THE EFFECT OF USING MOBILE GAMING TOWARDS STUDENTS' VOCABULARY MASTERY AT THE SEVENTH GRADE OF SMP NEGERI 4 SIAK HULU

A THESIS

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ABSTRACT

Irene Nova, 2019 : The Effect of Using Mobile Gaming towards Students' Vocabulary Mastery at the Seventh Grade of SMP Negeri 4 Siak Hulu

Key words : Students' Vocabulary, Mastery , Mobile Gaming

 The aim of this research is to know a significant effect on students' vocabulary mastery by using mobile gaming. Mobile gaming is a media to make students to be increased and improving their English vocabulary. Problems of the research are as in following ; their lack of vocabulary might be caused by the teacher who does not find the best ways of teaching vocabulary in order to be recorded longer in students mind so, by using mobile gaming the researcher wants to find out whether is a significant effect on students' vocabulary mastery after using mobile gaming as a media.

 This research is a quasi experimental research. It consists of two classes, VII-2 as the experimental class and VII-3 as the control class by doing pre-test and post-test for each class. In this research, the instrument is a set of vocabulary test. The population of this research of SMP Negeri 4 Siak hulu, there are ten classes. The researcher takes only two classes as experimental class and control class. The researcher used statistical analysis to find out the effect of using mobile gaming towards students' vocabulary mastery at the seventh grade of SMP Negeri 4 Siak Hulu.

 The research findings showed that there was a difference in the increase in vocabulary mastery between students in class VII-2 after being taught by using mobile gaming and students in VII-3 taught without mobile gaming. It could be seen from the average of pre-test of VII-2 is 40.42 and post-test is 70.41. The value t-test (4.990) is bigger than the value of t-table. Therefore, the null hypothesis was rejected and alternative hypothesis was accepted. So, there is significant effect of using mobile gaming towards students' vocabulary mastery at the seventh grade of SMP negeri 4 Siak Hulu.

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CHAPTER I

INTRODUCTION

1.1. Background of the Problem

In modern era, English is not a new language, because most of developed and developing countries use it as communication, both as a foreign language and as a second language , because English is an international language that is able to connect communication between various countries in the world. English used in all fields such as education, economics, culture, and politics. In Indonesia, English is used as a foreign language, English needs to be developed in Indonesia, especially in the field of education. There are 4 skills in English that need to be mastered, namely speaking, listening, reading, and writing and the language components are: vocabulary, grammar, pronunciation and spelling. Vocabulary is one of the most important component in the use of English. If students want to master English, students must have a lot of vocabulary to support mastery of the four skills. Nation (1994) Agrees that "a rich vocabulary makes the skills of listening, speaking, reading, and writing easier to perform".

Vocabulary is one of the essential element in English, because every language should start with vocabulary, for example if students want to speak English, they should know the vocabulary they want to convey in English, likewise with listening ability, if students want to understand conversations in English easily students need to understand the vocabulary meaning that

they listen first, then they know the intent and purpose of the conversation. If students have a lot of vocabularies, students will be easier to apply English both in daily communication and in school education, so that, researcher argue that mastery of vocabulary is the one of important thing in English. If the mastery of the students' vocabulary is little, it can be ascertained that students will not be able to use English.

Based on interviews conducted by researcher in students of SMP N 4 Siak Hulu, students have several problems in learning English, so the students have difficulties in mastering English so researcher explained it. First, the lack of students' understanding of English, there were many students who did not know the basic in English on the reason that they were not taught English when they were in elementary school. When they were in junior high school, they were shocked and felt burdened in learning English Language. It is very important for the teacher, specifically the English teacher gives more attention to students.

Second, students did not get used to apply English in their daily life, both in the school environment and community. They were always accustomed to use Indonesian or their respective regional languages when they speak. They felt ashamed to speak English in everyday communication due to lack of self-confidence and due to environmental factors that were less supportive of them in using English. They were afraid of being ridiculed or laughed by their friends because English is a foreign language. They were also afraid of being criticized for the mistakes they make in using English, so

the vocabulary they have learned so far will just disappear because they never use and repeat it.

Third, the limited vocabulary of students, students were also too lazy to memorize new vocabulary. When learned English, the students asked by the teacher to bring a dictionary which the aim is to help in finding difficult words or words that have never been heard before. Students assumed that bringing a dictionary is an obligation, and it is not as a tool in learning English. That is why when they found difficult words they will ask the teacher or friend, not the result of his own efforts so that the new vocabulary obtained did not stick to his memory and disappear. That is why the vocabulary they have has never increased.

Fourth, students did not understand grammar. In learning English, grammar is a confusing part for students, because there were many formulas that should be understood by students such as present tense, past tense, future tense and others, Students usually be lazy to remember the formula because there were too many formulas that make them confused, The teacher must have a strategy and a fun way so the students interested in learning it.

