3. Production step

The students created an improvisation after they were assigned tasks by the teacher. They could create the presentation for three to four minutes which was related to the topic of today's lesson. After students had finished the preparation, they were asked to perform in front of the class without seeing any scripts. The objective of this step was to encourage the students to speak English fluently.

Harmer (2007) claimed that the students needed exposure, motivation and opportunities in language use. These should be aware that each student may respond to the stimuli differently. It should be suggested that most instructional sequences should provide reliable elements for instruction no matter how long it took. Each sequence could spend just few minutes or half an hour depending on the context of students.

The ESA Teaching Model, as the main model used in this study, provided the instructional process of speaking in three stages. The process could be outlined as Engage, Study and Activate.

1. Engage step

This step was the step which the students must be engaged with the material or the topic. The students would start learning the language issues which they would deal with after they were asked to make prediction by the teacher after the guidance. In engagement process, it could be done in many ways, such as using stories, songs, or poetry, through drama and television or films, or through games. This stage was very

important in the teaching sequences because when the students were engaged, the benefits which they received as results would be better.

2. *Study step*

This step was the step which students did the tasks by learning from the materials. In traditional L2 language teaching practice, studying might be consisted of memorization by repetition of language forms or completion of set exercises. However, more modern methods of language teaching integrating techniques such as games, interactive exercises, and role-playing could be used along with traditional forms. Activities in the Study step could start from the focus on the construction of a grammar's elements to the controlled practice which the students repeated many phrases by using the target language in order to let them aware of the construction of language. The students were asked to repeat the words until the pronunciation was correct as they were required to think about the correct sounds when they spoke out. Sometimes, the teacher could show students a new grammar pattern, repeat each element dividedly, create a diagram on the board, or use the model for the students to repeat and practice speaking.

3. *Activate step*

In the Activate step, students were urged to apply the knowledge they had learned in the Engage and Study steps. The Activate step gained the knowledge in the students' mind and helped them access it more easily when it was required. The aims of activities in this step were to encourage the students to use any patterns of language which were suitable for the given situation or topic. By this means, students would have opportunities to practice language and transfer it to use in real life. This step also

created "personalisation" which students could use the language they had learnt and made their own dialogues to speak with others. Activities in this step should be carefully designed for the students so that they could use the language freely for the communication. Examples of activities in this step could be role-plays, debates and discussions, or *Describe and draw* (the student gave a hint to the partner to draw without seeing the object or answer). The ESA Teaching model is presented as following.

Figure 2.1: ESA Teaching Model (Harmer, 2007)

Engage

- The students are asked questioned by the teacher to make the prediction what they are going to learn. The teacher can firstly present materials such as songs, games, films or give a guidance, and then have a discussion with the students

Study

- The students learn the language, related topic vocabulary, pronunciation, and grammatical patterns by repeating each element dividedly, creating a diagram on the board, or being given transcript as a model to practice speaking and discuss with peers and the teacher.

(To be continued)

Figure 2.1 (continued)

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Activate
- The students are encouraged to use and practice the language that they have acquired in the Engage and Study steps by doing activities and exercises such as role plays, debating, and discussions in the given situations or topics so that they can transfer into their real lives.

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To conclude, the ESA teaching method could provide students' opportunities to use language for communication since lessons could be started by engaging students and allowing them to expose to language use from the very beginning. The ESA was; therefore, appropriate for the current study as the researcher used the digital games as an educational tool in English speaking instruction. The Engage step seemed to be more appropriate because it was not just Presentation at the first step. For the first step of the current study, the students were to play the assigned digital games which would allow them to have opportunities to be engaged in the lesson and increased their motivation. The nature of the ESA teaching method appeared to be student-centered learning environment.

2.1.3 English Speaking Ability

English speaking ability was defined differently based on the beliefs of researchers. These followings were the definitions of English speaking ability given by some of researchers.

Lado (1961) pointed out that English speaking skill was the ability to report actions or situations in correct words, or the ability to converse or express chronological ideas fluently.

Owen (1984) proposed that English speaking ability referred to the ability to exchange information, thoughts, and idea between speakers and audience.

Celce-Murcia et al. (1995) divided English speaking ability into four aspects which were grammatical, sociolinguistic, discourse, and strategic competences. For grammatical competence, this referred to the elements of communication such as grammatical rules, vocabulary, pronunciation, etc. For sociolinguistic competence, it referred to the speaker's knowledge to use appropriate language or politeness within both social and cultural context. For discourse competence, it referred to the ability to combine the structures of language into different cohesive texts. For strategic competence, this referred to the ability to use gestural and non-gestural communication strategies to deal with the difficulties which speakers met while having conversation.

Brown (2004) stated that English speaking ability was the ability to take the forms of either transactional or interpersonal languages to give information. For transactional language, the purpose was to exchange specific information while interpersonal language was to maintain social relationships.

Chen (2005) defined English speaking ability as it was the ability to express the meaning of English language efficiently and orally.

In conclusion, English speaking ability was the ability to express or exchange opinions and information orally between speakers and listeners.

2.1.4 Classroom Activities for English Speaking Instruction

There were many principles to enhance English speaking ability. Thus, many researchers in the area of English speaking instructions had discussed the principles to develop English speaking instruction activities as follows:

Nunan (2003) proposed three principles which were most relevant to teaching English speaking to intermediate students:

1. *Plan speaking tasks that involve negotiation for meaning*

The language which was used to teach the students should be suitable with their level and be comprehensible. The students were required to focus on the accuracy of the language as they used the right vocabulary, grammatical rules, and pronunciation. After the teacher finished planning speaking tasks, students were required to negotiate for the meaning and were allowed to practice by using the target language.

2. *Design both transactional and interpersonal speaking activities*

First, interpersonal speech was the communication which focused on social aspects, including forming and sustaining social relationship as in casual conversation. Transactional speech was the aim to achieve something through communication, including an interaction of service such as calling for a taxi. In casual conversation (interpersonal), it was unpredictable and the topics were various while transactional speech was easier to be predicted. Thus, both transactional and

interpersonal situations were important for the teacher to design activities to support the students' English speaking ability.

3. Personalize the content of speaking activities whenever possible

Personalization was the design of activities which were based on the students' conditions, preferences, and objectives. To personalize activities, the teacher could use the students' names, schools, or cities which they were familiar with in speaking activities. Besides, the teacher could also use situational topics, songs, puzzles, pictures, or reading passages which were suggested by the students.

Nunan (2003), Harmer (2005), Thornbury (2005), and Nation & Newton (2008) proposed classroom activities and tasks for English speaking instruction which enhanced students' English speaking ability as follows:

1. Jigsaw tasks

These tasks could be also called "split information activities" or "two-way tasks." In class, the teacher let students work in pairs. Each pair was given two different sheets of paper which provided numbers on pictures, and they must not see each other's sheets. Halves of these two sheets would be the same while the others were not. Two students took turn asking each other by giving information of their pictures. If student A finished describing the first picture, student B would decide whether his / her picture was the same as student A's or not. Then, student B would write either 'S' (the same) or 'D' (different) on that picture.

2. Complete the maps

Each student had different versions and information of maps. They must not let other students see what they had got in their hands. Then, they had to ask their partners to describe what were on their maps so that they could draw additional things that they did not have in their maps.

3. Guessing games

One student could think of any topics such as jobs, animals, food, or things and asked others to form questions. The student who set the topic could answer only 'yes' or 'no' in order to guide other students. The game was spontaneous and unpredictable as its focus was on the results such as being the winner of the game and receiving the rewards.

4. Inside-outside circle

The teacher set tables into two circles by turning tables inside faced outward and tables outside faced inward. Students had two to three minutes to interview their partners who sat in front of them. Then, students changed their partners by; for examples, letting students in the outer circle move to the right or letting those in the inner circle move to the left.

5. Role plays

This kind of activity combined many communicative tasks, such as negotiating in a purchase, making a reservation, or asking for information. Role plays could help students learn and practice their speech performances, useful vocabulary, and grammatical items. For the teacher, it was necessary to keep in mind that role plays

should be realistic, possible, and suitable with the students' requirement so that it would be effective for improving their English speaking ability.

6. Picture-based activities

The teacher could use the pictures from magazines, calendars or Internet to show students in class. Before teaching, teacher may teach students vocabulary used to describe the things by writing on the board. Then, teacher put all the pictures on the board with the numbers on each picture and passed out small pieces of paper which were written with the numbers to each student. Then, each student was asked to describe things in his / her own picture and let others guess which picture it was.

2.1.5 Assessment of English Speaking Ability

Clark (1979) divided the tests of English speaking ability into three types which were *direct*, *semidirect*, and *indirect* tests. The details were as follows:

In a *direct test*, students interacted by producing spoken language with the test director in face-to-face communication. The test which was used in the assessment was the oral component of the Basic English Skills Test (BEST), designed by the Center for Applied Linguistics (1982). This test was firstly used with nonnative speakers who were the immigrants in the United States of America. In the interview, the test director would rate the students' English speaking ability by giving a three-point scale which focused on communicative interaction, pronunciation, fluency, and listening ability.

In a *semi direct test*, students' communication ability was assessed by the use of tape recordings, textbook, or other materials which did not require any humans as the test evaluator. Therefore, a face-to-face communication with the interlocutor was

not needed for the whole process as the students communicated with the tape recordings. After the students finished their test, it would be assessed by one or more test evaluators. The Test of Spoken English (TSE) by Clark & Swinton (1980) and the Recorded Oral Proficiency Examination (ROPE) by Lowe & Clifford (1980) were examples which were conducted in the United States of America.

In an *indirect test*, students did not have to communicate with anyone as they had to do the non-communicative tasks instead. For example, the students had to fill out the missing words in the blanks correctly and grammatically. The tasks could be transcribed from the conversation recorded as tape recordings and then some of the words were cut out in every equal step. Besides, the students might be asked to write down the answers of the questions which were actually said in the given situations.

Compared with all three procedures, indirect tests seemed to be least valid assessment of English speaking ability because the students who took the test did not have an opportunity to speak in the end of the course. The students might feel that their English speaking ability was not fairly assessed as they did not really speak during their test time.

Thornbury (2005) proposed types of English speaking test as follows.

1. Interviews – These tests could be held easily if there was enough room separated from the classroom. Students were called one by one for the interview which they could be asked by either their teacher or external interviewer. If the interviewer was also the assessor, it was difficult to keep the flow of the conversation and assess the students' English speaking ability at the same time. However, this problem could be solved by starting a casual conversation to make the interviewees

feel less anxious. If the interviewees had only a few minutes to prepare themselves, the use of pictures or the pre-chosen topics could be helpful. In addition, a co-assessor could help the interviewer assess interviewees' speaking ability in order to confirm the level of impartiality.

2. Live monologues – The interviewees were given the pre-chosen topics, and then they had to prepare themselves and present the topics in brief. This test could prevent the interviewer bias and showed that the interviewees could cope with an extended turn which was not likely to happen in the interviews. If there were other interviewees in the room as the audience, the interview could be included with the question-and-answer process to show the interviewees' ability to interact spontaneously.

3. Recorded monologues – These kinds of test were less anxious and stressful for the interviewees than speaking in the public or doing live monologues. The interviewees could record themselves talking about their favorite sports or hobbies by taking turn asking each other in the separate room. The assessment of English speaking ability could be done after the tests finished. Then, the assessor could assess the recordings and compare with the other assessors' results to check for the correlation.

4. Role-plays – The same format and topic could be used to test the students in the class and also performed between the assessor and another student. The dialogues for the role plays should be based on everyday conversation which the students could prepare before doing the test rather than giving a lot of imaginative situations. These kinds of test were valid because they were rather suited with the students' needs.

5. Collaborative tasks and discussion – The students did not have to perform any roles but being themselves. They could express their own ideas or opinions which were related to the given topics. Unlike role plays, the students' performance did not affect other students while they were working in groups or pairs. For the assessment, the assessor would give scores based on students' interactive skills which were close with the skills used in real life.

In conclusion, the English speaking ability test used in the current study was a semi direct test as students were video-recorded while they were doing communicative tasks in both pretest and posttest. The researcher asked each student by starting with the student's personal information like introducing himself / herself or having a casual conversation before asking him / her the given topics or situations. After having finished the test, students' English speaking ability would be evaluated by the researcher and another rater.

Criteria of English speaking ability

There were a wide variety of English speaking ability criteria. Several researchers proposed various criteria of English speaking ability as follows:

Thornbury (2005) proposed two ways which were used to assess the students' English speaking ability. These two ways were holistic and analytic scorings.

For the first way, holistic scoring, the assessor gave a single score which was based on an overall performance of the test takers. The scores could be given quickly and it was sufficient for an informal testing. Normally, there could be more than one assessor in the test because the significantly different scores could be discussed and negotiated among themselves.

For the second way, analytic scoring, the scores were given separately in each aspect of the test which took the time longer. However, it forced the assessor to rate students' English speaking ability by using various factors into their consideration which led to the reliability and fairness. One problem was that the assessor might be so distracted by several aspects for the scoring that he / she finally forgot the overall students' performance. Therefore, only four or five aspects were enough for the assessor to cope with at that time.

Spratt et al. (2008) presented scale for assessing English speaking ability of students by focusing on accuracy, fluency, and pronunciation. The details were shown as follows:

Figure 2.2: Scale for Assessing English Speaking Ability (Spratt et al., 2008)

	Accuracy	**Fluency**	**Pronunciation**
5	Grammatical and lexical accuracy extremely high.	Speaks fluently without hesitation or searching for words.	Very clear; stress and intonation help to make meaning clear.
4	Quite accurate; some errors, but meaning is always clear.	Some hesitation and sometimes has to search for words.	Generally clear; reasonable control of stress and intonation.
3	Frequent errors; meaning is not always clear.	Quite hesitant; limited range of vocabulary and structures.	Frequent errors; not always clear enough to understand.

Figure 2.2 (continued)

	Accuracy	**Fluency**	**Pronunciation**
2	Very frequent errors; difficulty in making meaning clear.	Extremely hesitant; very limited range of language available.	Very frequent errors; often very difficult to understand.
1	Almost unable to communicate.		

Jones (2008) proposed speaking section evaluation guide in five criteria to assess students' speaking ability in the class. Each criterion was divided into five levels which were communication, interaction, accuracy, fluency and pronunciation. All details were presented as follows:
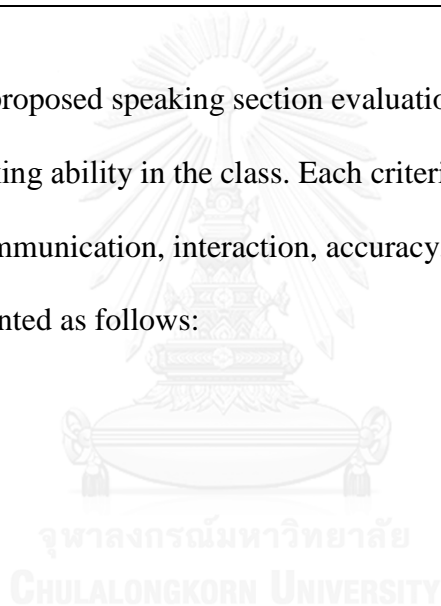
Figure 2.3: Speaking Section Evaluation Guide (Jones, 2008)

	Level 1	**Level 2**	**Level 3**
Communication (ability to make himself understood)	Can't make himself / herself understood while performing tasks, even when listener asks for repetition or clarification.	Can't make himself / herself understood while performing most tasks; listener frequently asks for repetition or clarification.	Makes himself / herself understood while performing at least half the tasks; listener sometimes asks for repetition or clarification.
Interaction (ability to listen to and interact with a partner)	Can't listen attentively or respond appropriately while performing tasks; fails to interact with a partner.	Can't listen attentively or respond appropriately while performing most tasks; interacts poorly with a partner.	Listens to another person and responds reasonably well while performing at least half the tasks; interacts adequately with a partner.
Accuracy (grammar, syntax, and general structures)	Grammar and syntax are uncontrolled while performing tasks; lacks knowledge of general structures.	Grammar and syntax are uncontrolled while performing most tasks; demonstrates limited knowledge of general structures with frequent errors.	Grammar and syntax are controlled while performing at least half the tasks; demonstrates knowledge of general structures with frequent minors errors.

Figure 2.3 (continued)

	Level 4	**Level 5**
Communication *(continued)* (ability to make himself understood)	Makes himself / herself understood while performing most tasks; listener rarely asks for repetition or clarification.	Makes himself / herself understood while performing tasks; listener does not ask for repetition or clarification.
Interaction *(continued)* (ability to listen to and interact with a partner)	Listens attentively to another person and responds appropriately while performing most tasks; interacts well with a partner.	Listens attentively to another person and responds appropriately while performing tasks; interacts very well with a partner.
Accuracy *(continued)* (grammar, syntax, and general structures)	Grammar and syntax are controlled while performing most tasks; demonstrates knowledge of general structures -with few errors.	Grammar and syntax are controlled while performing tasks; demonstrates knowledge of general structures -with a few minor errors.

Figure 2.3 (continued)

	Level 1	**Level 2**	**Level 3**
Fluency (vocabulary, speed, naturalness, lack of hesitation)	Speech is labored and unnatural while performing tasks; frequent hesitation on even high-frequency vocabulary words, phrases, or structures.	Speech is labored and unnatural while performing most tasks; frequent hesitation on common high-frequency vocabulary words, phrases, or structures.	Speech is smooth and natural while performing at least half the tasks; some hesitation on vocabulary words, phrases, or structures.
Pronunciation (stress, rhythm, intonation patterns)	Very difficult to understand while performing tasks; very unclear articulation and intonation.	Difficult to understand while performing most tasks; unclear articulation and intonation.	Easy to understand while performing at least half the tasks; slightly unclear articulation and intonation.

Figure 2.3 (continued)

	Level 4	**Level 5**
Fluency *(continued)* (vocabulary, speed, naturalness, lack of hesitation)	Speech is smooth and natural while performing most tasks; occasional hesitation on vocabulary words, phrases, or structures.	Speech is smooth and natural while performing tasks; occasional hesitation on low- frequency vocabulary words, phrases, or structures.
Pronunciation *(continued)* (stress, rhythm, intonation patterns)	Easy to understand while performing most tasks; clear articulation and intonation.	Easy to understand while performing most tasks; clear articulation and intonation.

The Ministry of Education of Ecuador (2012) proposed the scale for assessing English speaking ability which used to assess EFL students in Ecuador whose levels were in eighth, ninth, and tenth grades. The rubric was adapted from Jones (2008) and Spratt, et al. (2008). This rubric was used to assess students' English speaking ability in the current study. The details of the scale were as follows.

Figure 2.4: The Scale for Assessing English Speaking Ability (The Ministry of Education of Ecuador, 2012)

	Poor 1-2	Fair 3-4
Fluency speed, naturalness, lack of hesitation	Unnatural and labored speech, extremely hesitant on even high-frequency vocabulary words, phrases and structures.	Hesitant speech; very limited range of language available.
Accuracy grammar: syntax, and general structures	Lacks firm understanding of structures from the studied unit(s) / course to complete the task or is too limited for effective communication.	Uncomfortable with structures from the studied unit(s) / course when completing the task; formulates only rudimentary sentences.
Vocabulary adequacy and appropriateness of vocabulary for purpose	Lacks firm understanding of vocabulary from the studied unit(s) / course to complete the task or is too limited for effective communication.	Uncomfortable with vocabulary from the studied unit(s) / course when completing the task; incorporates very basic vocabulary only.
Pronunciation stress, rhythm, intonation patterns	Lots of errors; articulation and intonation are unclear; almost unintelligible speech.	Very frequent errors; difficulty in making meaning clear.
Content precision and length in describing the subject matter and picture elements	Description that is not detailed, complete; no responses are given	Description that is only partially relevant; only isolated phrases are mostly provided.

Figure 2.4 (continued)

Good 5-6	Very Good 7-8	Excellent 9-10
Quite hesitant speech; limited range of vocabulary and structures.	A little hesitant; has to search for words only sometimes.	Speaks fluently without hesitation or searching for words.
Firm understanding of some structures from the studied unit(s) / course to complete the task, but fails to elaborate.	At ease with producing expected structures to complete the task; elaborates a little.	Demonstrates full knowledge of structures from the studied unit(s) / course to complete the task; elaborates well.
Firm understanding of some vocabulary from the studied unit(s) / course to complete the task, but fails to elaborate.	At ease with expected vocabulary for completing the task; elaborates a little.	Demonstrates full knowledge of vocabulary from the studied unit(s) / course to complete the task; elaborates well.
Frequent errors; not always clear enough to understand.	Generally clear; reasonable control of stress and intonation.	Very clear; stress and intonation help to make meaning clear.
Some of the subject matter and / or elements seen in the photograph / sequence are described, and at least two complete sentences that describe the place, people, activities and objects are uttered.	Most of the subject matter and/or elements seen in the photograph/sequence, are described in detail and at least four complete sentences that describe the place, people, activities and objects are uttered.	Detailed description of the subject matter and / or elements seen in the photograph / sequence; at least five complete sentences that describe the place, people, activities and objects are uttered.

To conclude, the main criteria which were used in assessing English speaking ability mostly focused on fluency and accuracy. Some of them could be divided into several aspects which were pronunciation, vocabulary, intonation, discourse, and grammar.

2.2 Digital Games in Language Instruction

This section discusses digital games in language instruction in three parts which include the definitions of digital games and gamification, digital game-enhanced L2 learning activities, and criteria for choosing digital games used in language classroom.

2.2.1 Digital Games and Gamification

Digital games were software which appeared on various computer platforms. They could be played on many electronic devices, such as personal computer (PC), TV connected with game console, and mobile phones for entertainment purposes. Digital games could provide both implicit and explicit rules for the players to interact with computers or other electronic devices in order to achieve the goal (Becker, 2011; Salen & Zimmerman, 2004). They engaged players by requiring them to reach the outcome by using various strategies and to feel the consequences (such as winning the game or certain rewards). In the language classroom, digital games could increase a feeling of involvement and engagement into the games' environment. They also improved motivation in players to learn the fundamental materials displayed in the games' context (Tobias & Fletcher, 2011). These characteristics of digital games could be the foundation of another educational system in the digital age which called "gamification."

Gamification referred to the use of game elements which were designed in non-game context for the purposes of engaging learners and solving problems. Many educators found that it was interesting to add the characteristics of game into the real world. In language teaching, gamification provided the systems of giving rewards and points to learners in order to motivate them (Stanley, 2012). When learners had the motivation, they got engaged due to the use of activities which were similar to the techniques used in games, such as the use of scoreboards, levels, badges, trophies, or the feedback given to individual learner (Flatla, 2011). When learners were in game-like environment, their problem-solving skills were promoted as they had to complete the previous level in order to pass to the higher level. Gamification also encouraged positive attitudes towards learning. If learners wanted to win the game, they had to face with many failures; however, they learnt something whenever they failed. The feeling of satisfaction that learners completed the level and got through another level could compensate the negative attitude of repeating same old mistakes (Lee & Hammer, 2011). The related studies about the use of gamification in English teaching classroom were presented as follows:

Lam (2013) conducted the study with 101 Chinese students who were in the age of 18-20. Thirty-one students were divided into 2 groups and enrolled in English I classes. Other seventy students were divided into 3 groups and enrolled in Business classes. After that, the researcher used the Content Generator which was an open-source online program to create the game's template. The researcher introduced the flash game called "Fling the Teacher" which was the e-learning vocabulary quizzes. Students were asked to answer multiple-choice questions and they can use the helpline buttons such as "Take two away," "50/50" and "Ask the experts" to help

them pass to the next question. When students chose the correct answer, they would receive a piece of wood. Students had to collect 15 pieces of wood to build a trebuchet as a complete mission. After students finished playing this game, they were introduced to the new game called "Jeopardy." Students could create new questions by themselves and each questions provided different points according to the level of difficulty of the questions. From the interview, the researcher found that all of the students from English I groups and 85.5% of students from Business English groups preferred revising vocabulary using online games than doing worksheet while 14.5 % of the students from Business English groups did not. All of the students from English I groups and 82% from Business English groups also thought that online games helped them remember vocabulary more easily while 18% of students from Business English groups did not. The majority of students (82 of 91) said that they were willing to study and practice vocabulary by using other online games. The results showed that the use of gamification to engage students in language learning was successful and students' feedback was positive.

Karyawati (2014) conducted the study with 17 students from International Class Program of State Islamic Studies Institute of Salatiga. The researcher used Edmodo, the educational website that students could learn through online class, to teach English for students. In Edmodo, the teacher could give feedback or points to students according to their performance, quizzes, assignment, voice recordings and discussion. This learning tool could engage students to actively participate in classroom activities held by the teacher through the use of Internet. For the results, the researcher found that students' scores in terms of speaking were improved at the end of the course. From the interview, it revealed that most students (80%) liked using

Edmodo. They thought that this tool was very effective as they could discuss with their peers and the teacher though they were not in the classroom through voice chat, discussion board or chat box. Furthermore, other students (60%) could directly upload the document files or voice-recordings in Edmodo and could chat with the teacher privately. Students also added that their learning progress was improved because they had opportunities to share their ideas, experiences and knowledge easily. Some students (10%) said that an auto grading system encouraged them to study enthusiastically as they knew their progress after they did the assignment.