Fifth, lack of student motivation in using English, according to Ruddell (1986) stated that motivation and desire to learn new words is a contributing factor to effective vocabulary learning. As we knew many people say that English is a difficult subject to understand, so that students affected and assumed that English is a difficult subject and makes them feel more

burdened in learning English. It also due to methods and the teaching strategies used by the teacher in the teaching and learning process are too monotonous, less fun and less attractive so that students are bored in learning English, especially in learning vocabulary. Students will feel bored if they have to memorize a lot of vocabulary in English, students also feel confuse about how to spell it, recite it and find the meaning of the vocabulary. The students also do not know the benefits of English in the future, so that, researchers wants to prove that learning English can be done in various ways and strategies, and currently only focuses on interesting and fun strategies.

The use of technology such as smart phones as a teaching method is not a new thing in the field of education indeed there are still many teachers who think that smart phones have a negative impact on students. When the teaching and learning process takes place, teachers are worried that letting students use smart phone in learning will break focus on students, and use smart phone as a game tool. Smart phone technology is not always has a negative impact on student learning. Actually smart phone can have its positive impact on student learning if directed precisely in accordance with learning materials such as in learning English, this is one effective way to develop students' abilities both in terms of knowledge and aspects of creativity. Moreover, combination of educational games that are in smart phone make the teaching and learning process interesting and fun.

According to Kuzu and Ural findings (as cited in Donmus, 2010, p.1499), when games and education are combined, it can be educative and education environments can be entertaining.

Based on these problems, researcher wants to solve the problems faced by students in the field of vocabulary by applying mobile gaming, because mobile games are one of several media that have a good effect on students' vocabulary mastery. By using the game in the learning process of English, it will make the students more interested, increase students 'motivation and enthusiasm in learning English and develop students' creativity.

Based on the problems, the researcher conducted a research entitled **"The Effect of Using Mobile Gaming Towards Students' Vocabulary Mastery at the Seventh Grade of SMP Negeri 4 Siak Hulu".**

1.2. Setting of the Problem

There were some problems that make students feel difficult to learn English, Such as:

First, lack of student understanding in English. There were many Students who did not know the basic in English because they were not taught about English when they were in elementary school, so when in junior high school they were shocked and felt burdened in learning English. Second, students did not get used to apply English in their daily life, both within the school and the community. They were always accustomed to use Indonesian or their respective regional languages when they speak. It means that their

environment does not support them to use English. Third, the limited vocabulary of the students. The students were also too lazy to memorized new vocabulary. Without vocabulary knowledge Students will difficult to convey ideas and communicate with others. Fourth, students did not understand grammar. Students also felt difficult to distinguish and memorize the formula in tenses. Last, the lack of motivation of students to use English, so this is the duty for teachers and parents of students to provide motivation of students in learning English.

1.3.   Limitation of the Problem

Based on the setting of problem, the researcher needs to limit the problems that the researcher only focused on students' lack vocabulary. The students difficult to master English vocabulary because they rarely used and practiced it in their daily life, so that, using mobile gaming in learning vocabulary is expected to give significant improvement toward the word class students' vocabulary mastery. In addition, the researcher focused on noun, verb and adjective. It was take from student's book or constructed by the researcher

1.4.   Formulation of the Problem

The formulation of the problem is as follow: Is there any significant effect of mobile gaming towards students' vocabulary mastery of the eighth grade at SMP Negeri 4 Siak Hulu?

1.5. Objective of the Research

Based on the research problem, the objective of this study is as follows:

1. To find out whether any significant effect or not, of mobile gaming towards students' vocabulary mastery at the seventh grade of SMP Negeri 4 Siak Hulu.

1.6. Significance of the Research

Based on the significance that is used by researcher after being taught through mobile gaming is:

1. Ha: There is significant effect of using mobile gaming towards students' vocabulary mastery at the seventh grade of SMP Negeri 4 Siak Hulu ?

2. Ho: There is no significant effect of using mobile gaming towards students' vocabulary mastery at the seventh grade of SMP Negeri 4 Siak Hulu ?.

1.7. Definition of the Key Terms

1. Game is a set of activities involving one or more players. It has goals, constraints, payoffs and consequences. A game is rule-guided and artificial in some respects. Finally, a game involves some aspect of competition, even if that competition is with oneself. (Dempsey et al. (1996, page 2)

2. Mobile games are games that are deliberately designed to be used on mobile devices such as mobile phones, smart phone, gadgets, and tablets.

3. Vocabulary is the total number of words in a language; vocabulary is a list of words with their meanings. (Hornby, 1995)

CHAPTER II

REVIEW OF RELATED LITERATURE

2.1. Relevance Theories

2.1.1. The Nature of Vocabulary

Vocabulary is the first step in language learning. If students want to master a language well, students must first master the vocabulary. Mastery of vocabulary can affect various skills in English such as speaking, listening, writing and reading. Vocabulary is a number or set of words which, if arranged, can form one sentence that has meaning. There are many definitions of the vocabulary proposed by several experts. It is very important for one to know what vocabulary is before discussing vocabulary mastery. According to (Cameron, 2001) Vocabulary, as one of the knowledge areas in language, plays a great role for learners in acquiring a language. Vocabulary plays an important role in the use of language, the more vocabulary a person has, the easier it is to get and use language in everyday communication.

According to Mehta (2009) states that "vocabulary is the first and foremost important step in language acquisition." if someone wants to communicate using a language, the main basis is to have adequate vocabulary knowledge, so that they can arrange vocabulary into one good sentence. Vocabulary is all the words contained in language. English vocabulary differs

from Indonesian vocabulary because English and Indonesia are two different language. it means all forms of words in Indonesia included into Indonesian vocabulary and vice versa. The mastery or acquisition of each person's vocabulary are different, depending on the knowledge he has, the environment, and depending on how often he uses the vocabulary he gets and how often he reads, as we know the more people read, the more knowledge and vocabulary he got.

Having vocabulary is very necessary in language learning. Because without mastery of vocabulary we will not be able to continue to the next level. For example, such as the ability to read, and write, we will not know what the meaning of the material we read or the writing we will write if we do not understand the vocabulary first. That means we have to master the vocabulary first, because the vocabulary is the main foundation in language learning. Linse (2005) state that learners' vocabulary development is an important aspect of their language development. That means that without vocabulary knowledge, student language acquisition will not develop. Even so according to Nation (2001) further describes the relationship between vocabulary knowledge and language use as complementary: knowledge of vocabulary enables language use and, conversely, language use leads to an increase in vocabulary knowledge. Language and vocabulary is a unit that cannot be separated, without language vocabulary can not be formed and without vocabulary language will not be useful.

In pursuance of Merriam-Webster (2015) define vocabulary as "The words that make up a language; all of the words known and used by a person: words that are related to a particular subject." Expressing ideas in written or oral form must be supported by a large vocabulary, so that the ideas poured out can be well understood by the readers or listeners. Receptive vocabulary refers to all the words that can be understood by a person. Receptive vocabulary includes those words that we recognize when we hear or see them. Whereas according to Graves (2000, as cited in Taylor, 1990) defines vocabulary as the entire stock of words belonging to a branch of knowledge or known by an individual. He also states that the lexicon of a language is its vocabulary, which includes words and expressions.

Based on the some definition of vocabulary above, it can be concluded that vocabulary is a number of words that have meanings that are understood by people that can be used in everyday communication. In mastering English, where we need to master the four language skills, we need to master the vocabularies, so that the goals of mastering the language will be achieved. Vocabulary is very necessary in learning English because it can help students develop other 4 English skills such as listening, speaking, reading and writing.

2.1.2. Types of Vocabulary

From some definitions of vocabulary above, we know that every expert in various books has different definitions and classifications of vocabularies,

because each person has different ways of showing and telling their opinions and ideas.

Some experts have different opinions in classifying types of vocabulary. Harmer (1991) distinguishes between these two types of vocabulary. The first type of vocabulary refers to the one that the students have been taught and that they are expected to be able to use. Meanwhile, the second one refers to the words which the students will recognize when they meet them, but which they will probably not be able to pronounce. While according to Doff (1998) dividing the types of vocabulary into two forms, namely, passive vocabulary and active vocabulary. Doff (1988, p. 19) says "words which we want student to understand" (e.g. When reading a text) but which they will not need to use themselves, call them "passive vocabulary", words which students will need to understand and also use themselves, we call them "active vocabulary".

Whereas Haycraft, quoted by Hatch and Brown (1995), indicate two kinds of vocabulary, namely receptive vocabulary and productive vocabulary.

a. Receptive Vocabulary Receptive vocabulary is words that learners recognize and understand when they are used in context, but which they cannot produce. It is vocabulary that learners recognize when they see or meet in reading text but do not use it in speaking and writing (Stuart Webb, 2009).

b. Productive Vocabulary Productive vocabulary is the words that the learners understand and can pronounce correctly and use constructively in speaking and writing. It involves what is needed for receptive vocabulary plus

the ability to speak or write at the appropriate time. Therefore, productive vocabulary can be addressed as an active process, because the learners can produce the words to express their thoughts to others (Stuart Webb, 2005).

Based on all of statements above, there are four types of language skills such as listening, reading, speaking, and writing. It has similarities and differences with others. Listening and reading are receptive. They are equally received the information from the source. The difference is listening done directly while reading is done indirectly. And then, speaking and writing are productive (expressive). They are equally expresses their concept and idea. The difference is speaking done orally while writing done in writing. Students will not be able to build and develop the four skills above without vocabulary.

From the explanation above can be concluded, It is very important for students to know the criteria for how to choose and understand words. This will be achieved if they have been able to distinguish the types of vocabulary.

2.1.3. The Importance of Vocabulary in Learning English

Vocabulary in language learning has a very vital role in developing students' language skills, because vocabulary is the first and foremost component that must be learned by students in learning English, especially for students in their country who make English as a foreign language, such as Indonesia. Because limitations in vocabulary will hinder success in communication. It is component to master English as foreign language. According to (Macis & Schmitt, 2017) In EFL learning without having

adequate vocabulary knowledge, learners may not show the desired results in language learning process and its competence. This is very true, that without vocabulary students will not be able to achieve the desired results in learning English. Having a strong vocabulary recycling will help not only someone's fluency in speaking skill but also towards other skills.