To conclude, the current study was designed with the use of digital game activities as an instructional medium to enhance the second language learning in the classroom. The digital games provided their own content and being experienced by learners who played through them. It could be simply said that learners just learnt through games. Unlike gamification which its entire learning was newly designed on an online classroom, learners represented themselves by using avatars and playing in a team. They got the points or rewards based on their behaviors or collaboration among them in their teams.

2.2.2 Digital Game-enhanced L2 Learning Activities

For digital game-enhanced L2 activities, a three-step sequence framework (Explore, Examine, Extend) from Reinhardt & Sykes (2011) was integrated with the ESA Teaching Model (Engage, Study, Activate) from Harmer (2007) as the main instructional framework in the current study. Each step was related to both experiential and analytic elements which contributed to the next step of the instruction.

For the first step, the Explore step, the activities started with letting students learn and observe how to play game, and notice game discourses. In game discourses, they included the process of language, rules, and strategies which were used while students were learning and playing the game together by watching and interacting with language and narratives in the games' stories. In addition, when students played the game, they could also take notes about new things that they had never met before. Students might do the tasks about game discourses created by the teacher which focused on specific items, such as words, grammar forms, cultural story, or game playing.

For the second step, the Examine step, the activities particularly focused on playing and analyzing game discourses. These included both notes taken by students and content targeted by the teacher. While students were experiencing the game, they noticed and found a targeted discourse within the context of the game. However, after students had studied language items, they should be pursued by the exposure of meaningful context which connected with an interaction through and around the game. The activity designed by the teacher could be focused on specific language elements, cultural context, or tactics to win the game. By this way, as mentioned before, the teacher could create a set of questions to promote the discussion and interaction among students to think more critically about the game discourses and use them in a meaningful way.

For the last step, the Extend step, the activities focused on the creation and participation around the new game discourses in terms of interaction and contribution among the students themselves. Students could apply their new comprehension got from the game discourses to create the new context in activities given by the teacher.

For example, to extend activities which were related to the creation and presentation ability, students could present their completed dialogue stories, videos, role plays or projects to the class.

Figure 2.5: Game-enhanced L2 Learning Activities Framework (Reinhardt & Sykes, 2011)
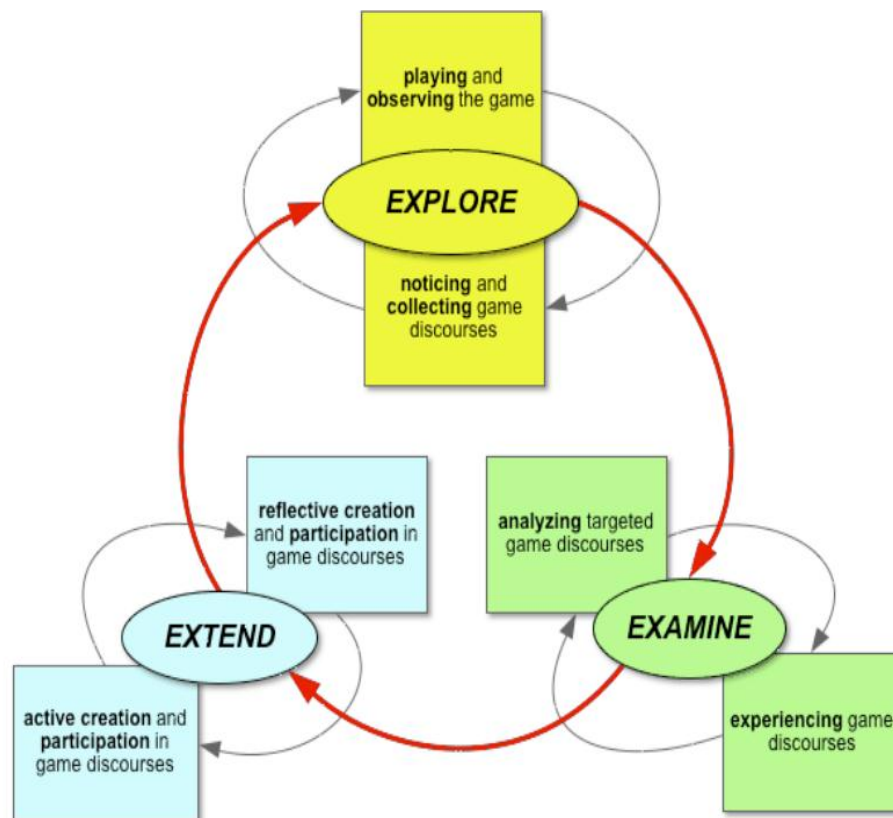
To conclude, each step involved both experiential (the outside of the circle) and analytic (the inside of the circle) components. Activities conducted in the class could be applied according to these steps respectively. These steps might be re-applied when players met the new content or rules in the game as they got into a new level. They could also be put back in the role of the players at the beginner level, but gaining knowledge that they acquired from earlier stages.

2.2.3 Criteria for Choosing Digital Games Used in Language Classroom

Games for entertainment were mostly used in the language classrooms nowadays. Although there were many terms to call games, such as digital games, video games, computer games or electronic games, they are all called "Commercial Off-The-Shelf (COTS)" Games. This term referred to the games and simulations which were available for the commerce. The COTS games could be played on electric devices, such as a computer or game console. They were not considered as multimedia CALL software programs or educational games. They required the creation of framework and activities to design around them.

Kronenberg (2012) proposed criteria as guidance for language teachers when choosing COTS games to use for teaching and learning purposes as follows:

1. Motivation and flow

When teachers chose the game, they should consider the game which could give learners a satisfaction and a worth for playing it without any set learning atmosphere and obvious learning aims. The learners would get engaged to the game because they wanted to reach at the top of the game or the goal which they had not experienced yet. If learners found that the game really motivated them, they would continue playing it in order to solve the mystery in the game. When learners were motivated, this would lead to a situation of flow which meant the learners were thoroughly fascinated by the game and paid attention to the tasks and narrative as shown in the game.

2. Clearly defined and spaced goals

Teachers should firstly consider the tasks which learners had to complete in order to get to the next level of the game. Good COTS games should show at least one explicit goal such as finding important items or words to find out the answers, finding and talking to the right person to solve the problems, or finding right ways to go to the specified place. Another thing was that COTS games should provide enough information or description which was challenging enough and related to the assigned mission for learners to complete. For example, in the COTS games, information shown to players could be presented in forms of maps, people, or objects to read or to listen to so that they could achieve the missions and get the rewards.

3. Game skills and game mechanics

The levels in the game should be appropriate for the learners to achieve when they played it. The game should be able to be replayed or started again to get over it. Learners could save it or pause it whenever they wanted. If the chosen game did not have these aspects, students would become unsatisfied and had a negative feedback towards that game and the target language as well.

4. Content

The problems of content in the game were considered as a barrier when teachers selected the game and used it within the educational purpose. Some games could be instantly distinguished by seeing the content in the games, such as violent and sexual behaviors. Thus, the game used as the supplement in the classroom should be cautiously checked by teachers before starting the class. Furthermore, the language

content in the game should be authentic as it could be used in daily life so that the learners would experience in the same situation as the native speakers met in real life.

5. Story and narrative

When considering a story of the game, there would be two stories involved in the game. The first one was the writer's story which the writer wanted to convey to the players. It was considered as the story which provided a high level. The second one was the players' stories which referred to the experience that the players gained from the game. It was considered as the story which provided an intermediate level. However, when selecting the game, teachers should choose the game which maintained the concept of being computer games rather than having too much storytelling. The word "story enabling" was more appropriate for the content displaying in the game.

6. Multimodality

The game should provide information with voices in order to enhance the range of communication. For examples, the game should offer the visual supports such as pictures, videos, and animation, the auditory supports such as speech, music, and sounds, textual supports such as hypertext, glossing, and subtitles, or tangible supports. While learners were playing the game, they could interact with the game by inputting their speeches, moving their computer mouse devices, or having physical movements.

7. Agency

When selecting the game, teachers should rely on the game which had the function allowing the learners to create their own stories. The selected game should be

able to create the variety of choices such as the creation of avatars which were experienced by the players of that game. The sense of controlling the game was vital to motivate the learners.

8. *Course integration and scaffolding*

For the course integration, the selected game should be parallel with the intended goal of that subject. For example, when the teacher wanted to set the learning outcome of writing ability, he / she should choose the game which was narrative so that the students would have a chance to practice writing in the class. For the scaffolding, it was described as the supplement of the context for meaning support by using more comprehensible language, models, pictures, learning with the cooperation, or with the manual operation. Therefore, when the teachers selected the game, it should provide these characteristics mentioned above as the contextual assistance to guide the learners.

9. *Financial, technical, and administrative considerations*

For financial considerations, some COTS games in local versions might not be changed in the language setting. Therefore, teachers had better buy an international version which offered many languages. Another was that most modern digital games could not be copied to another computer as they were locked by the copy protection. It was suggested that teachers should purchase many original digital games' discs to use in a class.

For technical considerations, teachers should check whether COTS games required any additional technics so that they could facilitate and install the additional equipment for school's computers. Teachers could also check how many hard drive

spaces were required in order to play the games or whether the use of internet connection was needed or not.

For administrative considerations, teachers should check the up-to-date version of COTS games which would be used in the class. In addition, teachers should also consider legal and ethical issues which involved with the violence or romance in the game's content.

Felicia (2009) proposed five aspects of choosing appropriate digital games used in class as follows:

1. Taxonomy of digital games and associated benefits

Before choosing the game, teachers should know the genres of the games and how to classify them. These genres were Shooters (e.g. Immune Attack), Bat and ball games (e.g. Pong), Platformers (e.g. Mario), Puzzles (e.g. Tetris), Mazes (e.g. Pacman), Sport Games (e.g. NBA Street), Racing Games (e.g. Racing Academy), RTS or Real Time Strategy (e.g. Civilization III), RPG or Role Playing Games (e.g. SimCity), FPS or First Person Shooters (e.g. Dimension M), MMORPG or Massive Multiple Online Role-Playing Games (e.g. World of Warcraft), Educational versions (e.g. Stu's Double Jeopardy), and Adventure games (e.g. Ever Quest). When teachers knew each genre of the games and the benefits received from them, they would know which proper digital game they would choose to teach in the class.

2. Understanding digital games' technical requirements

Teachers should check all computers in the computer room whether their specification such as processor speed, graphic card, or screen resolution was up-to-date or not. Some Commercial Off-The-Shelf (COTS) Games might require the

installations of Flash or Java before playing. If the teachers did not prepare and check the computers earlier, students might have the negative attitudes towards the game when they faced with the problems happened during game time.

3. *Understanding digital game rating and standards*

Teachers should consider the game's content whether it was appropriate for the students or not before using it in the class. Teachers could check the rating standard called "PEGI" (Pan European Game Information). This system could ensure teachers that the games selected by them were appropriate for the age of the target students. The PEGI was consisted of two level of information. The first level was consisted of five logos which showed the age's categories of the players. All five age's categories were 3, 7, 12, 16, and 18. The second level was consisted of eight icons which showed the involvement of the games. All eight icons were consisted of Violence, Bad Language, Fear, Sex, Drugs, Discrimination, Gambling, and Online.

4. *What to look for in a digital game: Testing the game*

After teachers had selected the games to use in the class, they should try testing the games to check whether the content in the games was relevant to the topics they were going to teach. Furthermore, teachers should also consider these following aspects which were technical considerations (user interface, audio, and customization), contextual considerations (age group, language, time, network games, and accommodation for disabilities), and pedagogical considerations (learning curve, educational content, clear progression bar, feedback, opportunities for collaboration and group work, assessment, and help).

5. *Taking account of children with disabilities*

Nowadays, there were many COTS games which were specially created for those who had visual, auditory, learning, or physical disabilities. Before starting to teach, teachers should carefully inspect whether the buttons spoke loudly or sound-operating system worked well. Teachers could also enable the textual dialogue systems displaying for students who had auditory disability or were deaf. For those who had the severe physical impairment, the one-switch COTS games were another good choice for teachers to accommodate their students in the class.

2.3 Related Studies

There were some related studies that used digital game activities in the English speaking classroom. To say so, these following studies showed that the use of digital game activities in the English speaking classroom was a useful way to encourage students' vocabulary and grammar learning which led to the activation of knowledge in English speaking ability.

Tewari et al. (2010) conducted the study in a public high school located in California, U.S.A. where were lived by a lot of Hispanic immigrants. There were eighteen volunteer students participated in this study. Six of the students were male, and the rest of them were female who were in the age range of 14 to 17 years old. They were divided into two groups which were the experiment and control groups. The experiment group had an opportunity to freely play the digital game called "Spring" for 10 minutes per week while the control group did not. Each session of the class took 2 hours per day, three times per week, and four weeks for the whole instruction. After the fourth week, the students were asked to have a test. In the

posttest, the slideshow of 30 words were displayed on the computer screen. Students were required to speak individually according to the words shown at that time. The speech recognition engine and scoring system were used to record the data. For the results, the mean acoustic scores, which referred to the numerical scores generated by the CMU Sphinx-III speech recognizer, of students in the treatment group were significantly higher than those in the control group at 1.41 and 0.68 respectively. Similarly, the word gains of students in the treatment group were significantly higher than those in the control group at 0 and 1.11 respectively.

Meihami et al. (2013) also conducted the study with 56 Iranian mariner students of Khoramshahr Navy University who used English as a foreign language. The participants were all male and their age range was 22 to 24 years old. For the procedure, the students were divided into 2 classes which were group A and group B. During 45 days, group A was required to play the simulation game called "Navy Simulator Game" in a laboratory while group B attended an ordinary English language class. In the class, group A learnt technical vocabulary, description, and pronunciation which they had seen in the simulation game. At the same time, group B also learnt the same content as group A did but in a traditional way. For the activities, all students in group A and B were divided into groups and each group was assigned do to the role plays according to the specific part of the lesson. At the end of the forty-fifth day, both group A and B were asked to do the proficiency test. The test was about the vocabulary and pronunciation used in the class's activities and in the simulation game. The test had 100 scores from 100 questions, and each question involved with vocabulary and pronunciation. For the results, it was shown that the mean scores of vocabulary learning and pronunciation in the pretest and posttest from

group A were 61.03 and 64.85 which were significantly higher than group B's mean scores which were 49.89 and 54.28 respectively.

For the last study review, Lee (2013) conducted the study with 60 students from two fifth-grade classes in South Korea. They were 34 males and 26 females and their age range was 10 to 11 years old. Then, all students were divided into two groups which called high and low shyness groups, and each group was consisted of 30 students. The division was based on the measurement of the Revised Cheek and Buss Shyness and Sociability (RCBSS) scale and the assertiveness scale. Before the experiment, all students were asked to do the self-expression test which was consisted of twenty questions. Then, two classes of all students were divided into eleven groups, and each group had six to seven members. They were asked to play a virtual world online game called "Second Life." In Second Life, all users had to customize their avatars to represent themselves and interact with other avatars by using the mouse control devices and keyboards. After students finished playing the game, they were asked to participate in the speaking activities which were held twice a week; each class spent 40 minutes. The topics for English speaking activities were taken from fourth-grade lessons. Students were allowed to write a memo before speaking to other students in order to save the speaking time. When the teacher held the discussion in Second Life, all students were required to answer questions by using microphones and headphones to speak. Six weeks later, the post self-expression test was analyzed to find the mean scores and then compared to the pre self-expression test's mean scores. For the pre self-expression test, the mean scores from the low shyness group were 12.10 while those from the high shyness group were 9.13. For the post self-expression test, although the mean scores from the low shyness group were significantly higher

than those from the high shyness group which were 13.10 and 12.27, it could be seen that students' mean scores from the high shyness group who were firstly passive and rarely spoke were significantly improved by 3.14 from the pretest.

According to the results and suggestions from the previous studies as mentioned above, English speaking instruction in the current study would be integrated with the use of digital game activities and conducted as an intensive course to improve students' English speaking ability.

CHAPTER III

METHODOLOGY

This chapter presents the methodology used in the current study. It describes: (1) research design of English speaking instruction using digital game activities, (2) setting, (3) population and sample, (4) research procedures, and (5) research instruments. Data collection and data analysis are discussed at the end of the chapter. Details are as follows.

3.1 Research Design

This study was a single group quasi-experimental research design which used pre- and post-test to measure the effects of the treatment given by the researcher. The students would be measured their English speaking ability both before and after they were taught with the English speaking instruction using digital game activities. The objectives of this study were to explore the effects of English speaking instruction using digital game activities on English speaking Ability of Thai secondary students and their opinions towards the instruction. The independent variable referred to the English speaking instruction using digital game activities. The dependent variables referred to students' English speaking ability and students' opinions towards English speaking instruction using digital game activities. The design of the study is shown as follows:

Figure 3.1: One-group Pretest – Posttest Design

O	**X**	**O**
Pretest: English speaking ability	*Treatment:* English speaking instruction using digital game activities	*Posttest:* English speaking ability
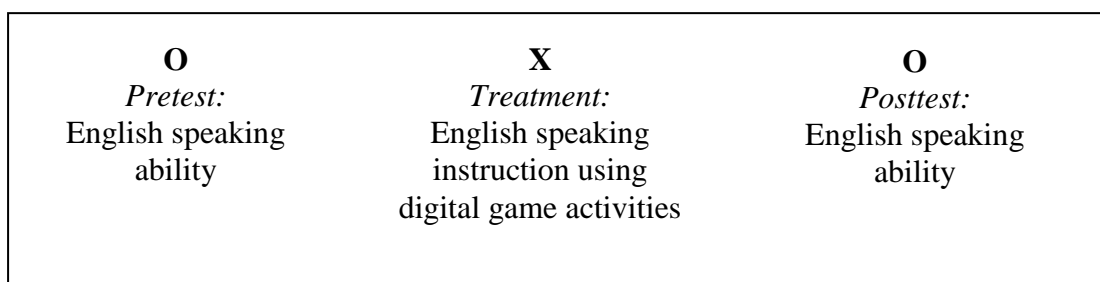
3.2 Setting

The setting chosen for this study was Darasamutr Sriracha School, which was located in Sriracha district, Chonburi. This school was founded on November 30th, 1936. At first this school was called "Villa Stella Maris School" which was the first school founded in Sriracha district. On May 21st, 1941, this school was changed to "Darasamutr Sriracha School" instead. At present, there are 5,800 students who are studying from the first year of the kindergarten level to the twelfth grade of the upper-secondary level with 450 teachers teaching at this school.

3.3 Population and Sample

The population in this study was 350 students who were studying in Grade 9 at Darasamutr Sriracha School. They studied the course "English for Communication II" in the first semester of the academic year 2014. These students all had similar background in English as they had been studying English since they were in the first year of the kindergarten level. Furthermore, they had the same basic skill in the computer literacy.

The sample was consisted of 30 students who were the volunteers from all of the population. From the observation and the interview of the teacher who was the students' homeroom teacher, English speaking ability of these students was in lower-

intermediate level which was measured by the school exams' and O-NET's scores. Therefore, all 30 students would enroll in the "English speaking instruction using digital game activities" as an intensive course held in summer session in academic year 2015.

3.4 Research Procedures

There were two phases in the research procedure. The first phase involved the preparation of English speaking instruction using digital game activities. The second phase involved the implementation of English speaking instruction using digital game activities. The details of the research procedure were presented as follows:

Figure 3.2: Phases of Research Procedures

Research Procedure

Phase 1: Preparation of English Speaking Instruction Using Digital Game Activities

Step 1.1: Study Thailand's core curriculum B.E.2551 in the foreign language strands

Step 1.2: Explore and study the basic concepts of English speaking instruction, English speaking ability test, digital games in language learning class, and Students' opinion questionnaire

Step 1.3: Choose digital games to play in the class

Step 1.4: Construct the lesson plans, and adapt pretest and posttest

Step 1.5: Adapt the questionnaire for the opinion survey

Step 1.6: Verify the effectiveness of lesson plans

Step 1.7: Conduct a pilot study

Figure 3.2 (continued)

Phase 1: Preparation of English Speaking Instruction Using Digital Game Activities *(continued)*

Step 1.8: Revise lesson plans and instruments according to the experts' suggestions and results from pilot study

Phase 2: Implementation of English Speaking Instruction Using Digital Game Activities

Step 2.1: Pretest of the English speaking ability

Step 2.2: Conduct the English speaking instruction using digital game activities

Step 2.3: Posttest of the English speaking instruction using digital game activities and administer the questionnaire of students' opinions towards the instructional model

Step 2.4: Evaluate the effectiveness of the English speaking instruction using digital game activities on English speaking ability and opinions of students.

Phase 1: Preparation of English Speaking Instruction Using Digital Game Activities

Step 1.1: Study Thailand's core curriculum B.E.2551 in the foreign language strands

The researcher studied Thailand's core curriculum B.E. 2551 in the foreign language strands about the content that the teacher had to teach the students so that they could achieve the objectives which were specified in the strands.

Step 1.2: Explore and study the basic concepts of English speaking instruction, English speaking ability test, digital games in language learning class, and students' opinion questionnaire

The researcher explored and studied all basic concepts from many sources such as books, research, theses, articles documents and journals which were relevant to the experimental model.

Step 1.3: Choose digital games to play in the class

The researcher chose digital games and downloaded them from the free game websites such as www.bigfishgames.com, www.arcadetown.com, and www.iplay.com which could be installed in the computer. The games used in the class which were Cooking Academy I, Fabulous Finds, Coyote's Tale – Fire and Water, Big City Adventure – Sydney Australia, Annie's Millions and Barn Yarn were chosen according to these following reasons.

1) Motivate the students

In order to engage students into the learning content, the use of modern or top hit games could motivate students by capturing their attention and could promote their positive attitudes towards the instruction. The researcher chose the games by considering the popular games' ranks which were shown in websites. The games were chosen since the beginning of the year 2014 to the year 2015.

2) Relevant with the students' age

To select the games for the instruction, students should not be exposed to inappropriate manners such as sexual activity, drug misuse, crime, violence, and wars.

The researcher tried playing each selected games and inspected them whether they contained inappropriate manners as mentioned above or not. In addition, the researcher also monitored both spoken and written languages appeared in the games whether they were polite or appropriate for students to learn or not.

3) Various contents

The researcher tried to select the games which provided the wide range of vocabulary so that students could acknowledge many useful vocabulary which was displayed on the games. In addition, it would be more effective when the games provided the range of vocabulary in the same category such as gardening, travelling, or cooking. The students also learnt grammatical items, social interaction, and speaking skill when they were asked about the games.

4) High-frequency words

The researcher studied the survey research conducted by Nuemaihom (2009) who categorized all vocabulary frequently found in students' textbooks into two alphabetical A-Z groups: parts of speech and word classes of Prathomsuksa6, Mathayomsuksa 3, and Mathayomsuksa 6 students. The researcher gathered vocabulary from forty five books; fifteen books from each educational level. For the results, Prathomsuksa 6 got 2,030 content words and 69 function words, Mathayom 3 got 3,134 content words and 59 function words, and Mathayom 6 got 3,282 content words and 32fuction words.

In the current study, the researcher found that most of vocabulary displayed in all six digital games was mostly from Mathayom 3. Thus, the researcher decided to

choose the secondary level to conduct the study since the vocabulary in the games would be suitable with students' abilities to learn new words and other grammatical items which were contributed to the English speaking ability.

Step 1.4: Construct the lesson plan, and adapt pretest and posttest

1.4.1 The information from the step 1.1 and 1.2 were gathered and became a theoretical framework for the development of the instruction.

1.4.2 The instruction and its components were designed. A proposed framework of English speaking instruction using digital game activities used in this study was adjusted based on the ESA Teaching Model from Harmer (2007) and Digital Game-enhanced L2 Learning Activities from Reinhardt & Sykes (2011). In the current study, two principles were combined together and became the main instructional steps of the study. The three steps were Explore-Engage, Examine-Study and Extend-Activate. The proposed framework was presented in Figure 3.3

Figure 3.3: The Proposed Framework of English Speaking Instruction Using

Digital Game Activities on English Speaking Ability

Digital Game-enhanced L2 Learning Activities
Reinhardt & Sykes (2011)

Explore - The teacher lets students learn to play or observe the game and notice game discourses by taking notes.

Examine – The teacher asks students to focus on particular language items displayed in the game, gets them discuss and talk about the game.

Extend – The teacher asks students to apply and create or participate in new discourses around the game.

The ESA Teaching Model
Harmer (2007)

Engage – The teacher gets the students' attention by asking questions and lets them make the prediction what they are going to learn.

Study – Students are asked to focus on the construction of the language, practice speaking in the assigned tasks, and discuss them with peers and teacher.

Activate – Students are asked to do speaking activities which can be transferred to the use in their real lives.

Explore-Engage
The teacher uses digital game activities at the beginning of the class to get the students' attention by asking questions before and while students were playing and observing the games.

Examine-Study
The teacher asks students to focus on construction of the language displayed on the game, and discuss with peers and the teacher on the assign tasks. They were also allowed to practice speaking.

Extend-Activate
The teacher asks students to apply and create the new ideas and language based on the game discourses by doing speaking activities which can be transferred to use in their real lives.

English speaking ability

1.4.3 Lesson plans were developed by the researcher (See Appendix C).
English speaking instruction using digital game activities was planned into 10 units
which lasted for 10 weeks. Each unit included one topic and English speaking tasks
which spent 90 minutes (1.5 hours) per a week. The ten-week lesson plans included
objectives, materials, evaluation, and instructional procedures which related to
English speaking instruction integrated with the use of digital game activities. The
course was conducted as an intensive course of which the procedures were divided
into three steps: Explore-Engage, Examine-Study and Extend-Activate.