David Wilkins in Thornbury (2002) stated that "without grammar very little can be conveyed, without vocabulary nothing can be conveyed. He argues that without grammar mastery we can express or convey ideas while without vocabulary knowledge there is nothing we can express. Furthermore, He argued by learning vocabulary that someone would be able to improve their language skills quickly, which meant vocabulary was the most important thing in learning English because it was the main key in language.

Same with the opinion expressed by Milton (2009: 3) "words are the building blocks of language and without them there is no language." Then it means that without the vocabulary of a language can not be formed.

While according to (Rubin and Thompson) in Lee 2004 : 5 vocabulary is Heart of mastering a foreign Language. that means we will not be able to speak, hear, write, read and understand foreign languages without much vocabulary.

Based on the statement above, it can be concluded that vocabulary is a very important thing to learn because the more vocabulary we know, the easier it will be for us to interact and communicate with others. And then, the

more vocabulary we have, the easier it will be for us to develop our skills (listening, speaking, reading, and writing).

2.1.4 Teaching of Vocabulary

Teaching Vocabulary plays an important role in Language acquisition. Teaching vocabulary to students is not an easy thing. As the teachers, they should consider first, about what actually teaching itself is. By understanding the concept of teaching, its purpose to achieve, and the procedures to follow can make the teachers realize what should be maturely prepared before implementing teaching activity in the classrooms.

According to brown (2000) teaching is guiding, facilitating learning, enabling the learner to learn, and setting the condition for learning. Guiding means giving direction to what objects are to be achieved, and also helping students solve the problems they face. Facilitating Learning means that the teacher must provide effective tools or media that can improve the quality of education in the teaching and learning process, such as using games in teaching vocabulary. Then, enabling the learner to learn and setting the condition for learning. It means before start the lesson, the teachers should check the circumstances surrounding of the class. Because the teacher not only ensures that the knowledge transferred is well received by students, but also must make the atmosphere and conditions of the class conducive and pleasant.

Furthermore, according to Gazarian (2002), teaching is a skill and an art. Teaching is always creating because there is no class which has the same

criteria. That means teaching is a special ability possessed by a teacher not only about transferring knowledge, but also must be able to develop and create teaching methods because each student has different abilities. The more development of science, the more developed methods, strategies, and approaches in teaching.

Vocabulary teaching is aimed at enabling learners to understand the concepts of unfamiliar words, gain a greater number of words, and use words successfully for communicative purposes (Cahyono and Widiati, 2008). Meanwhile, Intaraprasert (2004) emphasizes that the main goals of vocabulary learning are: 1) to discover the meanings of a new words; 2) to retain the knowledge of newly-learned words; and 3) to expand the knowledge of English vocabulary. That means students don't just memorize new vocabulary, then forget it, but students also need to know how to maintain and use the new vocabulary, in order to expand their knowledge of English.

Teaching Vocabulary cannot be avoided in language teaching. Because vocabulary is part of a language that is completely inseparable. Without the vocabulary it is impossible for students to be able to speak what he or she means, unable to convey their ideas or opinions easily, will not understand what others say (listening) and what he / she reads (Reading) or what they wrote. Teachers and students should be aware of that. Nation, (1990 : 4) stated that teaching vocabulary should be directly related to some other activities. It means that teaching vocabulary must be combination with other

language activities such as speaking, writing, listening, reading, and some others will enforce learning vocabulary.

2.1.5 Teaching Vocabulary to Students in SMP Based on Curriculum 2013

Teaching English at junior high school is the process of acquiring. That means students are not learning in grammatical word. Students will learn about the rules in English automatically as the acquiring process progresses. They do not focus on the automatically arrangement. First, they must focus on the ability of language components like vocabulary. They will try to use grammatical arrangement in real.

The focus point on teaching English in junior high school is on vocabulary teaching. Students have a lack of vocabulary. Lack of vocabulary is the biggest obstacle in mastering English, because it makes students unable to convey their ideas clearly and precisely. Teaching vocabulary can help students understand and communicate with others in English.

2.1.6. Vocabulary Test

There are many ways that can be done to test the student' vocabulary mastery, first is to use Multiple-Choice Question Formats (MCQs). MCQs are one of the most common formats in professionally-developed language tests. They are widely used to assess learning at the recall and comprehension levels (Coombe, Folse, & Hubley, 2007). MCQs take many forms but their

basic structure is stem and response options, which include the key or correct answer and the distractors or incorrect responses. The student must then identify the correct or best response choice. Students construct meaning through dependence on the context clues that are provided in the stem. Sometimes more than a onesentence stem is needed for beginning level students.

Second, Matching Formats, Matching questions usually present the student with two columns of information. The student's task is to 119 find the matches between the two columns. Items in the left-hand column are called premises and the items in the right-hand column are called options. The advantage of this format over MCQs is that there are more distractors to choose from. Matching item formats are very popular with teachers as they are generally easier to write than MCQs. (Coombe, Hubley, & Folse, 2007).

Third, Sentence Completion or Gap Fill Items.Sentence completion or gap fill items assess a student's production of vocabulary. These items require students to read the sentence and then write in the correct or best response. Sentence completion items encourage students to learn and know the tested word rather than just recognize it. Sentence completion items are easy to construct.

Fourth, Translation, Translation is another way to assess students' productive knowledge of vocabulary items. Of course, to monitor how effectively this is done, the teacher must have an adequate working knowledge of the students' L1.

In this research the researcher used Matching formats and Sentence Completion or Gap Fill Items as a test to assess students' vocabulary mastery.

2.1.7. Part of Speech

McGregor (2009) stated that all language consists of thousands of words with types or classes that are different from one another. The words are in classify into several different types of classes consists of verbs (Verb), nouns (noun) and words adjective and adverb. as mentioned in the limitation of research that researchers only focus on verbs, nouns, and adjectives.

1. Verb

   A verb is a word that shows or expresses an action, or a work performed

   Example: Write, run, eat, drink, catch, clean, speak, laugh, weep, are some verbs

2. Adjective

   Adjective is a word that gives more information to a noun or pronoun. Examples are, tall man, old house, red car. The word "tall, old, red" is adjectives which gives more information to the words "man, house, and car". The adjective word can be used more than one in the single noun word in a sentence. An adjective word gives information about color, size, characteristic, quality, quantity or personal traits of a noun or pronoun

   Example

- The beautiful girl entered into the room.

- The tall, beautiful girl entered into the room.

- The tall, thin, beautiful girl entered into the room.

- The tall, thin, beautiful and intelligent girl entered into the room.

3. Noun

   Nouns are words that refer to people, places, or things or something. Examples are chair, table, book, New York, computer, cup, boy, John, hospital, Newton, garden, room, man, Paris, doctor, and pen.

2.1.8 The Nature of Game

Hadfield (1990; Quoted in Deesri, 2002, p.1) describes games as "an activity with rules, a goal and an element of fun. games are activities carried out by people who have certain rules in it to achieve a goal. Games not only contain challenges but also have to make players feel enjoy and fun. It means games is a tool for improve students' knowledge through activities, rules and elements that interacted and also make the students enjoy for study learning English. By using the games people can develop their creativity without limits. This is very important especially for children that learning English. Similar in view of Rogers (1981). He said that gaming is goal-defined, rule-governed and competitive that has a closure and engage the students.

In addition "Jones (1980) stated that one or more players could play in a game to compete or co-operate according to a set of rules. Using Games in learning English can foster students' spirit of competition positively and can

develop a sense of cooperation in competing. It means that the game can motivated the students in learning English. The teachers should be creative especially in learning vocabulary for students, so, the game is become the effective media for teaching English.

Games are one way that can attract students' attention and can influence students in the learning process. It is very fun and also can train everyone involved and relieving stiffness in the classroom. The students can learn and play at the time. They will like it because it is very interesting and amusing and makes the learning atmosphere fun and not boring.

2.1.9 Education Games

Education games according to Andang Ismail (2016) in his book Education Games, which is an activity that is very fun and can be an educational means or tool that is educational. Similarly, the opinion of YM Harahap (2015) concluded that the educational game is one of the games that can be useful to support the teaching and learning process with more fun and more creative, and usable to provide teaching or increase of user knowledge by an exciting media

Then the use of good games must have good criteria so that users are not wrong in choosing games. According to Hurd and Jenuings (2009: 5), designing a good education game must meet the criteria of the game education itself. The following are some of the criteria of a game education, namely:

1. Overall Value (Overall Value) The overall value of a game is centered on the design and length of the game. This application is built with an attractive and interactive design. For determination of length of duration, this application uses the timer feature.

2. Usability: Easy to use and access are important points for game makers. This application designs systems with user friendly interfaces so that users can easily access the application.

3. Accuracy: Accuracy is defined as how the success of the model / description of a game can be poured into the experiment or design. The design of this application must be in accordance with the game model at the planning stage

4. Suitability (appropriateness) Conformity can be defined how the content and game design can be adapted to the needs of users well. This application provides menus and features that the user needs to help understand the user in using the application.

5. Relevant: Relevant means that you can apply game content to the target user. In order to be relevant to users, the system must guide them in achieving learning goals. Because this application is intended for children, the interface design must be in accordance with the nuances of the children, which is a cheerful color display.

6. Objectivity: Objectivity determines the user's goals and criteria for success or failure. In this application objectivity is an attempt to learn the results of the game.

7. Feedback: To help the user understand that their performance matches the game object or not, feedback must be provided. This application presents animations and sound effects that indicate the success or failure of the game.

Based on the statement above It can be concluded that Education game is a game that contains elements of education and meets the criteria of usability, accuracy, appropriateness, Relevance, Objectiveness, Feedback, Engagement, and also Motivation, specifically designed to entertain but also to educate so as to motivate users to develop their abilities and play the game.