The scope and sequence of English speaking instruction using digital game
activities are as follows:

*Figure 3.4: Scope and Sequence of English Speaking Instruction Using Digital
Game Activities*

Weeks	Topics	Functions of speaking	English speaking activities
Week 1	**Pretest and Introduction of the course**		
Week 2	**Lesson1:** Let's cook together (Playing game "Cooking Academy I")	- Describing the steps of cooking.	- Choose the right ingredients for the given menus (Gyoza and Sushi) and rearrange the steps of cooking in the correct order. - Discuss in a group of 4-5 people. Then, create and present new cooking recipe.

Figure 3.4 (continued)

Weeks	Topics	Functions of speaking	English speaking activities
Week 3	**Lesson 2:** Green thumb. (Playing game "Fabulous Finds" level1: Yard and Garden)	- Talking about the things used in a garden.	- Rearrange and convey the conversation into the right order. - Discuss in a group of 4-5 people about which things students will use to decorate their own garden and how they do it.
Week 4	**Lesson 3:** My holiday. (Playing game "Fabulous Finds" level 2: Travel and Transportation)	- Giving opinions about holiday experience.	- Choose appropriate words in the box and fill them in the blanks of conversations. Then, practice speaking in pairs. - Create a new conversation about good or bad holiday in groups.
Week 5	**Lesson 4:** What are you doing? (Playing game "Fabulous Finds level 3: Babies and Kids)	- Telling about activities that are happening.	- Choose appropriate words in the box and fill them in the blanks of conversations. Then, practice speaking in pairs and cut out pictures which are not related to the conversation. - Discuss in a group of 4-5 people and choose at least five pictures from all given pictures.

Figure 3.4 (continued)

Weeks	Topics	Functions of speaking	English speaking activities
			(continued) Then, create a new story about what each person in each picture is doing and orally present to the class.
Week 6	**Lesson 5: Lost and Found** (Playing game Big City Adventure - Sydney" level 1: Central Station and level 2: Hyde Park)	- Giving descriptions of lost things.	**-** Rearrange the conversation in the right order and practice speaking in pairs. - Do a role play between a tourist and an officer at lost and found office. The conversation made by students should be about describing lost things which they have chosen to describe.
Week 7	**Lesson 6: Tell me where it is?** (Playing game "Amazing Adventures around the World" level 1: Greece)	- Telling where things are.	- Work in pairs. Then, spot the differences in two versions of pictures and give information by telling where things are located. - Discuss in a group of 4-5 people and choose at least six pictures from all given pictures.

Figure 3.4 (continued)

Weeks	Topics	Functions of speaking	English speaking activities
			(continued) Then, stick pictures on the given background setting and present to the class by telling where each thing is.
Week 8	**Lesson 7: Where can I find it?** (Playing game "Annie's Millions level 1: Penny Barrel and level 2: Omnimart)	- Asking for and giving directions where the places are located.	**-** Work in pairs and do role play about asking for and giving directions in order to locate the places for buying the assigned things in the task. - Discuss in a group of 4-5 people and create a new conversation about buying things for the upcoming party. Students are to choose at least three pictures from all given pictures and create a new conversation about asking for and giving directions to buy things that they have chosen based on the map.

Figure 3.4 (continued)

Weeks	Topics	Functions of speaking	English speaking activities
Week 9	**Lesson 8: What will you do?** (Playing game "Coyote's Tale – Fire and Water" level 1: White Island and level 2: Underground Chamber)	Solving problems using future possibility.	- Choose appropriate words in the box and fill them in the blanks of conversations. Then, practice speaking in pairs - Discuss in a group of 4-5 people and choose the things that students will use to survive on a desert island by using if-clause type I sentences. Then, present orally to the class.
Week 10	**Lesson 9: Let's go shopping!** (Playing game "Barn Yarn" level 1: Fireplace Sale and level 2:Office Sale)	- Suggesting goods to customers.	- Work in pairs and rearrange the conversation into the right order. Then, practice speaking. - Do a role play between a customer and a shop assistant about buying things in the shop. Different sets of pictures are given to students to choose as a main topic of the conversation.

Figure 3.4 (continued)

Weeks	Topics	Functions of speaking	English speaking activities
Week 11	**Lesson 10: I'd like a refund, please.** (Playing game "Barn Yarn" level 3: Office Sale and level 4: Garage Sale)	- Complaining and refunding broken goods.	- Work in pairs and rearrange the conversation into the right order. Then, practice speaking. - Do a role play between a customer and a shop assistant about complaining and refunding broken things. Different sets of pictures are given to students to choose as a main topic of the conversation.
Week 12	**Posttest and Questionnaire**		

1.4.4 Design the pretest and posttest

Pretest and posttest were parallel as the researcher used the same test to measure students' English speaking ability before and after the instruction. Students had to do the test following to the directions in order to perform their English speaking ability to the researcher. The test was separated into four parts. The English speaking ability test took about eleven minutes (See Appendix D). Students were tested individually with an examiner. The voice and action along the test were recorded as a video-recording for the evaluation by using scoring rubric which was fluency, accuracy, vocabulary, pronunciation and content (See Appendix E).

Step 1.5: Adapt the questionnaire for the opinion survey

After having studied the concepts and chosen the games, the researcher designed the questionnaire in English. The questionnaire was composed of a set of statements and questions which were used to collect the students' opinions towards English speaking instruction using digital game activities (see Appendix A). This questionnaire was consisted of 14 statements using a Likert scale and 4 open-ended questions. The first part asked about the students' personal data, and the second part asked about the students' opinions towards English speaking instruction using digital game activities. However, the questionnaire which was given to the students was later translated in Thai since students could write more freely to express their ideas and it was easier for them to understand all questions clearly. After the researcher finished designing the questionnaire, all questionnaire items were verified the effectiveness by the experts.

Step 1.6: Verify the effectiveness of lesson plans

The checklists of the Item Objective Congruence (IOC) were evaluated and commented on lesson plans by three experts. All three experts evaluated and gave comments on learning objectives, instructional procedures, activities and materials for each session of lesson plans. Besides, in order to check whether the lesson plans were congruent with the objectives, the checklists were given to the experts to rate in the evaluation forms.

After the Item Objective Congruence (IOC) Index was evaluated by three experts to check whether objectives, contents, materials and tasks were proper or not, results of the Item-Objective Congruence (IOC) were calculated as follows:

+1	meant	Congruent
0	meant	Questionable
- 1	meant	Incongruent

Item Objective Congruence (IOC) Index was employed to validate lesson plans according to the responses of the experts.

$$IOC = \frac{R}{N}$$

IOC   meant   the index of congruent

R   meant   total score from the opinions of the experts

N   meant   the number of the experts

Three experts were asked to rate the validity and reliability of lesson plans. Items which were scored higher than 0.5 would be accepted and those which were scored lower than 0.5 would be revised and edited. The results from the validation of lesson plans were reported in Appendix F.

The additional suggestions and comments from experts were helpful as they could make the lesson plans more comprehensible. The suggestions and comments were as follows:

Expert A suggested that some words used in both lesson plans and tasks were a bit ambiguous so that they might make students get confused. Therefore, teaching procedures and directions in the tasks were revised in order to make them more

comprehensible. Some words which were considered too difficult for students were changed and replaced with easier words or the researcher gave more details instead.

Expert B suggested that the lesson objectives should be more specific and concrete. To say so, the objectives should identify functions of speaking more clearly as the researcher identified only forms of speaking. Therefore, the lesson objectives were revised and rewritten more clearly so that they could be more achievable and represented more functions of speaking.

Expert C commented that more activities should be added so that students would be more engaged to the instruction. For example, the expert suggested that the researcher could create a vocabulary sheet which provided pictures and asked students to fill in the missing letters in order to check their vocabulary recognition. The expert added that there were some grammatical errors found in lesson plans and they needed to be corrected. Therefore, the researcher created vocabulary sheets for students in order to let them write the words down below the given pictures in order to recall vocabulary seen from the games. Then, the researcher read and revised words in lesson plans thoroughly again to check for some mistakes.

Despite the fact that the results from lesson plans contained good characteristics, they were revised according to the experts' suggestions and comments so that the instruction would be more effective. The modified version could be seen in Appendix C.

Step 1.7: Conduct a pilot study

After the research received the comments and suggestions from three experts, lesson plans and instructional materials were revised and edited. Then, they were used

with a pilot group of 10 students at Darasamutr Sriracha School. All ten students were studying in ninth grade and having the similar educational background as the target group. The results from the pilot study were used to adapt and revise the lesson plans and instructional materials.

After conducting a pilot study with the pilot group of students, the lessons were interesting for them. They were enthusiastic while they were playing digital games in the class. They made notes about vocabulary they had seen in the games and how to play the games or tactics to win the games. However, in the Explore-Engage step, the researcher had to teach students how to play digital games and helped them get through to the next level in some parts of the games. In the study step, the teacher also had to help and guide students to complete the tasks. This step took much time in the first period, but it was quicker in the other periods. In the activate step, when students were in the group discussion, they sometimes talked about things which were not related to the lesson's topic and talked in Thai. Therefore, the teacher had to do the instruction strictly and monitor groups of students thoroughly.

Step 1.8: Revise lesson plans and instruments according to the experts' suggestions and results from pilot study

The problem found in the pilot study was the difficulty to conduct all steps of the instruction on time. Since the use of digital games was employed to the class, it may take more time to finish the class within the limited time as some tasks were rather difficult for them to finish quickly. Therefore, the teacher had to explain the directions of tasks clearly and slowly so that students could understand the procedures of instruction much more.

Phase 2: Implementation of English Speaking Instruction Using Digital Game Activities

Step 2.1: Pretest of the English speaking ability (Week 1)

The pretest of the English speaking ability was conducted in the first week of the instruction. Each student was tested individually with the researcher. The test was consisted of four parts which were Introduction, Telling How to Plant Tomatoes, Telling Description of Thing and Giving Directions to Buy It, and Choosing Right Things for Right People (See Appendix D). For the scores of the test, there was no point for the Introduction part. The criteria of speaking ability used to evaluate students' English speaking ability were fluency, accuracy, vocabulary, pronunciation and content; each criterion provided 10 points. The total raw score was 150 points (each part of the test provided 50 point) and the total converted score was 30 points (each part provided 10 points).

Step 2.2: Conduct the English speaking instruction using digital game activities (Week 2-11)

Students were asked to play digital games with their partners for 30 minutes at the beginning of the class as a warm up activity. After having finished playing games, they were assigned to practice their English speaking ability by role playing, group discussion, and presentation, for examples. Ten weeks were conducted with 10 lessons by using many English speaking activities based on the stories or settings from digital games and real life situations (See Appendix B). As each lesson was divided into 3 steps: Explore-Engage, Examine-Study and Extend-Activate, the

examples of Unit 1 (Let's cook together!) from the lesson plans were provided below (See Appendix C).

In the first step, Explore-Engage, the teacher got students' attention by showing them pictures of food such as Gyoza and Sushi and then asked them questions about cooking like "What is this dish called?" "Have you ever cooked this dish before?" "How do you cook it?" "What are the ingredients?" and "Would you like to know how these two dishes are cooked?" The teacher discussed with the students to let them make the predictions about what they were going to learn that day and involved them into the content with the use of digital game called "Cooking Academy I." Students played the digital game with their partners and they had to help each other complete the directions which were given in the games within 30 minutes. While they were playing the game, the teacher asked them to observe how to pass each level or each part of the game, and what they had seen in the game content. Students also had to remember vocabulary about cooking and what other elements they had seen in the games by making notes. While students were playing the game, the teacher could ask students by using guided questions; for examples, "What is the category of vocabulary that you are seeing?" "How do we play this game?" "What is this game about?" "What do you see in the first page of the game?" "Do you like this game?" and "Why don't you like this game?" After students had been playing the digital game for 30 minutes, taking notes and writing down the vocabulary, the second step started.

In the second step, Examine-Study, the teacher asked students to practice English speaking on the assigned tasks by letting them discuss in groups or with the

teacher. Students could also use the given conversation as a model to practice speaking with their friends. As in the examples from Unit 1, after the students were experienced with the Cooking Academy I game, they learnt vocabulary, grammar, and English situational communication which were related to cooking. In the task, students were asked to rearrange the correct steps of cooking Gyoza and Sushi. Then, they had to practice speaking with their friends by telling all ingredients used in cooking each menu and the steps to cook them. The students were also asked to repeat the words or phrases until the pronunciation was correct as the teacher monitored them while they were working in groups or pairs. The activities focused on specific language elements (using imperative sentences), cultural context (Japanese's food), or tactics to win the game (how to set the oven, how to close to stove when the food was cooked). If the teacher found that some students failed some parts of the game or forgot the steps of cooking Gyoza and Sushi in the game, they could play the game again to recall their memories. After the teacher chose 2-3 pairs of students to give the answers from the assigned tasks and gave them feedback, the last step started.

In the last step, Extend-Activate, students were asked to perform their English speaking activities which could make them apply and create the target language based on the game discourses. The assignment in this step let the students use the language freely and transfer them to use in the real life situation. As in the examples from Unit 1, students were asked to create the new menu of cooking by using words they had learnt from the study step or other words about cooking apart from the lesson. Then, students collaborated in groups by brainstorming and sharing their knowledge or ideas. Students could also play the game in this step to see it as a guide to create their

ideas and present to the class. When they finished, they were asked to present to the class and received feedback from the teacher and peers.

All of three steps were combined from two principles. The first principle was from the ESA Teaching Model (Harmer, 2007) which was used for teaching English speaking. Another principle was Digital Game-enhanced L2 Learning Activities (Reinhardt & Sykes, 2011) which was used for teaching by using digital game activities in the class. These steps could enhance students' English speaking ability in terms of fluency, accuracy, vocabulary, pronunciation, and content. Besides, students got opportunities to practice speaking in the class and were monitored by the teacher so that they could ask for the suggestion and useful comments when they were in the class.

Thus, the sample lessons of the English speaking instruction using digital game activities conducted in the current study can be seen in Appendix C.

Stage 2.3: Posttest of the English speaking instruction using digital game activities and administer the questionnaire of students' opinion towards the instructional model (Week12)

The posttest was conducted at the end of the instruction (See Appendix D). The test was the same as the pretest which was adapted from the Test of Spoken English (TSE) validated by Powers et al. (1999). This test was used as a sample of constructing the English Speaking Test. It required the students to show their English speaking ability by responding orally relevant to topics and information given in each part of the test within the limited time. The criteria adopted from the Ministry of Education of Ecuador (2012) were provided with rubric in ten-rating scales which

focused on fluency, accuracy, vocabulary, pronunciation, and content (See Appendix E).

After students finished doing posttest, they were given the questionnaire in Thai version so that the researcher could explore the students' opinions towards English speaking instruction using digital game activities. (See Appendix A)

Stage 2.4: Evaluate the effectiveness of the English speaking instruction using digital game activities on English speaking ability and opinions of students

This stage allowed the researcher to explore the answer of the first research question in the effects of the English speaking instruction using digital game activities on English speaking ability of Thai secondary students. The uses of means, S.D., and paired sample t-test were analyzed to find out the results.

To answer the second question, the students' opinions from the questionnaire were analyzed to see the results. Thus, the results which showed the opinions of secondary students towards English speaking instruction using digital game activities were analyzed by using descriptive statistics.

3.5 Research Instruments

In the current study, the research instruments were consisted of English speaking ability test and students' opinions questionnaire. The details were presented as follows:

3.5.1 English Speaking Ability Test

The English speaking ability test was developed by the researcher. The purpose was to evaluate the students' English speaking ability before and after the instruction. The test was adapted from the Test of Spoken English (TSE) validated by Powers et al. (1999). It was a semi-direct speaking test divided into four parts which were Introduction, Telling how to Plant Tomatoes, Telling Description of Thing and Giving Directions to Buy It respectively. The students were asked to perform their English speaking ability according to the directions in each part of the test.

The rubric which was in analytic form was adopted from the Ministry of Education of Ecuador (2012). This rubric assessed five criteria of English speaking ability which were fluency, accuracy, vocabulary, pronunciation, and content.

Each criterion of speaking provided 10 points for the evaluation. The total raw score was 150 points (50 points for each part of the test and there was no point for the Introduction part). The total converted score was 30 points (10 points for each part of the test). The time allocation was 11 minutes.

In the first part, students were required to introduce themselves to the examiner in 2 minutes. The students could talk about their family, favorite hobbies, favorite sports, favorite food, favorite subject or characteristic, etc. There was no point in this part as it was a warm-up activity for English speaking.

In the second part, students were required to describe how to plant tomatoes in 5 steps. The students had 1 minute to prepare to speak and 2 minutes to speak by telling each step in each picture with the use of imperative sentence. The objectives of

this part were to reproduce the previous learnt information, and use the proper vocabulary and sentences to describe the step in each picture. The time allocation in this part was 3 minutes.

In the third part, students were required to choose one thing from all pictures given in the test and describe what it looked like. Then, they had to look on the map and find the places where they could buy their chosen things. The students had 1 minute to prepare to speak and 2 minutes to speak. The objectives were to reproduce the previous learnt information and use it properly by finding the suitable places where things should belong to. The time allocation in this part was 3 minutes.

In the fourth part, students were required to choose two customers from four customers and find two appropriate things for them after they had already read the customers' descriptions. In addition, the students also had to tell the reasons why these things were appropriate for the chosen customers. The students had 1 minute to prepare to speak and 2 minutes to speak. The objective was to justify the appropriate things for people which were based on the given information. The time allocation in this part was 3 minutes

All students were assigned to take the test individually. The performance given in the test from each student was video-recorded and separately evaluated by the researcher and another rater. However, all video recordings were not transcribed as the researcher only evaluated students' English speaking ability by watching the videos and giving scores to students' speaking ability based on using given criteria for evaluating English speaking which were fluency, accuracy, vocabulary, pronunciation and content (See Appendix E).

All five criteria had 5 levels of English speaking ability which were poor (scores 1-2), fair (scores 3-4), good (scores 5-6), very good (scores 7-8), and excellent (scores 9-10). For fluency, the consideration would be on speed, naturalness, and lack of hesitation. For accuracy, the consideration would be on grammar (syntax and general structures). For vocabulary, the consideration would be on adequacy and appropriateness of vocabulary for purpose. For pronunciation, the consideration would be on stress, rhythm and intonation patterns. Lastly, for content, the consideration would be on precision and length in describing the subject matter and picture elements.

After both researcher and another rater finished giving scores to students, the researcher used Pearson's correlation to find the inter-rater reliability.

Validity and Reliability of the English Speaking Ability Test

The English Speaking Ability Test was evaluated by three experts to see the proper contents, directions, and rubric of the test. The three experts evaluated the test by using the Item-Objective Congruence (IOC) (See Appendix G). The results of IOC were rated as follows:

$$+1 \quad \text{means} \quad \text{Congruent}$$

$$0 \quad \text{means} \quad \text{Questionable}$$

$$-1 \quad \text{means} \quad \text{Incongruent}$$

Item Objective Congruence (IOC) Index was employed to validate English speaking ability test according to the responses of the experts.

$$IOC = \frac{R}{N}$$

IOC	meant	the index of congruent
R	meant	total score from the opinions of the experts
N	meant	the number of the experts

Three experts were asked to rate the validity and reliability of English speaking ability test. Items which were scored higher than 0.5 would be accepted and those which were scored lower than 0.5 would be revised and edited. The results from the validation of lesson plans are reported in Appendix G.

The results from the validation showed that 2 items, Item 1.1 and 2.6, received IOC value lower than 0.5 so that they were needed to be revised and modified based on the experts' suggestions. All two items were suggested and revised as follows:

Item 1.1: The tasks are relevant to English speaking ability.

The experts commented that the test did not represent its functions of speaking clearly as they were listed in the scope and sequence of the instruction. The functions of speaking needed to be elicited comprehensively in the test. In addition, all topics taught in the class should be integrated evenly in the test so that students could perform all necessary speaking skills which they had practiced in the class.

Therefore, the researcher revised and edited the English speaking ability test again by integrating lesson 1 (telling steps of cooking) and lesson 2 (taking about things used in gardening) into part B (telling steps of planting). Then, the researcher integrated lesson 3 (talking about things used in travelling), lesson 4 (talking about personal belongings), lesson 5 (giving descriptions of things), lesson 6 (telling where things are), lesson 7 (giving directions) and lesson 8 (giving information using future possibility) into Part C (describing things and telling directions to buy the chosen things by starting the sentence with the use of if-clause sentence). Lastly, the

researcher integrated lesson 9 (suggesting things to customers) and lesson 10 (solving customers' problems) into Part D (reading customers' problems or story and suggesting suitable things for them). The modified version is presented in Appendix D.

Item 2.6: The prompts are appropriate to elicit the English speaking ability.

The experts suggested that the directions given in the test should be modified and added with more details to help students understand more clearly. It was found that some prompts in the test's tasks were ambiguous or not clear for students. The experts added that it would be better if the researcher gave guided sentences in the test's tasks as examples for students to know how they should speak. Therefore, the researcher added the guided sentences in all three parts of the test as examples for students to prepare themselves before speaking. The modified version is presented in Appendix D.

3.5.2 Students' Opinions Questionnaire

After the students had done the posttest, they were asked to do the questionnaire about their opinions towards English speaking instruction using digital game activities enhancing English speaking ability. There were two parts in the questionnaire. The first part asked about the students' personal data, and the second part asked about the students' opinions towards English speaking instruction using digital game activities.

The second part of the questionnaire asking about the students' opinions towards the instruction was consisted of 14 statements and 4 open-ended questions. The 14 statements which were selected out of 22 statements were adapted from

Phisutthangkoon (2012) and 4 open-ended questions which were selected out of 8 questions were adapted from Yuangyim (2013). The 14 statements and 4 open-ended questions were translated into Thai version. The students were assigned to write in Thai since they could express their feelings and opinions more clearly (See Appendix A).

Validity and Reliability of Students' Opinions Questionnaire

The questionnaire was evaluated by three experts. The results of the evaluation showed that the questionnaire items were able to measure the students' opinions towards the model of the study which was the English speaking instruction using digital game activities. All three experts used the Item-Objective Congruence (IOC) (See Appendix H). The results of IOC were rated as follows:

+1	means	Congruent
0	means	Questionable
- 1	means	Incongruent

Item Objective Congruence (IOC) Index was employed to validate the questionnaire according to the responses of the experts.

$$IOC = \frac{R}{N}$$

IOC	meant	the index of congruent
R	meant	total score from the opinions of the experts
N	meant	the number of the experts

Three experts were asked to rate the validity and reliability of the questionnaire. Items which were scored higher than 0.5 would be accepted and those

which were scored lower than 0.5 would be revised and edited. The results from the validation of lesson plans are reported in Appendix H.

The results from the validation showed that the average scores of the questionnaire were between 0.67 and 1 which implied that the questionnaire contained the majority of relevant characteristic. However, some experts gave some additional suggestions and comments for revising the questionnaire to be more proper. Comments and suggestions were as follows:

Expert A suggested that some expressions in Thai version were ambiguous and not clear. Therefore, the expert commented that the researcher should adjust the expression from "learning through the teaching of English speaking using digital game activities" to "learning through English speaking instruction using digital game activities" instead.

Expert B suggested that the repetition of the phrase "English speaking instruction using digital game activities" in every statement was too long and quite distracting. It was suggested that this phrase should be replaced with "Learning through this program" instead of using the full phrase. Therefore, the researcher started the first statement in the questionnaire with the full phrase and used the short phrase in other following statements.

Expert C suggested that some statements in the questionnaire should be changed so that it would represent more aspects of speaking according to the proposed framework since some statements were not related to the aspects that the researcher would like to measure or assess. Therefore, the researcher revised and changed some statements which represented all three steps used in the instruction: Explore-Engage, Examine-Study and Extend-Activate. For Explore-Engage step, the

researcher added the statements about brainstorming and digital game activities as the engage part for the students. For Examine-Study step, the researcher added the statements about the improvement in all five aspects of speaking ability (fluency, accuracy, vocabulary, pronunciation and content) after students learnt through the assigned tasks in the class. For Extend-Examine, the researcher added the statements about their confidence and motivation to apply the knowledge from the class to use in their real lives. Therefore, the questionnaire was adapted according to the three experts' suggestion as can be seen in Appendix A.

The following table showed the conclusion of the instruments, the objectives, the time of distribution, and the statistics used for the research instruments which were the English speaking ability test and the students' opinions questionnaire. The summary of the researcher is presented as follows:

Figure 3.5: Summary of the Research

Instruments	Objectives	Time of Distribution	Statistics
English Speaking Ability Test (Appendix D and G)	1. To look into the effects of the English speaking instruction using digital game activities on English speaking ability of Thai secondary students.	Before and after the treatment (week 1 and week 12)	- S.D. and Mean - Paired sample t-test

Figure 3.5 (continued)

Instruments	Objectives	Time of Distribution	Statistics
Questionnaire of Students' Opinions	2. To explore Thai secondary students' opinions after learning through the English speaking instruction using digital game activities.	- After the treatment (Week 12)	- Descriptive statistics

3.6 Data Collection

The results from the pretest, posttest, and questionnaire were data which were used to find out two research questions. In the first week, students were asked to do the pretest before participating in the English speaking instruction using digital game activities. At the end of the instruction (week 12), the students had the posttest which was the same test as the pretest. Students were video-recorded their English speaking ability in both pretest and posttest. Then, the researcher watched the video and evaluated their speaking ability without transcribing the videos. The scores from the researcher and another rater who separately evaluated students' speaking ability were used to find the inter-rater reliability by using Pearson's Correlation.

After having done the posttest, the students were also asked to do the questionnaire to find out their opinions after learning through English speaking instruction using digital game activities.

The following table shows the conclusion of the periods collecting the data and their procedures in detail.

Figure 3.6: Summary of Data Collection

Periods	Weeks	Procedures
Before the Implementation of English speaking instruction using digital game activities		- The lesson plans and instructional materials were given to three experts to verify the effectiveness of English speaking instruction using digital game activities. - The researcher revised the lesson plans and instructional materials according to three experts' comments and suggestions - The researcher conducted the pilot study. - The researcher revised the lesson plans and instructional materials.
During the Implementation of English speaking instruction using digital game activities	Week 1	- Pretest of English speaking ability was given to the students. - The teacher gave students the orientation before starting English speaking instruction using digital game activities.
	Week 2-11	- English Speaking Instruction Using Digital Game Activities was instructed to the students.

Figure 3.6 (continued)

Periods	Weeks	Procedures
After the Implementation of English speaking instruction using digital game activities	Week 12	- Posttest of English speaking ability was given to the students. - The questionnaire of students' opinions towards English speaking instruction using digital game activities was conducted.

3.7 Data Analysis

Research Question 1: To what extent does English speaking instruction using digital game activities have effects on English speaking ability of Thai secondary students?

The research instrument which was used to answer the research question 1 was the English speaking ability test. The independent variables were English speaking instruction and digital game activities. The dependent variable was the mean scores of the English speaking ability test.

For the English speaking ability test, students were video-recorded their English speaking ability in both pretest and posttest. The video recordings were not transcribed as the researcher evaluated students' speaking ability by opening the video recordings of each student which could be opened in repetition as needed and assigning scores according to their performances of English speaking. The evaluation of English speaking ability used as the scoring rubric was composed of five criteria of

English speaking: fluency, accuracy, vocabulary, pronunciation and content. Each criterion provided 10 points and the total raw score for all three parts of the English speaking ability test was 150 points (50 points for each part of the test). Then, the raw score was converted into 30 points (10 points for each part of the test) as it was easy to be read and reported the results.

After having finished evaluating students' English speaking ability, the researcher trained another rater to follow the given five criteria of English speaking ability before allowing the inter-rater to watch the videos and assign scores individually. Then, students' English speaking ability scores from the researcher and another rater were analyzed to find the inter-rater reliability by using Pearson's correlation. If the results were consistent, the researcher continued analyzing the data to find the mean scores, standard deviations and paired sample t-test.

The data from pretest and posttest analyzed by using mean scores, standard deviation, and paired-sample t-test were compared by the researcher in order to see the improvement of the target group's English speaking ability. Then, the effect size Cohen's d (1998) was applied in this study to measure the significance of the effects of English speaking instruction using digital game activities.

The questionnaire which was given at the end of the instruction was also analyzed by using the data which students had written in order to express their opinions after learning through English speaking instruction using digital game activities. The results from the questionnaire could answer the research question 2.

Research Question 2: What are the opinions of Thai secondary students towards English speaking instruction using digital game activities?

The researcher used the questionnaire to answer the research question 2 in order to find out the students' opinions towards the instruction. There were 2 parts in the questionnaire. The first part was students' personal data and the second part was the students' opinions towards the instruction. In the second part, the questionnaire was consisted of 14 statements and 4 open-ended questions. All items in the questionnaire were translated into Thai version and it was distributed to students at the end of the instruction after doing the posttest. The students were asked to express their opinions towards English speaking instruction using digital game activities in Thai so that it would be easy for them to express their opinions. Then, their opinions were analyzed by using descriptive statistics to find the mean scores and standard deviations so that the researcher could see the students' opinions towards the instruction. The summary of data analysis is shown as follows:

Figure 3.7: Summary of Data Analysis

Research Questions	Instruments	Period to Find out the Answer	Methods of Analysis
1. To what extent does English speaking instruction using digital game activities have effects on English speaking ability of Thai secondary students?	- Pretest and posttest	- Before and after giving the treatment	- Using standard deviations - Mean scores - Paired sample t-test

Figure 3.7 (continued)

Research Questions	Instruments	Period to Find out the Answer	Methods of Analysis
2. What are the opinions of Thai secondary students towards English speaking instruction using digital game activities?	- The students' opinions questionnaire	- After giving the treatment	- Using descriptive statistics

Summary

The study aimed to examine whether English speaking instruction using digital game activities enhances Grade 9 students' English speaking ability. It was conducted with 30 students for 12 weeks. The researcher compared students' mean scores before and after learning through English speaking instruction using digital game activities. The opinions of students towards learning through English speaking instruction using digital game activities were explored by distributing the questionnaire to explore their opinions towards the instruction. The results and findings for each research question will be presented in Chapter IV.

CHAPTER IV

FINDINGS

This chapter reports both quantitative and qualitative results based on two research questions. The first question was to investigate the effects of English speaking instruction using digital game activities on English speaking ability of Grade 9 students. This question reported quantitative results obtained from the pretest and posttest mean scores. The second research question was to explore Grade 9 students' opinions towards English speaking instruction using digital game activities. Statements and open-ended questions from the questionnaire were analyzed by using descriptive analysis and were presented quantitatively and qualitatively in order to evaluate the effectiveness of English speaking instruction using digital game activities.

According to the objectives of the study, the analysis of the data was presented in two main parts. The first part was to answer the research question 1 and the second part was to answer the research question 2.

Students' English Speaking Ability

The first research question dealt with the effects of English speaking instruction using digital game activities on English speaking ability of Grade 9 students. A comparison analysis of overall data from pretest and posttest mean scores of all participants was carried out.

Research question 1: To what extent does English speaking instruction using digital game activities have effects on English speaking ability of Thai secondary students?

Hypothesis 1: Students who learn through the English speaking instruction using digital game activities will gain higher average scores on the posttest than the pretest at the significant level of 0.05.

The research instrument used to answer research question 1 was the English speaking ability test (See Appendix D). The test was composed of four parts based on all ten topics taught in ten-week lesson plans. All four parts in the test were Introduction, Telling how to Plant Tomatoes, Telling Description of Thing and Giving Directions to Buy It.

The total raw score of the test was 150 points (50 points for each part of the test) and the total converted score was 30 points (10 points for each part). The analytic scoring scheme adopted from the Ministry of Education of Ecuador (2012) was used to evaluate students' English speaking ability. The 50 points for each part of the test were evaluated based on five criteria of English speaking ability, which were fluency, accuracy, vocabulary, pronunciation and content; each criterion provided 10 points,. Therefore, all the following tables were presented in converted score as they were easy to be read and reported. The details of scores in the English speaking ability test were as follows:

Parts of the test	Raw score	Converted score
Part I	(no score for this part)	(no score for this part)
Part II	50 points	10 points
Part III	50 points	10 points
Part IV	50 points	10 points
Total	150 points	30 points

The first research question focused on investigating whether the pretest mean scores differed from the posttest mean scores at the significant level of 0.05.

Therefore, paired-sample t-test was employed as the statistical analysis used to explore whether there was a difference between the pretest and posttest mean scores of Grade 9 students at the significant level of 0.05.

The results showed the correlation between the researcher and another rater was 0.96 on the pretest and 0.98 on the posttest which implied that grading students' English speaking ability from both raters was consistent. The students' pretest and posttest mean scores, standard deviations, t-values, and statistical significance are presented in Table 4.1.

Table 4.1: Descriptive statistics of the overall English speaking ability test scores of all students

English Speaking Ability Test (Total converted score = 30 points)	Min	Max	Mean Scores ($\bar{x}$)	S.D.	t	df	Sig.
Pretest	5.4	19.8	9.71	3.196	-20.188	29	.000*
Posttest	10.2	25.2	15.45	3.606			

*p < .05, n=30

The total raw score of English speaking ability test was 150 points and each part of the test (3 parts) provided 50 points. The 50 points were from five criteria of English speaking ability, each criterion provided 10 points, which were fluency, accuracy, vocabulary, pronunciation and content. The total converted score was 30 points and each part of the test (3 parts) provided 10 points.

From the table 4.1, in the pretest, the minimum converted score was 5.4 points out of 30 points and the maximum converted score was 19.8 points out of 30 points. In the posttest, the minimum converted score was 10.2 points out of 30 points and the maximum converted score was 25.2 points out of 30 points. For the raw score, the minimum raw score was 27 points out of 150 points and the maximum raw score was 99 points out of 150 points. In the posttest, the minimum raw score was 51 points out of 150 points and the maximum raw score was 126 points out of 150 points.

As can be seen from the table, the students' posttest mean scores ($\bar{x}$ = 15.45) on the English speaking ability test were significantly higher than the pretest mean scores ($\bar{x}$ = 9.71). The total converted score was 30 points (10 points for each part of the test), the mean difference was -5.74, and the t-value was -20.188 with a degree of freedom of 29 (n = 30).

As the results showed that there was a significant difference between the pretest and posttest mean scores from English speaking ability test at a significant level (p < .05), the first hypothesis was accepted as students' English speaking ability enhanced after learning through English speaking instruction using digital game activities.

The values of effect size were used to measure the magnitude of the effect of English speaking instruction using digital game activities on students' English speaking ability. For the uses of the means and standard deviations, Cohen (1988) defined effect sizes as follows: greater than 0.5 meant large, 0.5-0.3 meant moderate, 0.3-0.1 meant small, and anything smaller than 0.1 meant trivial.

The effect size of English speaking instruction using digital game activities is presented in Table 4.2.

Table 4.2: The effect size of English speaking instruction using digital game activities on students' English speaking ability

Effect Size	Percentile Standing	Meaning
0.93	82	Large

From Table 4.2, the result of the mean effect size correlation was 0.93 which represented large effect size according to Cohen (1988). This meant that the score from average person in the posttest group was 0.9 standard deviation above the average person in the pretest group, and exceeded the score of 82 % of the pretest group. Hence, it could be summarized that English speaking instruction using digital game activities had a large effect on enhancing students' English speaking ability.

To see a clear picture of how English speaking ability was evaluated, the scale for assessing English speaking ability (adopted from the Ministry of Education of Ecuador, 2012) which included fluency, accuracy, vocabulary, pronunciation, and content were used to examine the pretest and posttest's minimum and maximum values, mean scores, standard deviations, mean difference, degree of freedom and paired-sample t-test of students' English speaking ability as presented in Table 4.3-4.7 as follows:

Table 4.3 was conducted to show the minimum and maximum values, mean scores, standard deviations, mean difference, degree of freedom, and paired-sample t-test of pretest and posttest in terms of accuracy.

Table 4.3: Descriptive statistics of students' English speaking ability in terms of fluency

Fluency (Total score = 10 points)	Min	Max	Mean Scores ($\overline{x}$)	S.D.	Mean Difference	t	df	Sig.
Pretest	1	7	3.43	1.330	1.32	7.12	29	.000*
Posttest	3	8.5	4.75	1.596				

*P<.05 n=30

According to Table 4.3, the mean score of the pretest was 3.43 (S.D. = 1.330) and the mean score of the posttest was 4.75 (S.D. = 1.596). The mean difference between the pre- and posttest was 1.32 which was significantly higher than the level of 0.05 (p<.05). Therefore, the statistics showed that students gained significantly higher scores of English speaking ability in terms of fluency after learning through English speaking instruction using digital game activities.

Table 4.4 was conducted to show the minimum and maximum values, mean scores, standard deviations, mean difference, degree of freedom, and paired-sample t-test of pretest and posttest in terms of accuracy.

Table 4.4: Descriptive statistics of students' English speaking ability in terms of accuracy

Accuracy (Total score = 10 points)	Min	Max	Mean Scores ($\bar{x}$)	S.D.	Mean Difference	t	df	Sig.
Pretest	1	6	2.83	1.061	1.92	9.99	29	.000*
Posttest	2	8.5	4.75	1.472				

*P<.05 n=30

According to Table 4.4, the mean score of the pretest was 2.83 (S.D. = 1.061) and the mean score of the posttest was 4.75 (S.D. = 1.472). The mean difference between the pre- and posttest was 1.92 which was significantly higher than the level of 0.05 (p<.05). Therefore, the statistics showed that students gained significantly higher scores of English speaking ability in terms of accuracy after learning through English speaking instruction using digital game activities.

Table 4.5 was conducted to show the minimum and maximum values, mean scores, standard deviations, mean difference, degree of freedom, and paired-sample t-test of pretest and posttest in terms of vocabulary.

Table 4.5: Descriptive statistics of students' English speaking ability in terms of vocabulary

Vocabulary (Total score = 10 points)	Min	Max	Mean Scores ($\bar{x}$)	S.D.	Mean Difference	t	df	Sig.
Pretest	1	8	2.90	1.093	3.18	21.13	29	.000*
Posttest	2	9	6.08	1.114				

*P<.05 n=30

According to Table 4.5, the mean score of the pretest was 2.90 (S.D. = 1.093) and the mean score of the posttest was 6.08 (S.D. = 1.114). The mean difference between the pre- and posttest was 1.92 which was significantly higher than the level of 0.05 (p<.05). Therefore, the statistics showed that students gained significantly higher scores of English speaking ability in terms of vocabulary after learning through English speaking instruction using digital game activities.

Table 4.6 was conducted to show the minimum and maximum values, mean scores, standard deviations, mean difference, degree of freedom, and paired-sample t-test of pretest and posttest in terms of pronunciation.

Table 4.6: Descriptive statistics of students' English speaking ability in terms of pronunciation

Pronunciation (Total score = 10 points)	Min	Max	Mean Scores ($\bar{x}$)	S.D.	Mean Difference	t	df	Sig.
Pretest	2	7	2.78	0.816	1.98	11.10	29	.000*
Posttest	2	8	4.77	0.989				

*P<.05 n=30

According to Table 4.6, the mean score of the pretest was 2.78 (S.D. = 0.816) and the mean score of the posttest was 4.77 (S.D. = 0.989). The mean difference between the pre- and posttest was 1.92 which was significantly higher than the level of 0.05 (p<.05). Therefore, the statistics showed that students gained significantly higher scores of English speaking ability in terms of pronunciation after learning through English speaking instruction using digital game activities.

Table 4.7 was conducted to show the minimum and maximum values, mean scores, standard deviations, mean difference, degree of freedom, and paired-sample t-test of pretest and posttest in terms of content.

Table 4.7: Descriptive statistics of students' English speaking ability in terms of content

Content (Total score = 10 points)	Min	Max	Mean Scores ($\bar{x}$)	S.D.	Mean Difference	t	df	Sig.
Pretest	1.5	5	3.38	1.297	2.51	12.88	29	.000*
Posttest	4	9	5.90	1.422				

*P<.05 n=30

According to Table 4.7, the mean score of the pretest was 3.38 (S.D. = 1.297) and the mean score of the posttest was 5.90 (S.D. = 1.422). The mean difference between the pre- and posttest was 1.92 which was significantly higher than the level of .05 (p<.05). Therefore, the statistics showed that students gained significantly higher scores of English speaking ability in terms of content after learning through English speaking instruction using digital game activities.

The comparison of mean scores and standard deviations from students' English speaking ability in all five criteria of English speaking ability were summarized and presented as follows:

Table 4.8: The comparison of mean scores and standard deviations from students'
English speaking ability

English speaking ability	Pretest		Posttest		Mean Difference	t	Sig. (2-tailed)
	Mean	S.D.	Mean	S.D.			
Fluency	3.43	1.330	4.75	1.596	1.32	7.12	.000
Accuracy	2.83	1.061	4.75	1.472	1.92	9.99	.000
Vocabulary	2.90	1.093	6.08	1.114	3.18	21.13	.000
Pronuncia-tion	2.78	0.816	4.77	0.989	1.98	11.10	.000
Content	3.38	1.297	5.90	1.422	2.51	12.88	.000

*P<.05, n=30, df=29

Ranking from the highest to the lowest mean difference, it could be concluded that students gained the highest mean scores in the criterion of vocabulary (mean difference = 3.18), followed by content (mean difference = 2.51), pronunciation (mean difference = 1.98), accuracy (mean difference = 1.92), and fluency (mean difference = 1.32) respectively.

For the pretest, it seemed that fluency was the highest mean scores of all five criteria. Students could perform their speaking fluently in the pretest. From the observation from the researcher who conducted the pretest, it was found that students spoke English fluently when they were asked with simple questions and answered questions very shortly. However, in the posttest, as students were asked to express more ideas or give more information, they spoke less fluently and give some pauses. Therefore, in the posttest, it revealed that the criterion of vocabulary was the highest

mean difference when compared to the pretest mean score. This meant that students enhanced their English speaking ability in terms of vocabulary the most and it was followed by content, pronunciation, accuracy and fluency respectively.

To conclude, English speaking ability in terms of vocabulary was enhanced the most of all five criteria. This meant students' English speaking ability was improved in the criterion of vocabulary. Furthermore, the posttest mean scores of English speaking ability were significantly higher than the pretest mean scores. Thus, the first hypothesis was accepted. The research findings supported that English speaking instruction using digital game activities could enhance English speaking ability at the significant level of 0.05.

Students' Opinions towards English speaking instruction using digital game activities

The second research question was concerned with students' opinions towards English Speaking Instruction Using Digital Game Activities. The findings were reported as follows:

Research question 2: What are the opinions of Thai secondary students towards English speaking instruction using digital game activities?

Hypothesis 2: Students will have positive opinions towards learning through English speaking instruction using digital game activities.

To investigate students' opinions towards English speaking instruction using digital game activities, the researcher used the questionnaire to explore the students' opinions towards the instruction. The 14 statements in the questionnaire including the results of the students' opinions towards English speaking instruction using digital

game activities were reported by mean scores and standard deviations which can be seen in Table 4.9.

Table 4.9: Mean scores and Standard Deviations of the students' opinions towards the English speaking instruction using digital game activities

Questionnaire Items	$\bar{x}$	S.D.
* The word 'Learning through this program' refers to 'Learning through English speaking instruction using digital game activities.' * 1. I am interested in learning through English speaking instruction using digital game activities.	4.47	0.681
2. My English speaking ability improves after learning through this program.	4.10	0.711
3. I speak English fluently after learning through this program.	3.77	0.971
4. I speak English correctly, according to grammar rules, after learning through this program.	3.70	0.915
5. My English pronunciation improves after learning through this program.	4.07	0.944
6. I learn more English vocabulary after learning through this program.	4.33	0.711
7. I can express my ideas in the class when I learn through this program.	3.70	0.794
8. I am confident to speak English after learning through this program.	3.97	0.999
9. I am enthusiastic to learn through the use of digital game activities in the class.	4.13	0.937
10. Digital games are easy to play.	4.43	0.817

Table 4.9 (Continued)

Questionnaire Items	$\overline{x}$	S.D.
11. I am more ready for the lesson when I do brainstorming activity before studying.	4.20	0.805
12. I am more ready for the lesson when I do digital game activity before studying.	3.97	0.718
13. I have a chance to speak English when I learn through the tasks in the class.	3.94	0.784
14. I can use knowledge from doing English speaking activities in the class in my real life.	4.20	0.761
Grand Mean Score	4.07	0.824

Notes: 1) Agreement was categorized using Likert 5-point scale:

5 = Strongly Agree, 4 = Somewhat Agree, 3 = Neutral,

2 = Somewhat Disagree, 1 = Strongly Disagree

2) Means of opinion scale $\geq$ 3.5 from the 5-point scale on the questionnaire   referred to the "positive opinion"

The mean scores of all questionnaire items were higher than 4.00 as the grand mean score was 4.07 from the 5-point scale. This signified positive opinions of the students towards English speaking instruction using digital game activities based on the results from questionnaire.

Ranking from the most to the least, students expressed their opinions towards the questionnaire items as follows: 1) I am interested in learning through this program ($\overline{x}$ = 4.47), 2) digital games are easy to play ($\overline{x}$ = 4.43), 3) I learn more English

vocabulary after learning through this program ($\bar{x}$ = 4.33), 4) I am more ready for the lesson when I do brainstorming activity before studying ($\bar{x}$ = 4.20), 5) I can use knowledge from doing English speaking activities in the class in my real life ($\bar{x}$ = 4.20), 6) I am enthusiastic to learn through the use of digital game activities in the class ($\bar{x}$ = 4.13), 7) My English speaking ability improves after learning through this program ($\bar{x}$ = 4.10), 8) My English pronunciation improves after learning through this program ($\bar{x}$ = 4.07), 9) I am confident to speak English after learning through this program ($\bar{x}$ = 3.97), 10) I am more ready for the lesson when I do digital game activities before studying ($\bar{x}$ = 3.97), 11) I have a chance to speak English when I learn through the tasks in the class ($\bar{x}$ = 3.94), 12) I speak English fluently after learning through this program ($\bar{x}$ = 3.77), 13) I speak English correctly, according to grammar rules, after learning through this program ($\bar{x}$ = 3.70) and 14) I can express my ideas in the class when I learn through this program ($\bar{x}$ = 3.70) respectively.

To summarize, students expressed their positive opinions towards English speaking instruction using digital game activities as they could enhance their English speaking ability. They thought that this course was interesting and enhanced their English speaking ability. Digital games used in the class were easy for them to play and these games made them ready for the lesson before studying. The students could express their ideas in the class through brainstorming. In addition, their English pronunciation, vocabulary, fluency, confidence to speak English and motivation to learn English were improved after they finished learning through the English speaking instruction using digital game activities.

Furthermore, apart from 14 statements using Likert 5-point scale, 4 open-ended questions of the questionnaire were also included in the questionnaire in order to allow the students to express their opinions by giving more details or report something that they had met in the class. The responses of each item were summarized as follows:

1) Please put 1-7 to tell your favorite digital games in order.

The researcher needed to explore which digital games students enjoyed the most and the least. The students were asked to rate from the most (by putting number1) to the least (by putting number 7) favorite digital games used in the class after they finished learning through English speaking instruction using digital game activities. The data from the questionnaire were analyzed in percentage shown in the following table.

Table 4.10: Ranking of the seven favorite digital games used in the class and the results from the questionnaire in form of percentage

Ranking Results	Digital Games	Rank (R) = Frequencies given by the students	Percentage
1	Cooking Academy I	R1=19	63.3%
		R2= 6	20%
		R3=3	10%
		R4=1	3.3%
		R6=1	3.3%

Table 4.10 (continued)

Ranking Results	Digital Games	Rank (R) = Frequencies given by the students	Percentage
2	Fabulous Finds	R1=4	13.3%
		R2= 9	30%
		R3=5	16.7%
		R4=5	16.7%
		R5=4	13.3%
		R6=3	10%
3	Big City Adventure – Sydney	R1=4	13.3%
		R2=5	16.7%
		R3=8	26.7%
		R4=7	23.3%
		R5=3	10%
		R7=3	10%
4	Barn Yarn	R1=3	10%
		R3=5	16.7%
		R4=11	36.7%
		R5=5	16.7%
		R6=4	13.3%
		R7=2	6.7%
5	Annie's Millions	R2=4	13.3%
		R3=6	20%
		R4=7	23.3%
		R5=10	33.3%
		R6=2	6.7%
		R7=1	3.3%

Table 4.10 (continued)

Ranking Results	Digital Games	Rank (R) = Frequencies given by the students	Percentage
6	Amazing Adventure around the World	R1=1	3.3%
		R2=2	6.7%
		R3=1	3.3%
		R4=4	13.3%
		R5=6	20%
		R6=12	40%
		R7=4	13.3%
7	Coyote's Tales – Fire and Water	R2= 3	10%
		R3=2	6.7%
		R4=2	6.7%
		R5=6	20%
		R6=6	20%
		R7=11	36.7%
Total number		210	

From the table 4.10, the results showed that the students' most favorite digital game which was chosen as the first rank was Cooking Academy I (63.3%). The digital game which was chosen as the second rank was Fabulous Finds (30%). The digital game which was chosen as the third rank was Big City Adventure – Sydney (26.7%). The digital game which was chosen as the fourth rank was Barn Yarn (13.3%). The digital game which was chosen as the fifth rank was Annie's Millions (33.3%). The digital game which was chosen as the sixth rank was Amazing Adventure around the World (40%) and the digital game which was chosen as the

seventh rank was Coyote's Tales – Fire and Water (36.7%). From the class observation, the researcher noticed that most students liked and were interested in cooking. They were also very enthusiastic to tell the steps of cooking food that they liked when the researcher asked them. When students had opportunities to play this game, they paid attention to the game a lot as they could interact with the game by; for examples, dicing onions, setting the oven, or rolling the sushi by clicking on mouse devices. Some students said that the animation in Cooking Academy I was so colorful and attractive that they wanted to achieve it.

2) In your opinion, which parts of the instruction do you like the most? Why?

Most students (66.67%) said that the part of the instruction they liked the most was the Explore-Engage step because they enjoyed playing digital games and talking about them. They added that in this step, they had much time to play digital games more than any other step of the instruction. They also liked when the teacher asked them questions to brainstorm their ideas. The examples of students' opinions are presented as follows:

1. "ชอบตอนเล่นเกมส์ก่อนที่จะเริ่มการเรียนการสอนมากที่สุด เพราะนักเรียนมีโอกาสได้เล่นเกมส์เยอะที่สุดในคาบ"

"The most favorite part of the instruction was to play digital games before studying because I had more chance to play games than any other step of the instruction."