2.1.10 Mobile Game

The typical definition of mobile Game is games developed to run on mobile or 'cellular' phones (Mencher, 2004). Mobile game is an application that allows people to play games on the phone. That means mobile games are a type of game specifically designed for phones.

The use of technology in the teaching and learning process is not a rare thing anymore, the incorporation of technology and knowledge can have a very good impact on improving students' abilities, especially abilities in language learning. Educational technology can enable learners to exchange information, share knowledge or experiences with others at the time of the learning process (Hwang et al., 2011). Mobile phone is one type of technology that is often used. In the modern era like today, it is undeniable that almost all people using mobile phones such as Android and tablets are no exception for children so that teachers can take advantage of this situation to

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develop teaching methods and techniques in the class using mobile phone technology. Mobile device applications also play a significant complementary role to serve teaching-learning purposes anywhere and anytime. With mobile technology, students can receive better support not only in the classroom, but also as they navigate to the context of their learning (Martin & Ertzberger, 2013). That means the mobile phone application can be used to improve the ability of students, especially in language learning. Games are one of the applications on mobile phones that are most often used by children at this time.

Unlike traditional console games that target geeks and teenagers, Mobile Games are accessible to anyone (Yuan, 2003). Mobile Games also present a big paradigm shift from console games due to the hugely different target audience, lifestyle and distribution models. According to Yuan, a successful Mobile Game should be designed to have a number of characteristics including

1. easy to learn, which can be translated into having non-steep learning curves.

2. providing rich social interactions to cater for the growing multiplayer games.

3. interruptible so that children, teenagers or adults, who often have small chunks of free time can switch smoothly between tasks

4. take advantage of mobile device hardware and network protocols such as global positioning system (GPS) extensions and short message service (SMS)/multimedia message service (MMS) messaging

5. avoid explicit violent or sexual content.

Based on the above mobile statement the use of mobile games can be one of the alternatives in the teaching process in the class that can have a positive impact on students, with the advantages of easy to use, simple does not require cables, or electricity so it is more effective and efficient.

Picture 1. Kind of The Mobile Game

Picture.2 If the Students choose the Wrong Vocabulary

2.1.11 Mobile Game-Base Learning

Mobile Game Base Learning is e-learning games using through mobile devices and wireless transmission (Lee, 2005; Sánchez et al., 2007), and it can be directed at children aged from 8 to 15, or young adults from 16 to 24 years or even older generations. game-based learning is an important alternative or supplement to traditional teaching (Antonellis et al., 2005). Mobile game based learning is a game that contains a summary of the lesson topic, is constructed by different levels of education, is adjusted to the prevailing curriculum and is able to run on mobile devices. Because electronic games play such a prominent role in young people's lives, researchers and educators, hope to combine the intrinsic motivation that students show towards electronic games that contain a summary of the topic of the lesson and objectives, to make learning more fun and enjoyable (Marina Papastergiou, 2009a). Mobile game-base learning is one of the effective ways to be applied in the learning process at school. Because in addition to improving students' abilities, creativity and motivation, mobile game base learning can also entertain students from learning saturation.

Based on the statements above, it can be concluded that the mobile game-base learning is a teaching technique using mobile games as a medium that can be applied in the teaching and learning process to improve students' abilities, especially language skills.

2.2 The Strategies of Teaching Vocabulary by Using Mobile Game

Learning strategies are all the efforts made by teachers to achieve maximum learning outcomes. Learning strategies are action plans (series of actions) including the use of methods and the use of various resources / strengths in learning (Wina Sanjaya,2006). It is not easy for teachers to determine the right and effective strategy in teaching vocabulary, especially in the digital era like today. It is considered boring to learn vocabulary by the students especially who grew up in the digital age (Yip & Kwan, 2006). It's important to turn a monotonous strategy into something fun that has the potential to be achieved with the help of digital games.

Along with the times, the sophistication of technology has greatly developed rapidly, such as mobile phones. Mobile phones are developed and filled with sophisticated applications. One of them is a game application on a mobile phone that can be used as a tool to teach students' English vocabulary. One technique that can be used to make students easily understand the material and are interested in learning vocabulary is the use of android games media (A Hamzah Fansury, Restu Januarty, 2017).

An interesting mobile game has been developed very rapidly beyond the age limit and with all its types. Education is one of the fields in which digital games such as mobile games, is possible to have a very large involvement as an effective strategy that can be applied in class. Accessing

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mobile games is very easy and simple because of its superiority which is very effective compared to other digital devices, making digital education games important from day to day.

There were many studies that have succeeded in developing students' language learning skills through mobile game applications as teaching strategies. Most studies and research are conducted on English, which is the most common language in the world. Such as Liu and Chu (2010) investigated effects of ubiquitous games on learning outcomes and motivation of English listening and speaking. There are many researchers who develop mobile games as an effective vocabulary learning media. Such as, Chen and Chung (2008) developed a personalized mobile English vocabulary learning system based on item response theory and learning memory cycle.