2. "ชอบตอนที่คุณครูถามคำถามนักเรียนและให้นักเรียนระดมความคิดเพื่อตอบคำถามก่อน

เริ่มการเล่นเกมส์และเริ่มการสอน เพราะทำให้นักเรียนมีความพร้อมในการเรียนมากขึ้น และได้รู้ว่า

วันนี้จะได้เรียนเรื่องอะไร"

"The most favorite part of the instruction was when the teacher asked students questions and let them brainstorm ideas to get answers before playing digital games and studying because these activities made students be more ready to study and know what they were going to study that day."

Some students (20%) said that they liked the Examine-Study step because they liked to talk about and review vocabulary. They also enjoyed doing the communicative tasks with their partners. In addition, the group work discussion also helped them understand the content and tasks easier. The examples of students' opinions are presented as follows:

1. "ชอบตอนที่คุณครูให้นักเรียนทำแบบฝึกหัดในห้อง เพราะเป็นการทบทวนคำศัพท์และได้

มีโอกาสฝึกพูดภาษาอังกฤษกับเพื่อนๆ"

"The most favorite part of the instruction was to do the communicative tasks because I had a chance to review vocabulary and practice speaking English with my friends."

2. "ชอบตอนที่คุณครูให้นักเรียนเข้ากลุ่มเพื่อช่วยกันทำงาน เพราะทำให้เข้าใจงานได้ง่าย

มากขึ้นและเสร็จเร็วขึ้น"

"The most favorite part of the instruction was to do a group work discussion because I could understand the tasks more easily and finish the tasks faster."

The other (13.33%) liked the Extend-Activate step because they thought that the lessons they had learnt in the class could be adapted and transferred to use in real life situations. For example,

1. "ชอบที่คุณครูให้นักเรียนนำความรู้ที่ได้จากบทเรียนไปปรับใช้หรือแก้ปัญหาในเหตุการณ์ที่ใกล้เคียงกับชีวิตประจำวัน"

"The most favorite part of the instruction was that the teacher let students adapt the knowledge learnt from the class to use or solve problems in the real life situations"

3) In your opinion, which parts of the instruction do you dislike the most? Why?

Most students (60%) said that there was no dislike part of instruction. Eighteen students gave reasons why they did not have the dislike part because the activities in each step were interesting and enjoyable. They felt that when they had opportunities to participate in the digital game activities in the class, they paid more attention to the lessons and were enthusiastic to study more than usual. Five students (16.7%) said that they did not like the Examine-Study step because some tasks took much time to finish and some vocabulary was quite difficult for them. They also added that it was difficult for them to speak English in the class, so they do not

understand some lessons or activities. The other seven students did not give any comments. The examples of students' opinions are presented as follows:

1. "ไม่มีส่วนใดของการสอนที่ไม่ชอบเพราะว่ากิจกรรมที่ได้ทำในห้องเรียนนั้นสนุกสนาน มาก"

"There was not any part of the instruction that I did not like because the activities done in the class were very fun."

2. "การที่คุณครูให้นักเรียนเล่นเกมส์ในห้องเรียนนั้นทำให้นักเรียนเกิดความสนใจในการ เรียนและตั้งใจเรียนมากขึ้น"

"The use of digital games in the class made students pay attention to the lesson and study more attentively."

3. "ไม่ค่อยชอบตอนที่คุณครูให้ทำแบบฝึกหัด เพราะว่าคำศัพท์บางคำยากไป ไม่เข้าใจ และ เวลาที่ให้ทำนั้นน้อยมาก ทำไม่ทัน"

"I did not like when the teacher assigned me to do the tasks because some vocabulary was too difficult, so I did not understand it. The time allocation was too short and I could not finish the tasks in time."

4. "ไม่ค่อยชอบตอนที่คุณครูให้พูดภาษาอังกฤษตลอดในชั้นเรียน เพราะฟังไม่เข้าใจ จึงทำ ให้ไม่เข้าใจบทเรียนหรือกิจกรรมในห้องได้"

"I did not like when the teacher let me speak English in the class all the time because I could not understand it. Therefore, I do not also understand the tasks or activities done in the class."

4) Do you meet any problems while you are participating in this learning program? If yes, please specify.

Eleven students (36.67%) said that it was difficult to learn through English speaking instruction using digital game activities because some communicative tasks given in the class were too difficult for them to finish in time. In addition, they couldn't understand some parts of the instruction since the teacher taught in English and they spent much time to think when they were assigned to speak in English. However, ten students did not report any problems in this part. The examples of students' opinions are presented as follows:

1. "ปัญหาที่พบในห้องคือทำแบบฝึกหัดไม่ค่อยได้ เพราะคำศัพท์บางคำยากไป ทำให้ใช้เวลาในการค้นหาคำแปลค่อนข้างนาน จึงทำให้เสร็จไม่ทันตามกำหนด"

    "The problem that I faced in the class was that I could not do the assigned tasks because some words were too difficult. It took more time to look up for the meanings, so I could not finish the tasks in time."

2. "ไม่สามารถพูดภาษาอังกฤษได้คล่อง จึงทำให้ใช้เวลาในการคิดค่อนข้างนาน บางครั้งไม่สามารถตอบคำถามคุณครูได้ และไม่เข้าใจเวลาคุณครูพูดในห้องเป็นภาษาอังกฤษ"

"The problem that I faced in the class was that I could not speak English fluently, so I spent long time to think. Sometimes, I could not answer questions to the teacher and not understand when the teacher was teaching in English."

The rest of the students (30%) said that when they were about to play the digital games, they had to wait for a long time because computers were too slow to run the game's files. Four students (13.3%) said that the headphones did not work and they could not hear the sounds from the games that they were playing. The examples of students' opinions are presented as follows:

1. "คอมพิวเตอร์ช้ามากและชอบค้าง ทำให้เปิดเกมส์ได้ช้า และเล่นไม่ทันเพื่อนคนอื่นใน

ห้อง"

"The computers were very slow and often frozen, so the digital games could be opened slowly and I could not catch up with other friends in the class."

2. "หูฟังที่ใช้เสียบกับคอมพิวเตอร์มีปัญหา ทำให้ไม่ได้ยินเสียงจากเกมส์"

"The headphones used with computers did not have sounds, so I could not hear the sounds from the digital games."

To conclude, students had positive opinions towards English speaking instruction using digital game activities. They thought that the classes were fun and interesting. The use of digital game activities in the class could enhance their learning motivation. Their English speaking ability was improved after learning through English speaking instruction using digital game activities. The students added that they also learn better when the teacher let them discuss and work in groups. However,

the hardest part of instruction was to listen and to talk in English when they were in the class. Some tasks were also too difficult for them to complete within the time limit.

Summary

This chapter presented the findings of the current study focusing on the effects of English speaking instruction using digital game activities on Grade 9 students' English speaking ability. The results were statistically analyzed and two research questions were investigated.

The first research question concerning the effects of English speaking instruction using digital game activities revealed that Grade 9 students gained higher mean scores of the posttest than mean scores of the pretest on their English speaking ability test. Thus, the first hypothesis was accepted.

The second research question focusing the effects of English speaking instruction using digital game activities on students' opinions showed that Grade 9 students had positive opinions towards English speaking instruction using digital game activities. Consequently, the second hypothesis was also accepted.

To conclude, the findings of the current study clarified that English speaking instruction using digital game activities was effective in enhancing students' English speaking ability. Moreover, students also had positive opinions towards English speaking instruction using digital game activities.

The next chapter will present the summary of the study, the discussions of the findings, and the recommendations for future research studies.

CHAPTER V

SUMMARY, DISCUSSIONS, AND RECOMMENDATIONS

This chapter is composed of five parts. The first part presents the summary of the study. The second part reveals the research findings. The third part discusses the findings. The fourth part provides to the pedagogical implication from the current study. The chapter ends with recommendations for future research studies.

Summary of the Study

The current study was a single group quasi-experimental research design which applied English speaking instruction using digital game activities on Grade 9 students' English speaking ability. It compared the English speaking ability of students before and after taking English speaking instruction using digital game activities by using paired-sample t-test. The sample in this study was 30 Grade 9 students at Darasamutr Sriracha School during the summer session of academic year 2015. They enrolled in "English speaking instruction using digital game activities" offered by the researcher. The course which was designed as an intensive course called "English speaking instruction using digital game activities" was conducted as a treatment for this research. The Grade 9 students enroll this course in order to improve their English speaking ability.

This study was divided into two phases. The first phase was related to the preparation of English speaking instruction using digital game activities. The second phase concerned with the implementation of English speaking instruction using digital game activities.

The first phase of the research procedure was the preparation of English speaking instruction using digital game activities. After the population and sample were specified, the researcher studied the core curriculum of the foreign language strands and explored the basic concepts related to English speaking ability, the use of digital games in language class, English speaking test, and students' opinions questionnaire. Then, digital games were chosen for designing research instruments. After that, the research instruments were evaluated by three experts and they were used to conduct a pilot study. In a pilot study, the research instruments were tested with 10 students who were the different group from the sample group. After the pilot study was conducted, lesson plans and other research instruments were revised according to the problems found in the pilot study.

After the first phase had been conducted, the researcher continued carrying out the second phase which was the implementation of English speaking instruction using digital game activities. The first step of this phase was the pretest of English speaking ability test (see Appendix D). The sample in this study was asked to do the pretest and to listen to the overview of the course which they were going to participate. Then, the English speaking instruction using digital game activities was instructed for the students who enrolled the English speaking instruction using digital game activities as an intensive course for 12 weeks (see Appendix B). Ten topics lasted for ten weeks and each lesson spent 90 minutes (1.5 hours). This model was composed of three steps of instruction which were Explore-Engage, Examine-Study and Extend-Activate. At the end of the instruction, all students were required to do the posttest of English speaking ability test which was the same as the pretest in order to measure their English speaking ability after learning through English speaking instruction

using digital game activities. The questionnaire was also distributed to the students to explore their opinions towards English speaking instruction using digital game activities.

In order to evaluate the effectiveness of the instruction, the scores collected from the pre and post English speaking ability tests were statistically analyzed by using arithmetic means, standard deviations and paired-sample t-test. Furthermore, the students' opinions towards English speaking instruction using digital game activities were analyzed by using descriptive statistics.

The analytic scoring scheme for assessing students' English speaking ability adopted from the Ministry of Education of Ecuador (2012) (see Appendix E) was a rubric designed for a speaking response. For the speaking evaluation, the total raw score was 150 points (50 points for each part of the test) and each part of the test was evaluated based on five criteria of English speaking ability: fluency, accuracy, vocabulary, pronunciation and content which provided 10 points for each criterion. The total converted score of this test was 30 points and each part of the test provided 10 points.

Inter-rater reliability was used to find reliability of grading students' English speaking ability in both pretest and posttest. The result showed the correlation between the researcher and another rater was 0.96 on the pretest and 0.98 on the posttest which indicated that grading students' English speaking ability from two raters was consistent.

Findings

The findings of the study can be summarized in two major aspects: 1) the students' English speaking ability and 2) the students' opinions towards English speaking instruction using digital game activities.

Students' English Speaking Ability

In response to the first research question, "To what extent does English speaking instruction using digital game activities have effects on English speaking ability of Thai secondary students?" The findings revealed that the posttest mean scores were significantly higher than the pretest mean scores at the 0.05 level.

To evaluate the students' English speaking ability, the researcher used five criteria of analytic scoring scheme: fluency, accuracy, vocabulary, pronunciation and content which provided 10 point for each criterion. Then, the data were analyzed to find mean scores, standard deviation, mean differences, and t-values. The findings showed that the posttest mean scores on every criterion of English speaking ability were higher than the pretest mean scores at the significant level of 0.05. Thus, it could be concluded that English speaking instruction using digital game activities significantly enhanced Grade 9 students' English speaking ability. In other words, students improved their English speaking ability after learning through English speaking instruction using digital game activities.

The effect size of English speaking instruction using digital game activities on students' English speaking ability was 0.9, which indicated the large effect size. Therefore, it could be summarized that English speaking instruction using digital game activities had a large effect on improving students' English speaking ability.

Students' Opinions towards English Speaking Instruction Using Digital Game Activities

In response to the second research question, "What are the opinions of Thai secondary students towards English speaking instruction using digital game activities?" The students were asked to do the questionnaire at the end of the course (see Appendix A). The data gained from the questionnaire revealed that students thought that their English speaking ability was improved after they had learnt through English speaking instruction using digital game activities. They said that this program encouraged them to speak more accurately and fluently. The use of digital game activities helped them acquire more vocabulary and made them ready to study the lessons. After students had done brainstorming and digital game activities, they also had ideas to discuss in the class with the teacher and their friends. Furthermore, students said that they liked the Explore-Engage step the most as they had chances to play digital games more than any other step of the instruction. They also thought that English speaking instruction using digital game activities was interesting and enjoyable for them. After having finished the class, students were motivated to use and apply knowledge learnt from the class in their real lives. However, the difficulties that they found in the class were that they had to talk in English with the teacher and the classmates. Students also took much time to finish the assigned tasks within the class time. In addition, the headphones in the computer room sometimes did not work so that they could not hear the sound and the computers were usually frozen so that students could not catch up with other students in the class.

To conclude, the two research hypotheses of the current study were accepted because there were significantly higher average scores on the post English speaking

ability test than those in the pretest. Moreover, the data gained from the questionnaire presented that students had positive opinions towards English speaking instruction using digital game activities.

Discussion

As mentioned earlier, the objectives of the current study were to investigate the effects of English speaking instruction using digital game activities on English speaking ability of Thai secondary students and to explore the opinions of Thai secondary students towards English speaking instruction using digital game activities. Therefore, the findings were examined and discussed in relation to two main aspects: students' English speaking ability and their opinions towards the instruction.

Students' English Speaking Ability

In the hypothesis 1 testing, there was a significant difference between the pretest and posttest mean scores of the English speaking ability test at a significant level of 0.05. The students' posttest mean scores on the English speaking ability test were significantly higher than the students' pretest mean scores. In other words, English speaking instruction using digital game activities significantly improved secondary students' English speaking ability.

As students' English speaking ability was enhanced after learning through English Speaking Instruction Using Digital Game Activities, it was found that all five criteria used for the speaking evaluation which were fluency, accuracy, vocabulary, pronunciation and content were improved as well.

According to the results of the current study, vocabulary was the most improvement among five criteria of English speaking ability, followed by content,

pronunciation, accuracy and fluency respectively. In the Explore-Engage step of the instruction, students had opportunities to attend digital game activities before studying the lessons. They were asked to write down new vocabulary that they had seen in the games. Then, vocabulary displayed in the games was used in order to complete the tasks assigned in the class. Some students said that they could memorize vocabulary easier through playing digital games than reading from textbooks as digital games provided them an animation and various pictures with sounds which attracted students' attention and motivation to learn the target language.

In the posttest, students could use vocabulary more properly to describe things or express their ideas. For examples, in the pretest, students used the word "bag" which referred to "a rolling suitcase" and used the word "cutting machine" which referred to "a lawnmower." The use of digital game activities could enhance students' knowledge in terms of vocabulary as they provided pictures and words when students put the mouse cursors on those pictures (e.g., wheelbarrow, compass, wellingtons) displayed in the digital games. Students who did not know some words before would also immediately know the meanings because these words were shown together with the pictures. In addition, pictures and animations displayed in the digital games promoted students to remember new words more easily than reading and memorizing from the textbooks.

The use of digital games in the Explore-Engage step could motivate students' attention to know the meanings of vocabulary as in the findings of Meihami et al. (2013).

As Meihami et al. (2013) claimed, students used vocabulary for their own objectives in both educational and entertaining ways while they were playing digital

games. When vocabulary items were shown in forms of auditive and textual ways, they stimulated students' language acquisition and improved vocabulary learning. For example, when words in digital games were displayed or highlighted, players may notice and recognize them though they have not known the meanings yet. The meanings of new words learnt in digital games would also be given as players requested by clicking on them for the clarification. This process promoted negotiation of meaning which was advantageous for vocabulary acquisition (Cornillie et al., 2011).

Similarly, Aghlara & Tamjid (2011) studied the use of a digital game called "SHAIEx" to teach 40 Iranian students in the age of 6-7 years old who learnt English as a foreign language. The students were divided into two equal groups of experimental and control groups which consisted of 20 students for each group. The experimental group was taught with SHAIEx for 90 minutes a week during 45 days while the control group was taught with the traditional method. In SHAIEx, the students were taught with English vocabulary consisting of names of animal, family members, colors, and numbers. As the students chose the units to learn by themselves, the game would automatically select the activities, settings, and levels of difficulty based on students' educational background. At the end of the instruction, all students from both groups were asked to the vocabulary test. The findings revealed that the mean scores on vocabulary retention test of the experimental group were higher than the mean scores of the control group at 7.8 and 6.6 respectively. In addition, the results of this study also indicated that the participants in the experimental group were more motivated and engaged to the instruction as the atmosphere in the room was less

serious. The use of the digital game provided them a fun environment which made the students feel relaxed without being seriously learning vocabulary.

The second rank from all five criteria was content. The content in this study referred to the information that students use to express their ideas or feelings according to the topics given in the class. In order to promote students to have ideas to speak, the teacher let them do many communicative tasks so that they would learn grammatical structures and vocabulary to express their own ideas by working in groups. These activities also encouraged collaborative learning which students shared ideas and helped one another.

In the current study, digital game activities could enhance students' knowledge in terms of content as they provided a storyline which promoted students' imagination. It could be said that when students' vocabulary knowledge was improved, their content knowledge would be correspondingly improved as well. Students could see various settings or situations in the games which were related to the real life situation such as in the shop, in the storage room or even on the street. When students experienced the games' environment or the games' discourses, these would provide students new ideas which they could share among themselves by; for example, comparing settings in real world to those in game's environment. After students finished doing the digital game activities, English speaking activities would give them opportunities to speak and to know what they wanted to speak. This ability was enhanced because the digital games themselves provided situations and questions which prompted students to achieve them. In the posttest; for examples, students were asked to choose proper things for a cowgirl who loved farming and a postman who found something to do in his free time. For a cowgirl, students chose many things

such as a pitchfork, wellingtons and a broom by describing how these things helped a cowgirl work in a farm. For a postman, students chose things such as paintbrushes, a golf club, and a banjo by describing how a postman could do with them as hobbies such as painting, golfing, and being a musician.

According to Willis (1996), in the stage of language focus or the study step, the teacher should act as a facilitator who encouraged students to notice and identify the language features in the assigned tasks by themselves. Then, the teacher could ask students about the findings and their opinions or reasons. Speaking activities such as discussion, role plays, simulations (students brought real items to the class to create a realistic environment), brainstorming, storytelling, interview and picture describing could be held to promote students' ideas and creativity (Kayi, 2006). For digital games, it could be said that digital games were the source systems as they were created based on many activities or other model systems in the world such as sports, cooking, and traffic on the road. These model systems could interact with players and acted as an input which stimulated players to be a part of the games. When players perceived some ideas from the model systems, they were encouraged to set questions and express their opinions when they compared the models in the real world to those presented in the games (Fullerton, 2014).

Correspondingly, Suh et al. (2010) conducted the study with the use of massive multiplayer online role-playing (MMORPG) game called "Nori School" in English teaching class. The participants were 220 elementary students from five schools located in South Korea. Then, students were divided into 2 groups which were the treatment group and the control group. The 118 students in the treatment group were taught with English MMORPG while 102 students in the control group

were taught in a traditional classroom. In the game, students were separated into groups based on their English proficiency levels. Students in each team had to help one another answer questions and collected items in each level. Students could consult with their team through the chat box and voice chat in the game. In each unit of the game, students learnt from many activities such as reading stories, watching cartoons, doing quizzes, and chatting with friends. For the results, means and standard deviations from the treatment group's speaking skill were significantly higher than those from the control group which were 12.36 (S.D. = 3.37) and 11.61 (S.D. = 3.38) respectively. In the speaking test, students from the control group acquired more vocabulary as they used new words learnt from the game to express their opinions and ideas when they were asked questions by the examiner. The environment or setting in the game also promoted students' imagination and creativity to explain their ideas and content in the assigned speaking activities.

The third rank from all five criteria was pronunciation. In the current study, digital games provided sounds, conversation, and narration of the characters in the games' context. For examples, when students clicked on the picture of a rolling pin, its pronunciation would be spoken out to them. Students could also click the replay button to listen to and pause the conversation. Some digital games also displayed the subtitle at the bottom of the screen so that students would know how each word was spelt. Furthermore, if students wanted to know how this word was pronounced, they could simply use the mouse to click on that word whenever they wanted. After students finished playing digital games, they were also asked to do the English speaking activities in groups where the teacher would monitor them and correct their pronunciation to speak more correctly.

It was said that pronunciation was an important element of communication and could not be taught separately. Pronunciation was practiced along with the use of task-based activities (Morley, 1994). Therefore, speaking activities in the class could promote students to practice the target language with their friends and be monitored by the teacher who would guide them with the correct pronunciation. With the use of digital games in the class, students who were too shy to speak with their partners or were not confident to speak English could practice with the computer to prepare themselves before speaking to the class (Meihami et al., 2013). This could help students not to lose their faces in front of the class when they made mistakes.

Likewise, Young & Wang (2014) conducted the study with 52 fourth grade students who were divided into 2 groups: the experimental and control groups. The experimental group was allowed to play the digital game called "GeCALL" while the control group learnt in the traditional classroom and had normal drill practices. In GeCALL, the students had to choose the words which had the same meanings with the right pictures shown at that time. When the students had chosen the words, they also had to record their pronunciation until it was all correct in order to pass to the next level. After 8 weeks of the experiment, the researchers conducted the speaking test. For the results of the speaking test, it was found that the pronunciation' mean scores of the experimental group were significantly improved higher than those of the control group which were 66.19 and 57.55 respectively. The results of the study also implied that most digital games provided sounds which students could listen and imitate the pronunciation. Some digital games also provided the voice recognition for students to speak through microphones in order to pass to the next level of games. In addition, students could have opportunities to communicate with other players to

practice speaking with their friends. These types of digital games promote students diverse chances to improve their speaking skill with an implicit feedback.

The fourth rank from all five criteria was accuracy. Accuracy was concerned when the performer tried to speak by making a few error as much as possible (Skehan, 2009). In the current study, digital game activities could enhance students' knowledge in terms of accuracy as they provided several examples of sentences. When students were exposed with many sentences displayed in the digital games, they could remember the grammatical sentences' patterns and adapt them to use in the English speaking activities with their friends in the class. For example, when students play the digital game about cooking, they acquired imperative sentences which were used to describe the steps of cooking such as "grate the ginger" and "dice the garlic." Furthermore, students were also monitored by the teacher who would encourage them to speak more correctly while they were doing English speaking activities in the class.

According to Goh (2007), it was said that after language-focused activities in the study step were done, students' accuracy would be improved by using language more correctly and promoting them to do better in the next step of instruction. In order to improve students' language accuracy, three stages which were noticing, comparing and integrating should be conducted as follows. For noticing stage, students paid attention to the new language elements in the target language. For comparing stage, students compared the similar points and the different points between their native language and the target language. For integrating stage, students transferred the language characteristics in the target language to use in their own styles.

Likewise, Zulfiqar (2015) studied the use of computers to teach English speaking for 15 students from University of Iqra Buru. Students participated in the English speaking activities by using the digital program in computers called "Yahoo Messenger voice chat." For the results, it was revealed that t-values in the pretest and posttest in the aspect of accuracy were significantly higher than those in the aspect of fluency which were 11.675 and 11.660 respectively. This researcher also added that the reasons why students' speaking accuracy was better than fluency might be because of the lack of vocabulary and grammar knowledge as they could be obstacles for students to speak fluently.

However, the lowest improvement among five criteria was fluency. Fluency concerned students' ability to produce the target language by not giving too many pauses or hesitations (Skehan, 1996). In the current study, digital game activities could enhance students' knowledge in terms of fluency as students could try speaking after the conversations or sentences given in the digital games as much as they wanted because the digital games could be replayed or got back to the previous parts or levels of the games. For examples, students could pause the digital game and spoke after the sentences displayed in the game to practice their fluency. When students finished playing the digital games, they were also given the speaking activity sheets which provided conversation for them as models or examples. Students could have opportunities to practice speaking English with their friends or the teacher who monitored and encouraged them to speak more smoothly without giving too many pauses or too much hesitation. Furthermore, students also had more confidence when speaking English as they were given much time to practice speaking and prepare themselves before presenting to the teacher and peers. The anxiety of speaking

something wrongly would be decreased because students well prepared themselves and were more confident to speak in the class. Another reason why students' confidence was improved was because when students were asked to help one another find the answers, their confidence was increased as they thought that the answers from many people were more accurate than those from working individually. It could be said that students could learn or acquire knowledge from other people in their groups and set their new own ideas or knowledge.

However, fluency was the aspect that students had to take more time to study as the teacher should provide more opportunities which attract students' attention to practice their fluency (Brown, 2003; Chomraj, 2010; Shen, 2013). The time of the current study might not be enough for high improving English speaking ability in terms of fluency. In the posttest, the researcher found that students still made mistakes by giving some pauses, hesitation or spending much time to think. These happened because when students tried to focus on accuracy or tried to speak all the content correctly, the spent much time to think and spoke more slowly. The findings found in the posttest were related to Skehan's study.

As Skehan (1998) claimed, it was said that students' capacity of attention was limited; therefore, when students paid their attention to accuracy, their fluency would be subordinated and vice versa.

In conclusion, the findings from the current study were congruent to the previous studies in many aspects. The results showed that students had the improvement in all five criteria of English speaking ability and gained advantages from English speaking instruction using digital game activities.

Students' Opinions towards the Instruction

The other hypothesis claimed that students would have positive opinions towards English speaking instruction using digital game activities. The students' opinions were from the questionnaire which was distributed to the students after the posttest. The results from the questionnaire were divided into two parts which were the improvement of English speaking instruction using digital game activities and the opinions towards English speaking instruction using digital game activities.

According to the results, most students thought that English speaking instruction using digital game activities was beneficial for them to transfer knowledge learnt in the class to use in their real lives and they also said that their English speaking ability was improved in terms of fluency, accuracy, vocabulary, pronunciation and content. In the class, they could learn both functions and forms of speaking through the tasks and activities provided by the teacher. Students could also practice speaking English to improve their fluency and using grammatical structures to improve their accuracy of English speaking. There were a variety of tasks and English speaking activities which promoted students to use forms and functions of speaking more properly as students had opportunities to practice speaking English with their friends and be monitored by the teacher. They also had more ideas to express or share to the class, and were more confident to speak English. They added that the use of digital games encouraged them recognize more vocabulary and got them engaged to the lessons.

In addition, students said that they liked the Explore-Engage step the most. They said that this step promoted their motivation to study English enthusiastically. The students' responses could be supported by Harmer (2007) and Reinhardt & Sykes

(2011) who introduced the Engage and the Explore steps to arouse students' attention or interest to study the target language. The use of digital games at the beginning of the class could also get their attention to be exposed to the lesson that they were going to learn that day. The results also revealed that the Examine-Study step was the second rank which students liked because they could have opportunities to practice speaking with their friends and review the vocabulary. However, the part of the instruction that students liked the least was the Extend-Activate step because they thought that the activities done in this step were too difficult for them as they had to create new ideas and link to their real lives.

Consequently, the results of the current study showed that students' English speaking ability was improved and they had positive opinions towards the instruction. The reasons why students showed their positive opinions were because this instruction provided both the Engage and Explore steps which were integrated together in order to get students' attention and get them engaged to the lessons before studying. To be engaged to the lessons and the class, students had opportunities to play digital games by being asked to notice and explore the game discourses such as characters, settings, how to play games and vocabulary.

When students were engaged, their motivation was also improved after learning through English speaking instruction using digital game activities. Digital games promoted motivation as students perceived that digital games made them enjoy and entertained them. Story and animation in the digital games mostly interested students' attention and challenged them to find out the answers or solve the problems.

After students were engaged in the digital game activities, they were motivated and were encouraged to learn in depth and use the knowledge outside the

classroom (Habgood et al., 2005). Students who had a prior exposure to the topic of the lesson and had chances to transfer their knowledge into practices in the games would showed their engagement and willingness to know more about the topic which was going to be taught (Felicia, 2011). Therefore, when students were asked to participate in English speaking activities, they were willing to speak English as they were trying to transfer what they had learnt into new situations.

In addition, motivation to learn by oneself could turn to be an aspect of autonomy as students could manage their own learning (DeCharms, 1968). Digital games could promote autonomous learners who could set the goal of learning by themselves. In the current study, students could set their own objectives of playing digital games as they could play digital games whenever they wanted to play and they would learn automatically by themselves in order to achieve each level of the games. Students could also start playing any part of the games as they wanted. When students wanted to know new words, they could just move the mouse cursors on those pictures and then the words were popped up. Similarly, when students wanted to know how these words were pronounced, they simply clicked on those words to listen for the sounds or replay the whole dialogues again.

Consequently, the English speaking instruction using digital game activities to enhance students' English speaking ability can be a model of learning for students who want to improve their English speaking ability while enjoying playing digital games. As young students naturally like playing games, the use of digital game activities could capture their attention. When students enjoy playing the digital games, their motivation in studying English is increased. Teachers' roles are geared towards

selecting appropriate digital games to design proper learning activities and facilitate the learning process to achieve the study goals.

Pedagogical Implications

The findings from the current study can be applied to English speaking instruction using digital game activities. The main objectives of English speaking instruction using digital game activities are designed to help students improve their English speaking ability. Many suggestions for EFL English speaking teachers can be implied on the basis of the findings of the current study.

First of all, teachers should study the core concept of the approach of teaching English speaking and the use of digital games in a language class thoroughly as these concepts are somewhat flexible when they are applied into the teaching steps. As presented in the current study, the researcher adapted the ESA Teaching Model from Harmer (2007) for teaching English speaking which also integrated with the Digital Game-enhanced L2 Learning Activities from Reinhardt & Sykes (2011) for using digital games in a language class. Therefore, teachers can adapt the teaching procedures which are proper for their contexts of classes and students' English proficiency.

Second, teachers should provide students with interesting and various tasks as they can promote students' progress and positive attitudes towards the lessons taught in the class. Thus, it is suggested that serious consideration should be given to English speaking instruction using digital game activities and teachers should provide students opportunities so that students can make progress in the content learnt in the class

through various tasks. As Nunan (1993) mentioned, a variety of tasks could promote learners' acquisition as each student required different instructional needs when learning language. Therefore, learners can get engaged to the tasks more easily when they find some tasks fit them. In addition, the use of real-world tasks can encourage learners to use authentic language in the real world because these kinds of tasks can promote real task behavior and focus on the accomplishment as a final goal at the end of the lesson or the unit of the instruction.

Third, teachers should act as a facilitator when teaching in the class. The focus of the instruction should be a student-centered environment as students' English speaking ability is focused. Instead of only lecturing students in the class, the teacher should share students some ideas and assist them when they need some help. In the current study, the teacher provided students opportunities to practice speaking English with their friends in groups, in pairs and with the teacher. Thus, it will be beneficial for students if they have opportunities to practice speaking English in the assigned tasks to improve their English speaking ability.

Fourth, it is important that teachers should give students feedback on grammatical errors and vocabulary because it can raise students' awareness to use them more properly and correctly. When teacher gives feedback to students, they will be encouraged to speak English more confidently and correctly as they acknowledge the correct forms of grammar and vocabulary.

Fifth, teachers should consider the time constraint in each teaching procedure as it can be adjusted to fit the objectives, students' ability, tasks, and contexts of classes. If some tasks are too difficult for students, teachers can delete or add other

tasks which were suitable for them instead. In addition, teachers should focus on time management while they are designing and planning the lessons so that the instruction will be more effective when they are introduced to students in the class.

Finally, it is recommended for teachers that they should promote the autonomous learning to students in order to develop their English speaking ability as teachers cannot provide students with everything for their study during class time. The use of digital game activities can be another interesting choice to promote autonomous learners as students have opportunities to assess their strategies by themselves and take their own decisions whether they are possible or not. In other words, students are willing to accept the challenges offered in the digital games and are responsible for figuring out the problems by freely making their own decisions. When students know how to learn by themselves, this will promote them to acquire new target language and transfer it to use in their real lives.

Limitations of the Study

Although the current study achieved its objectives, some limitations were found during the process of this study. The limitations were as follows:

First, English speaking ability needed more time to improve as this current study carried only 10 periods according to the school's approval since students had to prepare for ONET (Ordinary National Educational Test) examination. Therefore, students should have more time to practice their English speaking skill using digital game activities. If they had more time to practice their English speaking, their scores in the English speaking ability posttest would be better.

Second, the time constraint was another problem found during the process of experiment as students were expected to finish every task assigned in the class. However, the teacher found that it took much time to finish the given tasks within each step of the instruction. Therefore, the teacher decided to save time by assigning the English speaking ability sheets in the Extend-Activate step for students to do as homework instead of asking them to complete and hand them in within the class time.

To sum up, English speaking instruction using digital game activities had achieved its objectives. Students were able to improve their English speaking ability in all five criteria of English speaking which were fluency, accuracy, vocabulary, pronunciation and content. Furthermore, they also had positive opinions towards the instruction. However, there were some limitations found during the process of the experiment as mentioned above.

Recommendations for Future Research Studies

The current study focused on the effects of English speaking instruction using digital game activities on English speaking ability of Grade 9 students. English speaking instruction using digital game activities could be investigated further in the future according to these recommendations.

First, since the current study had already investigated students' productive skill (speaking), it would be also fascinating to investigate students' perceptive skills such as reading and listening or another productive skill such as writing to explore how knowledge and skills could be enhanced with the use of digital game activities in the language class.

Second, the level of students could be lower than those who were in the secondary level as the current study had already examined secondary students (Grade 9). As digital games could appeal and interest every age of people especially young learners, students in upper elementary level might be selected for another target group of the participants in order to investigate the effects of English speaking instruction using digital game activities.

Third, researchers may conduct the research outside the classroom to encourage students to experience the real-life situations and use the target language more effectively. EFL teachers may take their students to practice speaking English with people outside the classroom or do some extra-curricular activities which English is used as a medium. Then, researcher can investigate how students' English speaking ability is developed.

Finally, since the current study used the opinion questionnaire to investigate students' opinions towards the instruction, the other kinds of qualitative instruments such as interview, student logs and classroom observation can be conducted in the future research in order to explore students' opinions towards the instruction more profoundly.

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APPENDICES

Appendix A

Students' Opinions Questionnaire

English Speaking Instruction Using Digital Game Activities Questionnaire

This questionnaire is a part of the study which is conducted by a master degree student of EIL (English as an International Language) at Chulalongkorn University. This questionnaire is consisted of two parts and each part begins with directions. All information provided in this questionnaire will be kept confidentially. Thank you very much for your cooperation.

Part 1: Personal Data

Please put a ✓ in front of the item you choose and write required information in the blanks provided.

1. Age: _____ years old
2. Matthayom: _____
3. Gender: ◯ Female ◯ Male
4. Your English's grade of the previous semester: _____
5. You have been studying English for _____ years
6. How often do you have an opportunity to speak English in an English speaking class at your school?

    ◯ Always (More than 80%)   ◯ Rarely (About 20%)

    ◯ Often (About 70%)   ◯ Never (0%)

    ◯ Sometimes (About 50%)

Part 2: Students' Opinions towards English speaking instruction using digital game activities

Please put a ✓ in the appropriate column according to your opinion.

(Please be noted that the word 'Learning through this program' refers to 'Learning through English speaking instruction using digital game activities')

5 = Strongly Agree

4 = Somewhat Agree

3 = Neutral

2 = Somewhat Disagree

1 = Strongly Disagree

Items	Levels of Opinion				
	5	4	3	2	1
1. I am interested in learning through English speaking instruction using digital game activities.					
2. My English speaking ability improves after learning through this program.					
3. I speak English fluently after learning through this program.					
4. I speak English correctly, according to grammar rules, after learning through this program.					
5. My English pronunciation improves after learning through this program.					
6. I learn more English vocabulary after learning through this program.					

Items	Levels of Opinion				
	5	4	3	2	1
7. I can express my ideas in the class when I learn through this program.					
8. I am confident to speak English after learning through this program.					
9. I am enthusiastic to learn through the use of digital game activities in the class.					
10. Digital games are easy to play.					
11. I am more ready for the lesson when I do brainstorming activity before studying.					
12. I am more ready for the lesson when I do digital game activity before studying.					
13. I have a chance to speak English when I learn through the tasks in the class.					
14. I can use knowledge from doing English speaking activities in the class in my real life.					

15. Please put 1-7 to tell your favorite digital games in order.

___ Cooking Academy I   ___ Big City Adventure – Sydney

___ Amazing Adventures around the World   ___ Annie's Millions

___ Coyote's Tale – Fire and Water   ___ Barn Yarn

___ Fabulous Finds

Please answer these questions.

16. In your opinion, which parts of the instruction do you like the most? Why?

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17. In your opinion, which parts of the instruction do you dislike the most? Why?

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18. Do you meet any problems while you are participating in this learning

program? If yes, please specify.

…………………………………………………………………………………………

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Students' Opinions Questionnaire (Thai Version)

แบบสอบถามเรื่อง การสอนการพูดภาษาอังกฤษโดยการใช้กิจกรรมเกมส์ดิจิทัล

แบบสอบถามนี้ทำขึ้นเพื่อเก็บข้อมูลสำหรับการทำวิทยานิพนธ์ของนิสิตระดับปริญญาโทสาขาวิชา

ภาษาอังกฤษเป็นภาษานานาชาติ จุฬาลงกรณ์มหาวิทยาลัย แบบสอบถามนี้ประกอบด้วยสองส่วน

โดยแต่ละส่วนจะมีคำสั่งกำกับ ข้อมูลทั้งหมดในการตอบแบบสอบถามในครั้งนี้จะถูกเก็บเป็นความลับ

ขอขอบคุณสำหรับความสำหรับความร่วมมือ

ส่วนที่ 1 ข้อมูลส่วนตัว

<u>โปรดใส่เครื่องหมาย ✓ ในข้อที่นักเรียนเลือกและเขียนคำตอบลงในช่องว่าง</u>

1. อายุ _____ ปี

2. ระดับชั้นมัธยมปีที่ _____

3. เพศ ◯ หญิง ◯ ชาย

4. เกรดวิชาภาษาอังกฤษเทอมที่แล้ว _____

5. นักเรียนเรียนภาษาอังกฤษมาเป็นเวลา _____ ปี

6. หากนักเรียนมีโอกาสบ่อยแค่ไหนในการพูดภาษาอังกฤษในวิชาการพูดภาษาอังกฤษที่

   โรงเรียนของนักเรียนเอง

   ◯ ประจำ (มากกว่าร้อยละ 80)　　　◯ แทบจะไม่ (ประมาณร้อยละ20)

   ◯ บ่อยๆ (ประมาณร้อยละ 70)　　　◯ ไม่เคย (ร้อยละ 0)

   ◯ บางครั้ง (ประมาณร้อยละ 50)

ส่วนที่ 2 ความคิดเห็นของนักเรียนที่มีต่อการเรียนผ่านการสอนพูดภาษาอังกฤษโดยการใช้กิจกรรมเกมส์ดิจิทัล

โปรดใส่เครื่องหมาย ✔ **เพื่อแสดงลำดับความเห็นด้วยหรือไม่เห็นด้วยในแต่ละข้อ**

(ในคำถามทั้ง 17 ข้อต่อไปนี้ คำว่า "การเรียนด้วยวิธีนี้" หมายถึง "การเรียนผ่านการสอนพูดภาษาอังกฤษโดยใช้กิจกรรมเกมส์ดิจิทัล")

5	เห็นด้วยอย่างมาก
4	ค่อนข้างเห็นด้วย
3	ปานกลาง
2	ค่อนข้างไม่เห็นด้วย
1	ไม่เห็นด้วยอย่างมาก

ข้อความ	ระดับความคิดเห็น				
	5	4	3	2	1
1. ฉันมีความสนใจในการเรียนผ่านการสอนพูดภาษาอังกฤษโดยใช้กิจกรรมเกมส์ดิจิทัล					
2. ความสามารถในการพูดภาษาอังกฤษของฉันพัฒนาขึ้นหลังจากที่ได้เรียนด้วยวิธีนี้					
3. ฉันสามารถพูดภาษาอังกฤษได้อย่างคล่องแคล่วหลังจากที่ได้เรียนด้วยวิธีนี้					
4. ฉันสามารถพูดภาษาอังกฤษได้อย่างถูกต้องตามหลักไวยากรณ์หลังจากที่ได้เรียนด้วยวิธีนี้					

ข้อความ	ระดับความคิดเห็น				
	5	4	3	2	1
5. การออกเสียงภาษาอังกฤษของฉัน พัฒนาขึ้นหลังจากที่ได้เรียนด้วยวิธีนี้					
6. ฉันเรียนรู้คำศัพท์ภาษาอังกฤษมาก ขึ้นหลังจากที่ได้เรียนด้วยวิธีนี้					
7. ฉันสามารถอธิบายความคิดของฉัน ในชั้นเรียนเมื่อฉันเรียนด้วยวิธีนี้					
8. ฉันมีความมั่นใจในการพูด ภาษาอังกฤษเมื่อฉันเรียนด้วยวิธี ดังกล่าว					
9. ฉันมีความกระตือรือร้นในการเรียน ผ่านการใช้กิจกรรมเกมส์ดิจิทัลในชั้น เรียน					
10. เกมส์ดิจิทัลเล่นได้ง่าย					
11. ฉันมีความพร้อมในการเข้าสู่บทเรียน มากขึ้นเมื่อฉันได้ทำกิจกรรมการ ระดมสมองก่อนเริ่มการเรียน					

ข้อความ	ระดับความคิดเห็น				
	5	4	3	2	1
12. ฉันมีความพร้อมในการเข้าสู่บทเรียนมากขึ้นเมื่อฉันได้ทำกิจกรรมเกมส์ดิจิทัลก่อนเริ่มการเรียน					
13. ฉันมีโอกาสในการพูดภาษาอังกฤษเมื่อฉันได้เรียนผ่านงานปฏิบัติต่างๆ ในชั้นเรียน					
14. ฉันสามารถนำความรู้ที่ได้จากการทำกิจกรรมการพูดภาษาอังกฤษต่างๆ ในชั้นเรียนไปใช้ในชีวิตประจำวัน					

15. โปรดใส่เลข 1-7 เพื่อบอกลำดับเกมส์ดิจิทัลที่นักเรียนชื่นชอบ

___ Cooking Academy I   ___ Big City Adventure – Sydney

___ Amazing Adventures around   ___ Annie's Millions

      the World   ___ Barn Yarn

___ Coyote's Tale – Fire and Water

___ Fabulous Finds

ให้นักเรียนตอบคำถามต่อไปนี้

16. ตามความคิดของนักเรียน นักเรียนชอบการเรียนการสอนตอนใดมากที่สุด เพราะอะไร

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17. ตามความคิดของนักเรียน นักเรียนไม่ชอบการเรียนการสอนตอนใดมากที่สุด เพราะอะไร

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18. นักเรียนพบปัญหาบ้างหรือไม่ในขณะที่นักเรียนเรียนผ่านการเรียนด้วยวิธีนี้ หากพบปัญหา

จงอธิบายปัญหาที่นักเรียนพบ

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Appendix B

Course Syllabus

Course syllabus for the English speaking instruction using digital game Activities

1. **Course Tile:**   English speaking instruction using digital game activities

2. **Semester:**   Summer session (Intensive course)

3. **Academic Year:**   2015

4. **Instructor:**   Pornpan Kongsontana

5. **Course Duration:** 12 weeks

6. **Session/Week:**   1 session/week

7. **Hours/Week:**   1.5 hours/week

8. **Course Description:**

   English speaking instruction using digital game activities is the course which provides English speaking content including vocabulary and grammatical items based on digital game activities integrated into the lessons. English speaking is practiced in the class by using guided questions and selected situations which are related to students' daily lives.

9. **Course Outline**

   9.1.1 Learning Objectives

   By the end of the course, students will be able to:

   9.1.2 Reproduce the previous learned information.

   9.1.3 Identify the needed information in order to complete the tasks.

9.1.4 Justify the appropriate thing for someone based on the given

information.

10. Course Schedule

Weeks	Topics & Games	Functions of Speaking
Week 1	**Pretest and Introduction of the course**	
Week 2	**Lesson1:** Let's cook together (Playing game "Cooking Academy I")	- Describing the steps of cooking**.**
Week 3	**Lesson 2:** Green thumb. (Playing game "Fabulous Finds" level1: Yard and Garden)	- Talking about the things used in a garden.
Week 4	**Lesson 3:** My holiday. (Playing game "Fabulous Finds" level 2: Travel and Transportation)	- Giving opinions about holiday experience.
Week 5	**Lesson 4:** What are you doing? (Playing game "Fabulous Finds level 3: Babies and Kids)	- Telling about activities that are happening.
Week 6	**Lesson 5: Lost and Found** (Playing game Big City Adventure - Sydney" level 1: Central Station and level 2: Hyde Park)	- Giving descriptions of lost things.
Week 7	**Lesson 6: Tell me where it is?** (Playing game "Amazing Adventures around the World" level 1: Greece)	- Telling where things are.

Weeks	Topics & Games	Functions of Speaking
Week 8	**Lesson 7: Where can I find it?** (Playing game "Annie's Millions level 1: Penny Barrel and level 2: Omnimart)	- Asking for and giving directions where the places are located.
Week 9	**Lesson 8: What will you do?** (Playing game "Coyote's Tale – Fire and Water" level 1: White Island and level 2: Underground Chamber)	- Solving problems using future possibility.
Week 10	**Lesson 9: Let's go shopping!** (Playing game "Barn Yarn" level 1: Fireplace Sale and level 2:Office Sale)	- Suggesting goods to customers.
Week 11	**Lesson 10: I'd like a refund, please.** (Playing game "Barn Yarn" level 3: Office Sale and level 4: Garage Sale)	- Complaining and refunding broken goods.
Week 12	**Posttest and Questionnaire**	

11. Methods

- Explore-Engage   30   Minutes/Session

- Examine-Study   30   Minutes/Session

- Extend-Activate   30   Minutes/Session

12. Materials

- Digital games   - Speaking activity sheets

- Computers with headphones   - Pictures shown on Power Point Presentation

                                                 Program

- Flip charts   - Markers

13. Evaluation

- Pretest and Posttest

- Class participation

- The rubric for assessing speaking ability: Accuracy of speaking, Fluency of

  speaking, Pronunciation, Vocabulary, and Content.
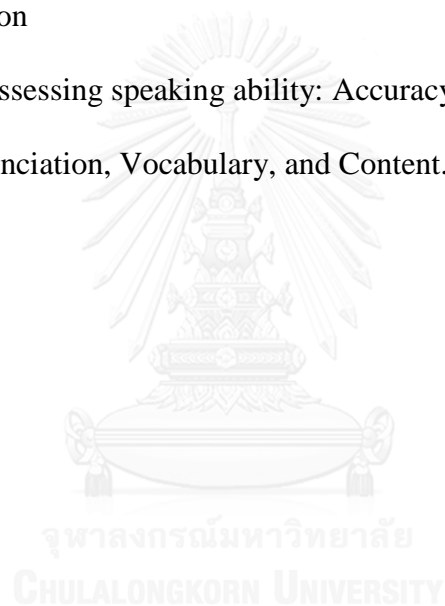
Appendix C

Lesson Plans

Lesson 1: Let's cook together!

Terminal Objective:

Students will be able to orally describe the steps of cooking.

Enabling Objectives:

1. Students will be able to use vocabulary related to ingredients: garlic, cucumber green onion, carrot, ground pork, avocado, and seaweed to describe the steps of cooking.

2. Students will be able to use the verbs about cooking: dice, knead, fold, deep fry, cook, slice, put, and add to describe the steps of cooking.

3. Students will be able to use imperative sentences by using the pattern "Infinitive Verb + Object + (Adverb)".

4. Students will be able to tell the steps of cooking

Background Knowledge:

- Present simple tense

Language Content

- Imperative sentence pattern:

  ➢ Infinitive Verb + Noun

- Vocabulary:

  ➢ Countable Nouns: garlic, green onion, cucumber, carrot, avocado, seaweed

➢ Uncountable Nouns: ground pork

➢ Verbs: to dice, to knead, to fold, to deep fry, to cook, to slice, to put, to

add

Materials & Equipment:

- Cooking Academy I Game file   -Speaking activity sheets

- Computers with headphones   - Pens

- Pictures shown on Power Point Presentation   - Flip chart

- Projector

Evaluation:

Teacher evaluates how well students can orally describe the steps of cooking

according to the assigned tasks by using the following criteria: Accuracy of speaking,

Fluency of speaking, Pronunciation, Vocabulary, and Content.

Time Allocation:

1 class period (90 minutes)

Teaching Procedures

Teacher	Students
Step: Explore-Engage **Time:** 30 minutes **Materials:** Cooking Academy I Game file, computers with headphones, pictures shown on Power Point Presentation program, a projector **Activities:** T: Shows the pictures of Gyoza and Sushi on Power Point Presentation program and asks students information about these dishes. - What are these dishes? - Have you ever eaten them before? T: Shows the pictures of ingredients on Power Point Presentation program. ground pork garlic	- Gyoza and sushi - Yes/No.

gyoza wrappers	cooking oil
green onion	potato
cucumber	carrot
Avocado	Rice
seaweed	bell peppers
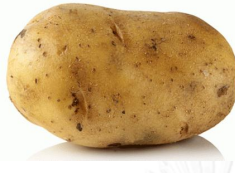
- What ingredients do we use to cook Gyoza?	- Various answers
- What ingredients do we use to cook Sushi?	- Various answers
- Have you ever cooked Gyoza before?	- Yes/No.
- How do you cook it?	- Various answers
- Have you ever cooked Sushi before?	- Yes/No.
- How do you cook it?	- Various answers
- For those who do not know how to cook them or those who already know how to cook them, let's play the game to see and review how they are cooked again.	
T: Shows how to play the game to students as an example on the projector. Then, clicks on the menu called "Onion Rings"	Ss: Watch the teacher playing the game on the projector.

Onion Rings

- Now, it's your turn to play the game.