Based on the experts above it can be concluded that the use of mobile games can be one of the strategies and media that can be used to improve students' vocabulary mastery skills in a more fun and effective way to achieve maximum learning outcomes.

The following are the steps that will be performed in teaching vocabulary using mobile games according to Myta Widyastuti and Hermariyanti Kusumadewi (2018),

1) the teacher explains the theories and concepts of Learning Media.

2) the teacher explains the theories and concepts of mobile game applications.

3) the teacher explains the steps of learning with using the mobile game application

4) the teacher gives an explanation and learning procedure by using the application.

5) the teacher gives examples of making sentences and improvement vocabulary using game applications

6) teachers explain important points in making sentences by using a game application.

7) Students follow the teacher's direction in making the material vocabulary related lessons using game applications

2.3 Relevance Study

There are many experiences and experiments show about teaching English vocabulary through games. Now, the researcher will show the example of successful experiment by past researcher that similar with researcher strategies.

First, Saminten (2015), Using Ludo Words Game (LWG) Toward Students' Engliah Vocabulary At TK AL-Rizky Nusantara Lubuk Sakat (Perhentian Raja). In her research, the implementation of Ludo Words Game was showed significant effect achieved in students' English.

Second, the research was conducted by Intan Pertiwi (2017), The Effect of Taboo Games Towards Students' Vocabulary Mastery Of The Seventh Grade At SMP Negeri 40 Pekanbaru. The findings of the research showed that the application of Taboo Games for seventh grade at SMP Negeri 40 Pekanbaru is helpful the students in increase their vocabulary mastery. The

students was enjoyable inteaching vocabulary by using Taboo Games in the classroom.

Third, the research was conducted by Mila Federika Fiantina. Effendy Gultom, Afrianto, The Effect of Using Card Games on Vocabulary Learning Achievement of the First Year Students of SMPN 5 Tapung. In this research showed there is a significant effect of using card games on vocabulary learning achievement of the first year students of SMPN 5 Tapung.

Fourth, the research was conducted by Kartadi and Ni Komang Amelia, The Effect of Using Word Family Game on The Vocabulary Mastery of The Fifth Grade Students at SD Negeri 1 Astina in Academic Years of 2017/2018. The research showed the word family game had a significant effect on the students' vocabulary mastery rather than using conventional teaching and the effectiveness of using word family game as a strategy of teaching English vocabulary could happen because of the fun and enjoyable learning process.

Based on all of past studies, the researcher can get conclusion that game is one of an effective media toward students' vocabulary mastery. It is interesting and fun. When the students playing the game. It can make them enjoy. And then, it will help students to enhance their motivation to learn.

The differences of this research with the other research is about the game. The other using traditional games as a teaching medium to improve student mastery of vocabulary, but, in this study, the researcher used modern games on mobile phones such as android and tablets as a medium to improve

students' vocabulary mastery. For other researcher may choose using traditional games or modern games based on student characteristics.

2.4 Hypothesis

Hypothesis comes from the word *hypo* and *thesa.* Hypo means under, and thesa mean truth. So, hypothesis is a temporary answer while the truth remains to be tested or a summary of the theoretical conclusions obtained from the bibliography. According to James E. Greighton in Sing (2006) Hypothesis is a tentative supposition or provisional guess "It is a tentative supposition or provisional guess which seems to explain the situation under observation.

And then, according to Nanang Martono in Intan pertiwi (2017) there are some function of hypothesis :

a. To limit the field of investigation.

b. To increase the researcher's sensitivity that he/she should work selective to choose approach to the problems

c. To offer a simple way of collecting evidence for verification.

In addition, in pursuance with Nanang Martono in Intan Pertiwi (2017) there are some kinds of hypothesis based on the relationship between variables :

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a. Descriptive hypotheses

Descriptive hypotheses are the hypothesis that describes the character of a group or a variable without connecting with other variable.

b. Assosiative hypotheses

Assosiative hypotheses are the kind of hypothesis which describes the relationship between variable, either explicitly or implicitly.

c. Comparative hypothesis

Comparative hypotheses are the hypothesis that a comparison between a sample or a variable one with a sample or other variables.

In addition to the above hypothesis, according to Nanang Martono in Intan Pertiwi (2017), there are kinds of hypothesis which is distinguished by the existence of the relationship between variable:

a. H1 (read: H one) or alternative hypothesis (Ha) is the hypothesis that the existence of a relationship between variables that are operationalized. For example: there is a relationship between level of education and type of work.

b. H0 (read H null) is the hypothesis that no existence of relationship between variables that are operationalized. For example: there is no relationship between level of education and type of work

Based on all of statements above, there are definition, the function, and the kind of the hypothesis that described by the researcher. As the summary, hypothesis is a temporary answer to the question of research.

CHAPTER III

RESEARCH METHODOLOGY

3.1. Research Design

This research was experimental research. It involved two classes, an experimental class and control class. They treated differently: however, the teacher, the length of the time, and their material were same. The experimental class used Mobile Gaming while the control one used traditional method of teaching.