T: Lets students play Cooking Academy I in the computers in pairs. Then, tells students to take turn to be the player and the note taker between the recipes of Gyoza and Sushi. After that, prompts the students to talk about the content in the game in both Thai and English.	Ss: Play Cooking Academy I. Each student takes turn playing each recipe. When one student is playing the game, the other is taking notes about vocabulary that he / she sees in the games.
Step: Examine-Study **Time:** 30 minutes **Materials:** Speaking activity sheet, computers with headphones, Cooking Academy I Game file **Activities:** T: Tells students to form group of 4-5 people. Students are to choose the pictures of ingredients which belong to the proper menus: Gyoza or Sushi. Then, students have to match the instructions to the proper menus; one set for Gyoza and the other set for Sushi using Speaking Activity Sheet 1.1.	Ss: Help each other doing the task assigned by the teacher. Students can ask the teacher if they do not understand some parts of the task.

Speaking Activity Sheet 1.1

T: Walks around the class and guides students to choose the right ingredients and steps of cooking correctly.	Ss: Prepare themselves to present the ingredients and steps of cooking to the class.
T: Tells students to get ready for the presentation of how to cook Gyoza and Sushi.	Ss: Present the steps of cooking Gyoza and Sushi to the class.
T: Chooses 3 groups of students to present the ingredients and steps of cooking Gyoza. Then, choose other 3 groups to present the ingredients and steps of cooking Sushi.	*Expected answers:* **Ingredients for Gyoza:** Garlic, ground pork, green onion, Gyoza wrappers, cooking oil **Instructions for Gyoza:** - Dice the garlic. - Dice the green onion. - Add the ground pork and knead the Gyoza meat.

	- Fold Gyoza with Gyoza wrappers. - Deep fry Gyoza. **Ingredients for Sushi:** Cucumber, avocado, carrot, seaweed, rice **Instructions for Sushi:** - Slice the cucumber. - Slice the carrot. - Slice the avocado. - Add rice. - Cook rice. - Add sugar in the rice. - Spread the rice on the seaweed. - Put avocado, carrot, cucumber on the rice. - Roll them together. - Slice the roll of sushi.
- What is the part of speech of every word shown in the ingredients part?	- Nouns.
- What is the part of speech of every first word used in the instructions part?	- Verbs.
- Do you use any subjects in these sentences?	- No.
- When you describe the steps of cooking, what structure will you use?	- Verb + Noun

- The structure used in this task is called 'imperative sentence.' We use an imperative sentence when we describe steps or processes when you are doing something such as telling the steps of cooking.	
Step: Extend-Activate **Time:** 30 minutes **Materials:** Pens, flip chart, computers with headphones, Cooking Academy I Game file **Activities:**	
T: Lets students play the game again to revise the things that they have learnt in the Study step.	Ss: Play the game again with their partners.
- Can you tell me the words you used to describe the steps of cooking?	- dice, add, fold, deep fry, cook, put, roll, slice, and spread
- What else can you dice?	- Dice a cabbage. - Dice tofu. (Various answers)
- What else can you add?	- Add water. - Add soy sauce. (Various answers)
- What else can you fold?	- Fold Pizza dough. - Fold dumpling sheet. (Various answers)
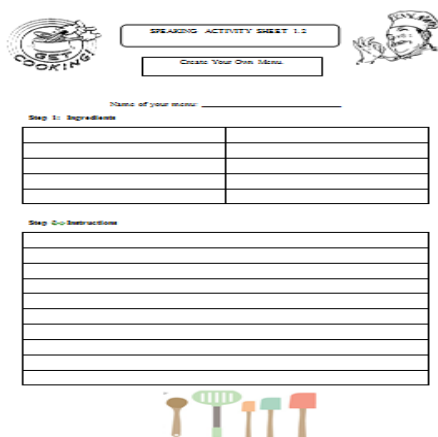
- What else can you slice?	- Slice an apple.
	- Slice tomato. (Various answer)
- What else can you spread?	- Spread butter.
	- Spread jam. (Various answers)
T: Assigns students to work in 6 groups (4-5 people in each group) to create a new menu using the learnt vocabulary and structures to present in front of the class. Students can play the game again in order to create the new menus which are similar to the ingredients and steps of cooking shown in the game. T: Gives pens and flip charts to each group to create the new menu by writing ingredients and instructions. Students can see Speaking Activity Sheet 1.2 as an example.	Ss: Discuss the menu to present to the class. Students can ask teacher if they do not understand
Speaking Activity Sheet 1.2 	*Example answers:* **Name of the menu:** Porky Fried Rice **Ingredients:** carrot, bell pepper, green onion, garlic, rice, cooking oil, ground pork, soy sauce, black pepper **Instructions:** - Dice the garlic. - Slice the carrot. - Slice the bell pepper. - Dice the green onion. - Cook rice.

	- Pour cooking oil on the pan and add the garlic.
	- Add ground pork and fry it with the garlic.
	- Add the garlic, green onion, carrot, and bell pepper in the pan.
	- Add rice.
	- Add soy sauce and black pepper.
	- Fry them together.
T: Walks around the groups of students to help and guide them with new ideas.	
T: Tells students to prepare themselves to present to the class.	Ss: Prepare themselves to present in front of the class.
T: Lets 2-3 groups of students present their new menus by showing their flip charts to the class and telling the ingredients and instructions of their new menus.	Ss: Present their new menus and steps of cooking to the class.
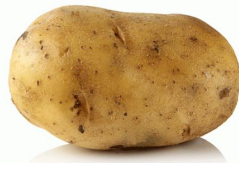
**SPEAKING ACTIVITY SHEET
1.1**

Gyoza & Sushi

Step 1: Select your ingredients

After you have played the game called "Cooking Academy I," choose the lists of ingredient below. Discuss in your group about what should be the ingredients for cooking Gyoza and Sushi. Then **CUT** the ingredients you need for each menu.

ground pork	garlic	potato
green onion	cucumber	Gyoza wrappers
cooking oil	rice	avocado
carrot	seaweed	bell pepper

Step 2: Select the instructions of cooking Gyoza and Sushi

Think of the instructions of cooking these 2 menus that you have seen in the game. Then, cut and rearrange them into the correct order.

Dice the garlic.
Slice the cucumber.
Dice the green onion.
Slice the carrot.
Add the ground pork and knead the Gyoza meat.
Add rice.
Slice the avocado.
Deep fry Gyoza.
Cook rice.
Spread the rice on the seaweed.
Fold Gyoza with Gyoza wrappers.
Add sugar in the rice.
Put avocado, carrot, cucumber on the rice.
Slice the roll of sushi.
Roll them together.

STICK HERE !!!!

Gyoza

Step1: Ingredients

Step 2: Instructions

STICK HERE !!!!

Sushi

Step1: Ingredients

Step 2: Instructions
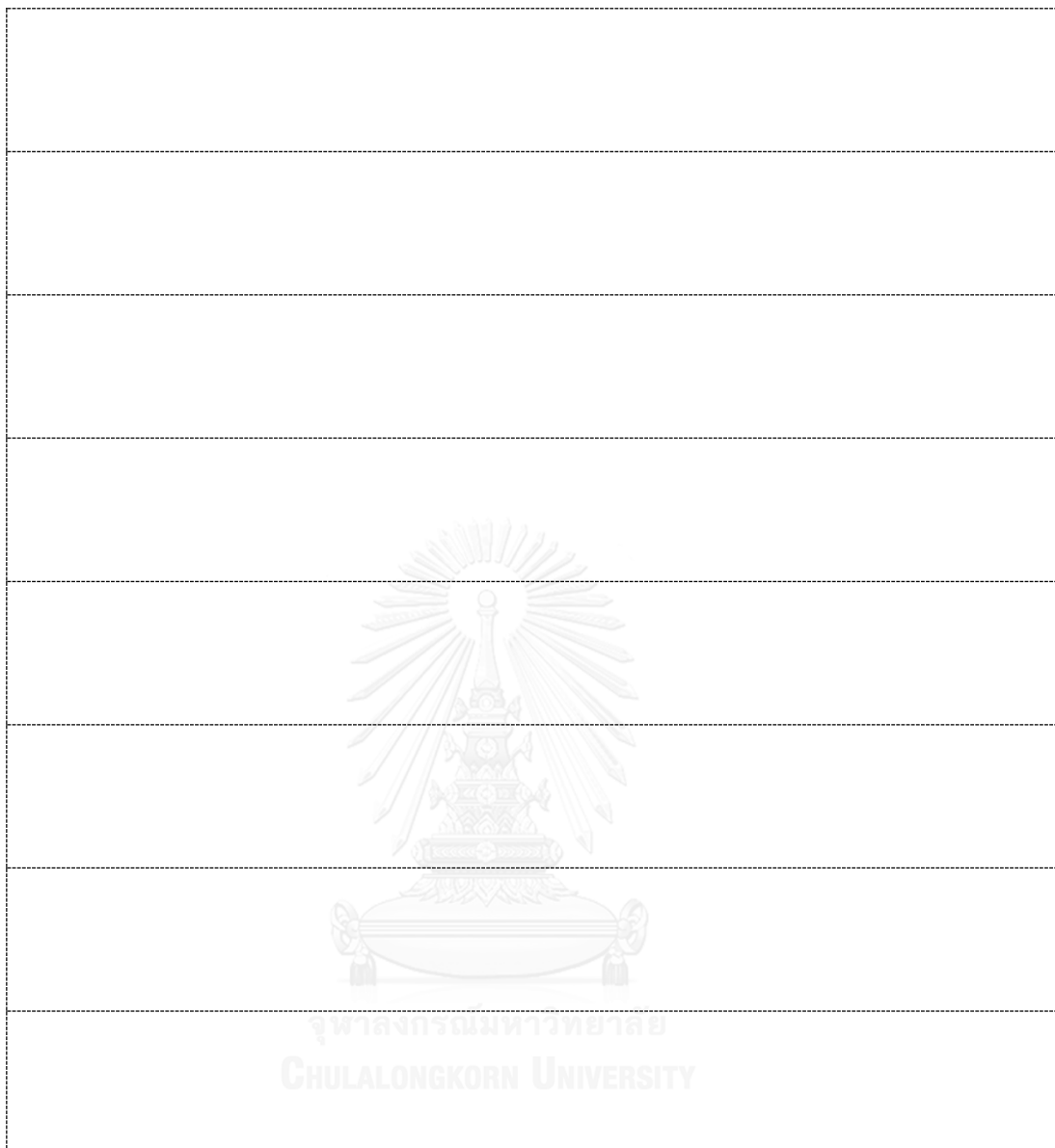
SPEAKING ACTIVITY SHEET 1.2

Create Your Own Menu.

Name of your menu: _____

Step 1: Ingredients

Step 2 : Instructions

Lesson Plan

Lesson 2: Green Thumb.

Terminal Objective:

Students will be able to orally talk about the things used in a garden.

Enabling Objectives:

1. Students will be able to use vocabulary related to things used in a garden: lawnmower, wheelbarrow, hot tub, fountain, stack of pots, ground pool, fertilizer, deck chair, bench, hammer, trellis, wellingtons, sun hat.

2. Students will be able to use sentences describe the purposes of things used in a garden as follows:

   ➢ Positive: We use it/them to …….

                 We use it/them for ………

   ➢ Negative: We use it/them not to ……..

3. Students will be able to describe the purposes of things used for gardening.

Background Knowledge:

- Present simple tense, past simple tense

Language Content

- Present simple sentences to describe the purposes of things used in a garden.

   ➢ Positive: We use it/them to …….

                     We use it/them for ………

   ➢ Negative: We use it/them not to ……..

- Vocabulary: lawnmower, wheelbarrow, hot tub, fountain, stack of pots, ground pool, fertilizer, deck chair, bench, hammer, trellis, wellingtons, sun hat.
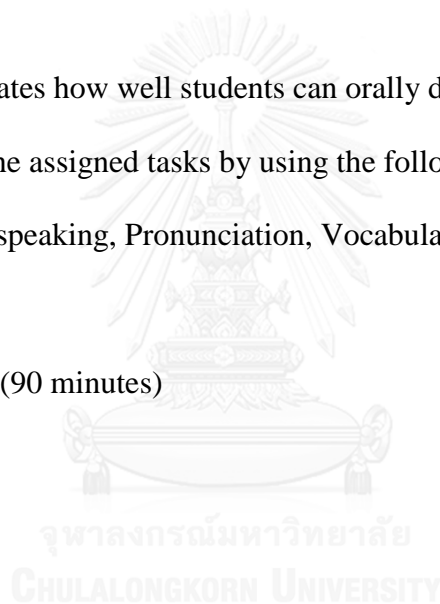
Materials & Equipment:

- Fabulous Finds game's file   -Speaking activity sheets

- Computers with headphones   - Projector

- Pictures shown on Power Point Presentation

Evaluation:

Teacher evaluates how well students can orally describe the things used in a garden according to the assigned tasks by using the following criteria: Accuracy of speaking, Fluency of speaking, Pronunciation, Vocabulary, and Content.

Time Allocation:

1 class period (90 minutes)

Teaching Procedures

Teacher	Students
Step: Explore-Engage	
Times: 30 minutes	
Materials: Fabulous Finds game's file, computers with headphones, pictures shown on Power Point Presentation program , a projector	
Activities:	
T: starts a conversation with students.	
- Every weekend, I usually help my father work.	
T: Shows pictures and ask students questions.	
- This is where I work. Do you know where it is?	- It's a garden.
- Have you ever done the gardening?	- Yes/No.
- If yes, what do you do?	- Various answers.
- My father is a green thumb. He can grow everything in his garden.	
- Do you know what a green thumb is?	- Yes/No.

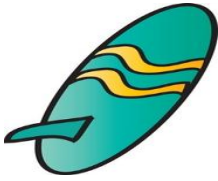|	
- Do you think that this person is good or bad at growing plants? - So, do you know now what does a green thumb mean? T: Shows pictures of gardening tools on Power Point Presentation program and asks students the questions. - What are the gardening items you can see or use in the garden? wheelbarrow trellis basketball hoop fountain	- Various answers. - A person who has a special ability to make plants grow. *Expected answers:* A wheelbarrow, a trellis, a fountain, a lawnmower, a hammer, and a bag of fertilizer.

lawnmower	surfboard
hammer	a bag of fertilizer

- Is there anything else you know about the gardening items?	- Various answers.
- Let's play game to know more about them.	Ss: Watch the teacher playing the game on the projector.
T: Opens the game "Fabulous Finds" and clicks to play level 2 which is about 'Babies and Kids' as an example for students to know how to play. 	

- Now, it's your turn to play game. Let's find what the gardening items used in the garden. You and your partners will firstly play the first level which is called "Garage Room." You have to find all gardening items shown in this room. If you don't know some vocabulary in the game, you can use your dictionary application on your smartphones to find the meaning. You can also write new vocabulary down on your notebook.	Ss: Play Fabulous Finds Game. Each student helps each other complete the game and write vocabulary which they don't know the meaning down on their notebooks.
Step: Examine-Study **Time:** 30 minutes **Materials:** Speaking activity sheet 2.1 and 2.2, pictures on PPT, computers with headphones, Fabulous Finds game's file **Activities:** T: Tells students to work in pairs. In pairs, each student will get different sets of pictures about items used in a garden. Students must not let their partners see the pictures that they have got. Then, students will take turn giving the clues to their pairs without saying their names out before giving the correct answers. They can use three	Ss: Take turn giving the clues and try to guess the names of each item used for gardening that they are told by their partners. They can ask the teacher for some help if they have some problems or do not understand some parts of the task.

example sentences given in the sheet to describe the things in each picture. Students are also allowed to ask and answer by using yes-no questions while they are trying to guess what each item is.

Speaking Activity Sheet 2.1

T: Tells students that they can play the game again to review some vocabulary.

T: Walks around and guides students if they have some problems to provide them more information while they are playing the game or discussing in their groups.

T: Tells students that the time is up and asks them to listen to the teacher.

Example answers:
Student A: We use this thing to cool off our body when the weather is hot. We can swim with our friends in here.
Student B: It is a ground pool.
(Then, student B changes the role to be the person who gives the clues to his/her partner.)
Student B: We use this thing to cure our sore muscles by sitting in hot water. When the weather is very cold, we can sit in there to make our bodies warm.
Student A: It is a hot tub.

T: Asks students questions to check the vocabulary.	
- We use it to swim with our friends or we use it cool our bodies in there. What is it?	- It is a ground pool.
- We use it to lie on when we want to get some sun or to rest. What is it?	- It is a deck chair.
- We use it to cart some rocks or soil. What is it?	- It is a wheelbarrow.
- We use them not to get our feet wet. What are they?	- They are wellingtons.
- We use them to plant the tress in them. What are they?	- They are stack of pots.
- We use it to hit the nails. What is it?	- It is a hammer.
- We use it to sit in when the weather is cold and we use it to make our bodies warm. What is it?	- It is a hot tub.
- We use it for sitting on to rest. What is it?	- It is a bench.
- We use it for watering our tress by squeezing it to let water out. What is it?	- It is a hose nozzle.
- We use it for cutting the grass. What is it?	- It is a lawnmower.
- We use it for feeding the plants. What is it?	- It is a bag of fertilizer.

- We use it for protecting our faces from the sun. What is it?	- It is a sun hat.
- How do we describe the purposes of the things we use for?	- We use it / them to ……. - We use it / them for …..
- How do we describe in a negative form?	- We use it / them not to …..
T: Writes each pattern of sentences on the whiteboard.	
- Which part of speech comes after the word 'to'?	- Infinitive verb.
- Which part of speech comes after the word 'for'?	- Present participle (-ing form)
T: Asks students to form a group of 4-5 people. Then, tells them to help one another read a conversation between Lisa and Tommy and arrange it into the right order by putting the number 1-15 to show the sequences of the conversation. The first line of the conversation in the Speaking Activity Sheet 2.2 is already given. After students finish the task, tells them to practice speaking in their groups.	Ss: Help one another rearrange the conversation and put them in the right order. After finishing, practice speaking in their groups.

Speaking Activity Sheet 2.2	*Expected answers:*
	1. Lisa: Good morning, Tommy. How are things?
	2. Tommy: Good morning, Lisa. I'm fine, thank you.
	3. Lisa: What did you do on the weekend?
	4. Tommy: I helped my dad do the gardening. It was really tired but fun!
	5. Lisa: How did you help your dad?
	6. Tommy: First, I helped him cut the grass.
	7. Lisa: What did you use to cut the grass?
	8. Tommy: I used a lawnmower.
	9. Lisa: What did you do next?
	10. Tommy: I helped him grow the tomatoes.
	11. Lisa: What did you use to grow the tomatoes?
	12. Tommy: I put the soil in the pots and then I poured some tomato plant seeds on them.
	13. Lisa: What a nice weekend! It sounds interesting!
	14. Tommy: I have to go home now. See you later!
	15. Lisa: Bye, Tommy. See you soon.

T: Walks around the class and guides students if they have any problems.	
T: Tells students to prepare themselves for the presentation.	Ss: Prepare themselves in their groups to present to the class.
T: Chooses 3-4 pairs of students from each group and asks them to take turn speaking in the right order of the conversation. After each group finish, gives them feedback.	Ss: Present the conversation to the class and receive feedback from the teacher.
Step: Extend-Activate **Time:** 30 minutes **Materials:** Speaking activity sheet 2.3, computers with headphones, Fabulous Finds game's file **Activities:**	
T: Asks students to form a group of 4-5 people. Each group of students has to discuss which gardening items they will use to create or decorate their gardens, and how they will do it. Students are asked to write down on their Speaking Activity Sheet 2.3. After they finish, they have to practice speaking with their groups. The teacher allows them to play the game again to review some vocabulary or to get more ideas. Students can also use some new	Ss: Discuss and brainstorm in their groups to get more ideas to present to the teacher and the class. Students can play the game again to review the vocabulary or find other new words to use in the task given by the teacher.

words which do not shown in the game but related to the gardening.

Speaking Activity Sheet 2.3

SPEAKING ACTIVITY
SHEET 2.3

Directions: Imagine that you own a nice garden at the back of your house, but your garden has nothing in it. Which gardening items will you use to create or decorate your garden? and how will you do it? Discuss with your friends and write your ideas down here. Then, practice speaking it with your friends.

My Garden

T: Walks around the class to help and gives advice to students if they do not understand or have some problems with the task.

T: Tells students to prepare themselves for the presentation.

Example answer:

My Garden

If I have my own garden, I will do many things to make it beautiful. Firstly, I will put a ground pool in the middle of it because when I have a party, I can invite my friends to swim or play sports in it. Secondly, I will buy deck chairs and put them around a ground pool so that my friends can sunbathe or take a rest on them. Thirdly, I will buy the bags of fertilizer to feed my flowers and water them by using a hose nozzle so that I don't have to walk for a far distance. Lastly, I will put a lot of statues around my garden because I want my garden look classy. When my friends are hanging out in my garden, I want them to feel like they are walking in an art gallery.

Ss: Prepare themselves for the presentation.

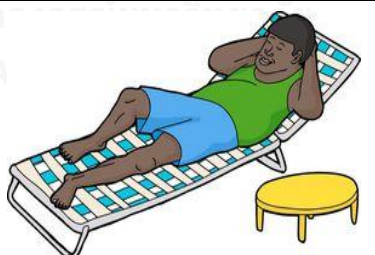| T: Chooses 3-4 groups of students to orally present their ideas in front of the class. Then, gives them a feedback after each presentation.	Ss: Present their ideas to the class.

SPEAKING ACTIVITY SHEET 2.1

Student A

Directions: Look at the things in the photographs. You and your partner have different pictures. Take it in turns to describe each thing in the pictures. Don't say out the names of the things before getting the correct answers. Allow your partner to ask yes-no questions while trying to guess what each item is.

Examples: We use it/them to ……..(+ V.1)………..

We use it/them not to …….(+V.1)……..

We use it/them for …….…(V.ing)……………

My Garden

ground pool	deck chair	wheelbarrow

wellingtons	stack of pots	hammer

SPEAKING ACTIVITY SHEET
2.1

Student B

Directions: Look at the things in the photographs. You and your partner have different pictures. Take it in turns to describe each thing in the pictures. Don't say out the names of the things before getting the correct answers. Allow your partner to ask yes-no questions while trying to guess what each item is.

Examples: We use it/them to ……...(+ V.1)………..

We use it/them not to …….(+V.1)……..

We use it/them for ………(V.ing)……………

My Garden

hot tub	bench	hose nozzle

lawnmower	a bag of fertilizer	sun hat

SPEAKING ACTIVITY SHEET 2.2

Here is a conversation between Lisa and Tommy. Put it in the right order (1-15) by putting while practice speaking with your partners. The first line was already done for you.

Lisa
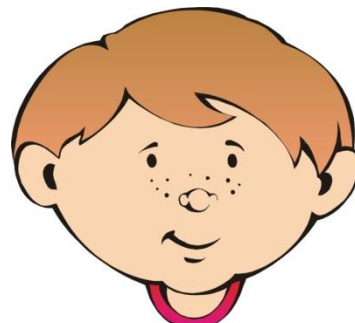
Tommy

	Lisa: What did you do on the weekend?
1	Lisa: Good morning, Tommy. How are things?
	Lisa: How did you help your dad?
	Tommy: Good morning, Lisa. I'm fine, thank you.
	Lisa: What did you use to cut the grass?
	Tommy: I helped my dad do the gardening. It was really tired but fun!
	Tommy: I used a lawnmower.
	Tommy: First, I helped him cut the grass.
	Lisa: What did you use to grow the tomatoes?
	Lisa: What did you do next?
	Lisa: What a nice weekend! It sounds interesting!

	Tommy: I helped him grow the tomatoes.
	Tommy: I have to go home now. See you later!
	Tommy: I put the soil in the pots and then I poured some tomato plant seeds on them.
	Lisa: Bye, Tommy. See you soon.

SPEAKING ACTIVITY
SHEET 2.3

Directions: Imagine that you own a nice garden at the back of your house, but your garden has nothing in it. Which gardening items will you use to create or decorate your garden? and how will you do it? Discuss with your friends and write your ideas down here. Then, practice speaking it with your friends.

My Garden

_____
_____
_____
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Lesson Plan

Lesson 3: My Holiday.

Terminal Objective:

Students will be able to give opinions about their holiday experience.

Enabling Objectives:

1. Students will be able to use vocabulary related to things used in their holiday experience: rolling suitcase, beach towels, map, hiking boots, camera, GPS device, blowup raft, charger, travel pillow, surfboard, walking stick, compass, backpack, air pump, African mask, Didgeridoo

2. Students will be able use sentences as follows:

- Asking information about holidays:

  ➢ How was your holiday?

  ➢ How did you enjoy your holiday?

- Giving information about holidays:

  ➢ Positive: It was great.

                   It was wonderful.

                   It was terrific.

                   It was fun.

  ➢ Negative: It was a nightmare.

                   It was terrible.

                   It was boring.

- Giving response about holidays:

  ➢ Positive: It sounds interesting. / It's fascinating. / ….

  ➢ Negative: I'm sorry to hear that. / That's bad. / ……

3. Students will be able to talk about what happened during their holidays.

Background Knowledge:

- Present simple tense, past simple tense

Language Content

- Expressions:

  - Asking information about holidays:

    ➢ How was your holiday?

    ➢ How did you enjoy your holiday?

  - Giving information about holidays:

    ➢ Positive: It was great.

                  It was wonderful.

                  It was terrific.

                  It was fun.

    ➢ Negative: It was a nightmare.

                  It was terrible.

                  It was boring.

  - Giving response about holidays:

    ➢ Positive: It sounds interesting. / It's fascinating. / ….

    ➢ Negative: I'm sorry to hear that. / That's bad. / ……

- Vocabulary: rolling suitcase, beach towels, map, hiking boots, camera, GPS device, blowup raft, charger, travel pillow, surfboard, walking stick, compass, backpack, air pump, African mask, Didgeridoo

Materials & Equipment:

    - Fabulous Finds game's file   - Computers with headphones

    - Pictures shown on Power Point Presentation   - Speaking activity sheets

    - Projector

Evaluation:

        Teacher evaluates how well students can give opinions about their holiday experience according to the assigned tasks by using the following criteria: Accuracy of speaking, Fluency of speaking, Pronunciation, Vocabulary, and Content.

Time Allocation:

    1 class period (90 minutes)

Teaching Procedures

Teacher	Students
Step: Explore-Engage **Time:** 30 minutes **Materials:** Fabulous Finds game's file, computers with headphones, pictures shown on Power Point Presentation program, a projector **Activities:** T: Shows a picture of the place and talk about last holiday. - Last holiday, I went to this place with my family. Do you know where it is? - It was very fun to go there because the water was very clear and the weather was nice. - How were your last holidays? Where did you go? - Is it good or bad? - Why? What happened?	 - The beach - Various answers. - It is good / It is bad. - Various answers.

T: Shows pictures on Power Point Presentation and asks students questions? - In your opinions, what do you use when you travel to somewhere?	- A rolling suitcase, beach towels, a map, hiking boots, a camera, and a GPS device. - Various answers

rolling suitcase

scissors

beach towels

map

basket

hiking boots

camera

necklace

GPS device	baseball mitt

- What else do you know about things used in travelling on your holidays?

- Let's play game to know more about things used in travelling during your holidays?

T: Shows how to play the game to students as an example on the projector. Then, click on the level named "Attic" which asks the players to find things used in fashion.

Fashionistas - Attic

- Various answers.
Ss: Watch the teacher playing the game shown on the projector.

- Now, it's your turn to play the
  game.

T: Lets students play Fabulous Finds in the computers in pairs. Then, tells students to take turn to be the player and the note taker while they are playing the second level called "Basement". In this level, students have to find the things which are related to the topic 'travel and transportation' during the holidays. After that, prompts the students to talk about the content in the game in both Thai and English.	Ss: Play Fabulous Finds level 2 called "Basement." Each student makes an agreement who will play in each part. When one student is playing the game, the other is taking notes about vocabulary that he / she sees in the games.

Step: Examine-Study
Time: 30 minutes
Materials: Speaking activity sheet 3.1, picture on Power Point Presentation, computers with headphones, Fabulous Finds game's file

Activities:

T: Tells students to work in pairs. Students are to choose the appropriate words in the box and then fill them in the blanks to complete the conversations about holidays in the Speaking Activitiy Sheet 3.1. After students finish the task, the teacher asks them to practice speaking with their partners. The teacher	Ss: Help and discuss with each other to choose the appropriate words in the box to complete all the conversations assigned in the task. Students can ask the teacher if they do not understand in some parts of the task.

allows students to play the game again to
review some vocabulary.

<u>Speaking Activity Sheet 3.1</u>

T: Walks around the class and guide students if they have problems or do not understand in some parts of the task. T: Tells students to get ready for the presentation of the task. T: Chooses 4 pairs of students to present each conversation to the class. Then, gives them the feedback whether they choose the appropriate words or not. If some pairs of students give wrong answers, guide them or ask other pairs of the students to give right answers to the class.	Ss: Prepare themselves for the presentation.

T: Shows pictures and answers on the projector using Power Point Presentation to students.	*Expected answers:*
	Conversation 1
	    1.1 Blowup raft
	
	    1.2 Camera
	
	    1.3 Charger
	
	Conversation 2
	    2.1 GPS device
	
	   2.2 Map

Conversation 3

    3.1 beach towels

    3.2 hiking boots

    3.3 Rolling suitcase

Conversation 4

    4.1 Compass

    4.2 Walking stick

    4.3 backpack

T: Asks questions and writes answers on the white board.	
	Expected answers:
- How would you say to ask people about their trips during holidays?	- How was your holiday? - How did you enjoy your holiday?
- How would you say if your holiday was good?	- I really had a good time. - It was great. - It was terrific. - It was wonderful. - It was fun. - (Various answer)
- How would you say if your holiday was bad?	- It was a nightmare. - It was terrible. - It was bad. - It was boring. - (Various answers)
- How would you say to give a positive response?	- It sounds interesting. - It's fascinating. - (Various answers)
- How would you say to give a negative response?	- That's terrible. - I'm sorry to hear that. - (Various answers)
Step: Extend-Activate **Time:** 30 minutes **Materials:** Speaking activity sheet 3.2**,** computers with headphones**,** Fabulous Finds game's file	

Activities:

T: Asks students to form a group of 4-5 people. Asks them to fill in the missing letters and tells them to create a new conversation by using the words given from the teacher. There must be at least 3 words shown in the conversation. The conversation shown in the Speaking Activity Sheet 3.2 should be about good or bad holidays.

T: Allows students to play the game again to review some vocabulary or gives them some ideas.

Ss: Discuss in their groups to create the new conversation about good or bad holidays. Students can ask the teacher if they have some problems or do not understand some parts of the task. In addition, students can also play game to review vocabulary or to get some ideas.

Speaking Activity Sheet 3.2

Example answers:

1. Rolling suitcase
2. Beach towel
3. Map
4. Hiking boots
5. Camera
6. GPS device
7. Blow up raft
8. Charger
9. Travel pillow
10. Surfboard
11. Walking stick
12. Compass
13. Backpack
14. Air pump
15. African mask
16. Didgeridoo

	Example answers:
	Chosen words: surfboard, beach towels, hiking boots
	Joey: Hello! Susie. How was your holiday?
	Susie: It was wonderful. I was very happy.
	Joey: Where did you go?
	Susie: I went to the beach with my friends. We all took our surfboards and we went surfing together. After that, we sunbathed by lying on our beach towels. The weather was sunny all day. In the last day, we went hiking on the mountain. It was exciting.
	Joey: Did you bring your hiking boots with you?
	Susie: Yes, I did. They were quite heavy.
	Joey: Your trip is great. How fun it is! I wish I could join you next time.
T: Walks around the class and guides students if they have any problems.	
T: Tells students to prepare themselves for the presentation.	Ss: Prepare themselves for the presentation in their groups.
T: Chooses 3-4 pairs of students from each group and asks them to present their conversations to the class.	Ss: Present their conversations to the class.
T: Gives students a feedback.	

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SPEAKING ACTIVITY SHEET 3.1

</div>

Directions: Choose the appropriate words in the box and fill them in the blanks to complete the conversations.

|			
Blowup raft	Camera	Rolling suitcase	Compass
Charger	Hiking boots	Walking sticks	GPS device
Backpack	Map	Beach towel	

Conversation 1

Nancy: Hello, Sarah. How was your holiday last month?

Sarah: Hello, Nancy. I really had a good time! It was terrific!

Nancy: Wow, that's great? Can you tell me more about it?

Sarah: My family and I went camping near the river. I sat on a/an _____ and float along the river. The view was very beautiful.

Nancy: Did you take a/an _____ to take pictures?

Sarah: Yes, I took almost a thousand of pictures. I took them everywhere I passed.

Nancy: Wasn't your camera run out of battery?

Sarah: Don't worry about that. I brought a/an _____ with me all the time. So, I could charge it at the same time I was taking photos.

Nancy: It sounds fascinating.

Conversation 2

Bobby: Good morning, Lucy. I heard that you go abroad. How was your holiday?

Lucy: Good morning, Bobby. Oh I'm so glad to be home! It was terrible!

Bobby: Why? What happened?

Lucy: My friends and I drove to the mountain and we were lost because a/an _____ in our car was broken. We also forgot to take a/an _____ with us, so we didn't know how we could search for the place on it.

Bobby: That's terrible. I'm sorry to hear that.
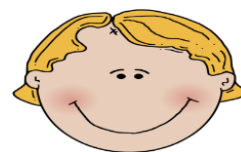
Conversation 3

Jane:	Good afternoon, Jane. Long time no see. How did you enjoy your holiday?
John:	It was a nightmare for me.
Jane:	Oh, that's bad! What happened?
John:	The weather was rainy and windy. Everything was bad. The wind blew my _____ away, and I lost them. So, I didn't have them to lay on the sand and sleep on them. After that, I went hiking with my father. I tripped over a huge rock and my _____ were torn. So, I couldn't walk. On the way back, one of the wheels of my _____ was missing. I had to carry it in my arms because I couldn't roll it on the floor.
Jane:	I'm sorry to hear that. I wish your next holiday will be fantastic.

Conversation 4

Kim:	Good evening, Peter. Nice to see you again! How did you enjoy your holiday?
Peter:	It was marvelous! I joined the boy scout camp with my school.
Kim:	What did you do there?
Peter:	My friends and I had to find the things hidden in the woods by using a/an _____ to search for the north and the south of the things were. We also walked in a long way, so we used our _____ to help us walk more easily.
Kim:	Did you bring your own food with you?
Peter:	No, I brought only clothes, a toothbrush, a tube of toothpaste, and a towel in my _____. We cooked by ourselves there.
Kim:	That's interesting. Your holiday sounds exciting.

SPEAKING ACTIVITY SHEET 3.2

Directions: Fill in the missing letters and create a new conversation of 2-3 people about good or bad holidays. In the conversation, there must be at least 3 words shown in it. The optional words are given below.

r_lli_g s_it_a_e	_ea_h t_w_l	m_ _	_iki_g b_ _t_
c_m_r_	G_ S d_v_c_	b_lwu_ r_f_	c_ar_ _ r
_rav_l p_l_o_	s_r_b_ar_	w_lk_n_ s_i_k	_omp_s_
b_ck_a_ _	_ir p_m_	A_r_c_n m_s_	D_d_e_i_oo
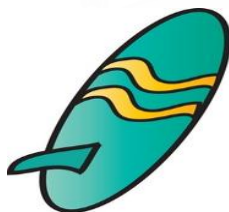
Words that you have chosen……………

Conversation

Happy Holidays!

Appendix D

English Speaking Ability Test

English Speaking Ability Test

Directions:
This test is consisted of **FOUR** parts:
  Part A: **Introduction**
  Part B: **Telling How to Plant Tomatoes** (50 points)
  Part C: **Telling Description of Thing and Giving Directions
        to Buy It** (50 points)
  Part D: **Choosing Right Things for Right People** (50 points)

The total score of this test is **30 points**. The test will take about 11 minutes.

Part A: Introduction (2 minutes)

        Please introduce yourself to the examiner.

Part B: Telling How to Plant Tomatoes (3 minutes)

        You will see 5 pictures of how to plant tomatoes. Describe how to plant them step by step showing in each picture. You have 1 minute to prepare to speak and 2 minutes to speak.

How to Plant Tomatoes
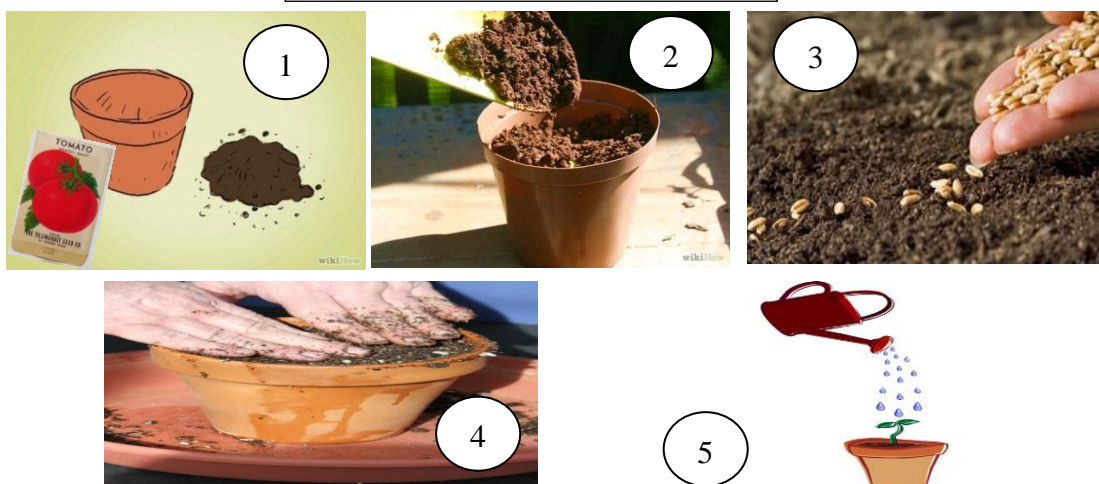
Part C: Telling Description of Thing and Giving Directions to Buy It. (3 minutes)

Choose ONE thing given below and describe what it looks like. Then, look on the map and find the place where you can buy your chosen thing. After that, give the directions to go to that place in order to buy it. You have 1 minute to prepare to speak and 2 minutes to speak.

For example:

The thing that I choose is 'a camera.'
> It is rectangular.
> It is blue with a green strap.
> It is made of a plastic.
> It looks like a lady's purse.

If I want to take a photo, I can buy a camera at Ken's Cameras. From the start point, go along the Parkview Road and take the first on the right. Then, go past Tony's Toys City. It's on your right."
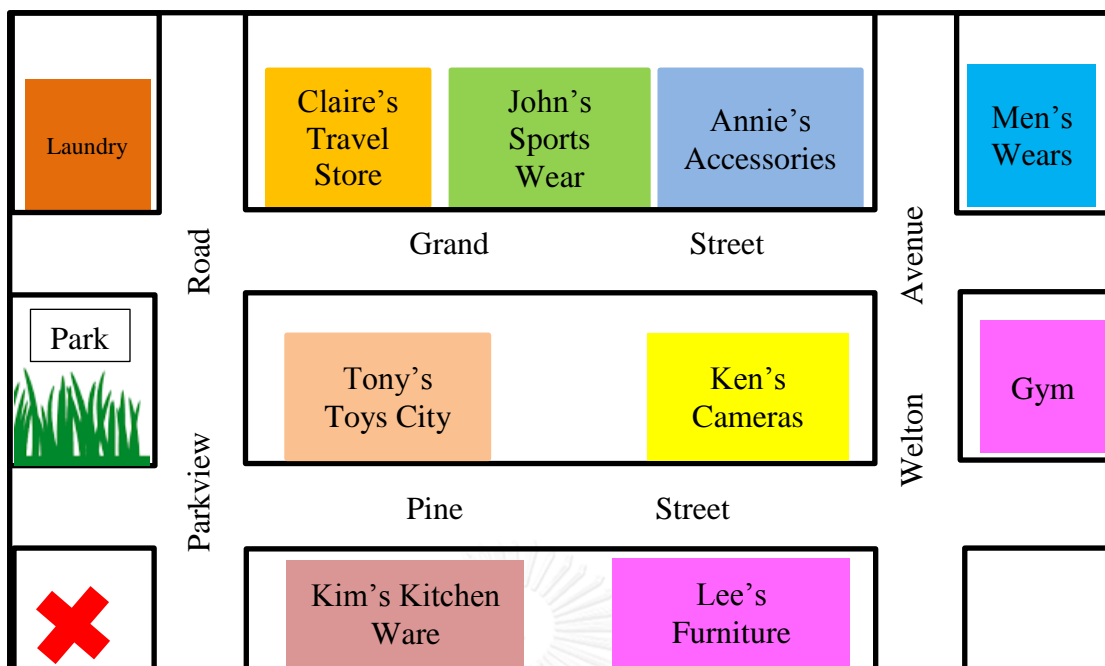
Part D: Choosing Right Things for Right People (3 minutes)

There are 4 people who are the customers at your shop. They are looking for things to buy. Choose TWO customers and find TWO appropriate things for them (one thing for each). Then, tell the reasons why they are appropriate for them. You have 1 minute to prepare to speak and 2 minutes to speak.

I will choose a necklace for Linda because she can wear it to match with her green dress.

I suggest that Peter should buy a new TV for his father because he won't feel lonely when he is alone.
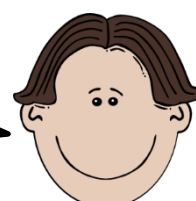
Customers

A cowgirl loves working in a farm. She is finding something to help her when she does her work.

A postman wants to find something to do when he is free so that he doesn't feel bored.

Grandma loves working in the kitchen a lot. She can stay there all day.

A nurse is a neat person. She wants everything in her house stay tidy and clean all the time.

Appendix E

Scoring Rubric

	Poor 1-2	Fair 3-4
Fluency speed, naturalness, lack of hesitation	Unnatural and labored speech, extremely hesitant on even high-frequency vocabulary words, phrases and structures.	Hesitant speech; very limited range of language available.
Accuracy grammar: syntax, and general structures	Lacks firm understanding of structures from the studied unit(s) / course to complete the task or is too limited for effective communication.	Uncomfortable with structures from the studied unit(s) / course when completing the task; formulates only rudimentary sentences.
Vocabulary adequacy and appropriateness of vocabulary for purpose	Lacks firm understanding of vocabulary from the studied unit(s) /course to complete the task or is too limited for effective communication.	Uncomfortable with vocabulary from the studied unit(s) / course when completing the task; incorporates very basic vocabulary only.
Pronunciation stress, rhythm, intonation patterns	Lots of errors; articulation and intonation are unclear; almost unintelligible speech.	Very frequent errors; difficulty in making meaning clear.
Content precision and length in describing the subject matter and picture element.	Description that is not detailed, complete; no responses are given	Description that is only partially relevant; only isolated phrases are mostly provided.

Good 5-6	Very Good 7-8	Excellent 9-10
Quite hesitant speech; limited range of vocabulary and structures.	A little hesitant; has to search for words only sometimes.	Speaks fluently without hesitation or searching for words.
Firm understanding of some structures from the studied unit(s) / course to complete the task, but fails to elaborate.	At ease with producing expected structures to complete the task; elaborates a little.	Demonstrates full knowledge of structures from the studied unit(s) / course to complete the task; elaborates well.
Firm understanding of some vocabulary from the studied unit(s) / course to complete the task, but fails to elaborate.	At ease with expected vocabulary for completing the task; elaborates a little.	Demonstrates full knowledge of vocabulary from the studied unit(s) / course to complete the task; elaborates well.
Frequent errors; not always clear enough to understand.	Generally clear; reasonable control of stress and intonation.	Very clear; stress and intonation help to make meaning clear.
Some of the subject matter and/or elements seen in the photograph/ sequence are described, and at least two complete sentences that describe the place, people, activities and objects are uttered.	Most of the subject matter and/or elements seen in the photograph/sequence, are described in detail and at least four complete sentences that describe the place, people, activities and objects are uttered.	Detailed description of the subject matter and/or elements seen in the photograph/ sequence; at least five complete sentences that describe the place, people, activities and objects are uttered.

Adopted from the Ministry of Education in Ecuador (2012)

Appendix F

Lesson Plans Evaluation

IOC Results of Lesson Plans

Please rate (✓) in the rating box (+1, 0, -1) to score the items according to your opinion.

+1	means	Congruent
0	means	Questionable
- 1	means	Incongruent

Items	Experts' judgments			IOC Mean Score	Meaning
	A	B	C		
1. Lesson Layout and Design:					
1.1 The layout and design of the lesson are appropriate and clear.	+1	+1	+1	1	Reserved
1.2 The layout and design of the lesson are effectively organized.	+1	+1	+1	1	Reserved
2. Objectives:					
2.1 The terminal objective is realistic, appropriate, and achievable for the lesson and time allocation.	+1	+1	+1	1	Reserved
2.2 The enabling objectives are related to the terminal objective.	+1	+1	+1	1	Reserved

Items	Experts' judgments			IOC Mean Score	Meaning
	A	B	C		
2.3 The objectives are relevant and consistent with the concept of the lesson.	+1	+1	+1	1	Reserved
3. Stages and Activities:					
3.1 The activities are relevant to the "Explore-Engage" step which is to motivate the students by letting the students play digital game and observe the game in the framework of English speaking instruction.	+1	+1	+1	1	Reserved
3.2 The activities are relevant to the "Examine-Study" step which is to let the students experience the game and study language element from game in the framework of English speaking instruction.	+1	+1	+1	1	Reserved

Items	Experts' judgments			IOC Mean Score	Meaning
	A	B	C		
3.3 The activities are relevant to the "Extend-Activate" step which is to practice the students to speak in real life situation based on the games' environment in the framework of English speaking instruction.	+1	+1	+1	1	Reserved
3.4 The activities are relevant to the lesson objectives.	+1	+1	+1	1	Reserved
4. Procedures:					
4.1 The procedure in each activity meets its aims.	+1	+1	+1	1	Reserved
4.2 The procedure in each activity is in logical sequence.	+1	+1	+1	1	Reserved
4.3 The procedure in each activity is clear and effective.	+1	+1	+1	1	Reserved

Items	Experts' judgments			IOC Mean Score	Meaning
	A	**B**	**C**		
5. Materials:					
5.1 Materials are appropriate for the lesson.	+1	0	+1	0.67	Reserved
5.2 Materials are suitable for students' language level.	+1	+1	+1	1	Reserved
5.3 Materials are interesting, motivating, and comprehensible.	+1	+1	+1	1	Reserved

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Appendix G

English Speaking Ability Test Evaluation

IOC Results of English Speaking Ability Test

Please rate (✓) in the rating box (+1, 0, -1) to score the items according to your opinion.

+1	means	Congruent
0	means	Questionable
-1	means	Incongruent

Items	Experts' judgments			IOC Mean Score	Meaning
	A	**B**	**C**		
1. Context:					
1.1 The tasks are relevant to speaking ability.	+1	0	0	0.33	Modified
1.2 The time allocation is appropriate.	+1	+1	+1	1	Reserved
2. Content:					
2.1 The tasks require the test takers to perform their English speaking ability in terms of fluency.	+1	+1	+1	1	Reserved

Items	Experts' judgments			IOC Mean Score	Meaning
	A	B	C		
2.2 The tasks require the test takers to perform their English speaking ability in terms of accuracy.	+1	+1	0	0.67	Reserved
2.3 The tasks require the test takers to perform their English speaking ability in terms of vocabulary.	+1	+1	+1	1	Reserved
2.4 The tasks require the test takers to perform their English speaking ability in terms of pronunciation.	+1	+1	+1	1	Reserved
2.5 The tasks require the test takers to perform their English speaking ability in terms of expressing students' ideas	+1	0	+1	0.67	Reserved
2.6 The prompts are appropriate to elicit the English speaking ability.	+1	0	0	0.33	Modified
3. *Language:*					
3.1 The instructions are comprehensible, concise and clear.	+1	0	+1	0.67	Reserved

Items	Experts' judgments			IOC Mean Score	Meaning
	A	B	C		
3.2 The prompts are easy to understand.	+1	+1	+1	1	Reserved
4. Analytic Scoring Scheme:					
4.1 The details of criteria are appropriate and relevant to the tasks.	+1	+1	+1	1	Reserved

Appendix H

Questionnaire of Students' Opinions Evaluation

IOC Results of Students' Opinions Questionnaire

Please rate (✓) in the rating box (+1, 0, -1) to score the items according to your opinion.

+1	means	Congruent
0	means	Questionable
- 1	means	Incongruent

Items	Experts' judgments			IOC Mean Score	Meaning
	A	B	C		
1. Content:					
1.1 The questionnaire is able to evaluate students' opinion towards speaking instruction using digital game activities.	+1	+1	+1	1	Reserved
2. Language:					
2.1 The items are comprehensible, brief, and unambiguous.	+1	0	+1	0.67	Reserved
2.2 Both English and Thai versions are parallel.	+1	+1	+1	1	Reserved

Appendix I

Lists of Experts Validating the Instruments

A: Experts Validating Lesson Plans

1. Dr. Denchai Prabjandee

    Faculty of Education, Burapha University

2. Dr. Karnchanok Wattanasin

    Faculty of Applied Arts, King Mongkut's University of Technology North

    Bangkok (KMUTNB)

3. Dr. Zirivarnphicha Thanajirawat

    Faculty of Liberal Arts, Rajamangala University of Technology Rattanakosin

    Borpitpimuk Chakkrawat (RMUTR)

B: Experts Validating English Speaking Ability Test

1. Dr. Denchai Prabjandee

    Faculty of Education, Burapha University

2. Dr. Karnchanok Wattanasin

    Faculty of Applied Arts, King Mongkut's University of Technology North

    Bangkok (KMUTNB)

3. Dr. Zirivarnphicha Thanajirawat

    Faculty of Liberal Arts, Rajamangala University of Technology Rattanakosin

    Borpitpimuk Chakkrawat (RMUTR)

C: Experts Validating Students' Opinions Questionnaire

1. Dr. Denchai Prabjandee

   Faculty of Education, Burapha University

2. Dr. Karnchanok Wattanasin

   Faculty of Applied Arts, King Mongkut's University of Technology North

   Bangkok (KMUTNB)

3. Dr. Zirivarnphicha Thanajirawat

   Faculty of Liberal Arts, Rajamangala University of Technology Rattanakosin

   Borpitpimuk Chakkrawat (RMUTR)

VITA

Pornpan Kongsontana was born on the 1st October 1990 in Bangkok, Thailand. In 2013, she graduated with a Bachelor's degree (second class honours) in Humanities majoring in English and minoring in Linguistics at Srinakharinwirot University. She continued her Master's degree in English as an International Language, graduate school, Chulalongkorn University in the year 2013. After that, she had taught at Thammasat University as an extra teacher. Currently, she works as a freelancer of English personal tutor.