There were two variables in this research : Independent and dependent variable. An independent variable was mobile gaming while the dependent variable in this research was students' vocabulary mastery The design of the research can be seen as follows:

Table 3.1

Research Design

Class	Pre-test	Treatment	Post-test
Experimental (E)	Y1	X	Y2
Control ©	Y1	-	Y2

Where :

E : **Experimental Class**

C : **Control Class**

X : **Treatment**

Y1 : **Pre-test**

Y2 : **Post-test**

Based on the table 3.1 above. E means the experimental class (the researcher chose the class VII-2) and C means the control class (the researcher chose class VII-3). Y1 means the pre-test, the experimental class and control class did the pre-test on the first meeting. X means the treatment during five meetings, but the control class did not. Y2 means the post-test after the experimental class did treatment, so the experimental class and control class did the post-test on the last meeting.

3.2 Location and Time of the Research

The research was conducted at SMPN 4 Siak Hulu, location was on Pandau Jaya, Siak Hulu sub-district, Kampar regency. The researcher did experimental research of the students SMPN 4 Siak Hulu, particularly to the seventh grade students at SMPN 4 Siak Hulu, location was on Pandau Jaya, Siak Hulu sub-district, Kampar regency. The reason for chose it because this

school was the place of the researcher have been doing the teacher's training program, then, the time for conducted data was on July 2019 – August 2019.

Table 3.2 Schedule of the Research

NO	Date	Activity
1	July, 18th 2019	Pre-test
2	July, 20th 2019	Treatment (Greeting)
3	July, 25th 2019	Treatment (At school)
4	July, 27th 2019	Treatment (At home)
5	August,1st 2019	Treatment (Place)
6	August, 3rd 2019	Treatment (Family)
7	August, 8th 2019	Post-test

3.3. The Population and Sample of the Research

3.3.1 Population

Polit and Hungler (1999; 37) define population as an aggregate or totality of all the objects, subjects or members that conforms to a set of specificationsPolit and Hungler (1999; 37). The population of this research was the seventh grade students at SMPN 4 Siak Hulu, Kampar Regency. They were consists of ten classes. The total number of the population were 300 students. The specification of the population can be seen on the table below:

Table 3.3

The Population of the Seventh Grade of SMPN 4 Siak Hulu

No	CLASSES	POPULATION
1	VII-1	30
2	VII-2	30
3	VII-3	30
4	VII-4	30
5	VII-5	30
6	VII-6	30
7	VII-7	30
8	VII-8	30
9	VII-9	30
10	VII-10	30
TOTAL		300

3.3.2 Sample of the Research

According to Sugiyono (2010: 118) says that the sample is part of the number and characteristics possessed by the population. If the population studied is very large and probably not all individuals / objects in the population studied one by one, then simply take a sample of the population. The researcher chose class VII-2 as the experimental class and the class VII-3 as the control class because the English teacher of the seventh grade at SMPN 4 Siak Hulu only willing to gave these classes to the researcher.

Table 3.4

The Distribution of Sample of the Research

No	Class	Number of Students	Sample
1	VII-2	30	Experimental Research
2	VII-3	30	Control Research
Total Number		60	

3.4. Instrument of the Research

In this study, the research instrument was vocabulary test. The researcher gave vocabulary test to the students. It was constructed by the researcher based on the vocabulary that the students had found in the mobile game. Then, the test was validated by the researcher's advisor in order to minimize inappropriate test. There are 30 questions in pre test and post test. The topics were about greeting, at school, at home, my family and friends, and public places.

Table 3.5

The Blue Print of the Test

No	Kinds of Vocabulary	Number of Items	Total
1	Verb	1,2,3,4,5,6	6
2	Noun	7,8,9,10,11,12,13,14,15,16,17,18,25,26,27,28,29,30	18
3	Adjective	19,20,21,22,23,24	6
4	Total Number		30

The research instrument can be seen in the appendix 3

3.5 Data Collection Technique

3.5.1. Collecting Data for Control Class

The first meeting, the researcher came to the classroom, made greeting, and checked the students' attendance list. And then, the researcher gave the vocabulary pre-test and it is collected on 60 minutes. There was no a treatment for control class, they only taught by their English teacher. And then the researcher also gave the post-test on 60 minutes. The pre-test and the post-test was same topic. After they finished it, the researcher collected the data.

3.5.2. Collected Data for Experimental Class

The first meeting, the researcher came to the classroom, made greeting, and checked students' attendance list. The researcher gave the vocabulary pre-test and it also collected on 60 minutes. The purpose of this test to

measured the students' vocabulary before treatment by using mobile gaming as a media.

The second meeting, the researcher came to the classroom, made greeting, and checked students' attendance list. The researcher described the material to be taught and then the researcher explained about the game application to be used and its benefits before using the games application. Researcher gave instructions on how to use the "English Vocabulary" game application first, the application determined by the researcher, after that the researcher asked students to play the "English Vocabulary" application on their Android. In treatment, the researcher gave the explanation of topics about vocabulary that using mobile gaming. The researcher introduced and explained the topic about greeting. After 60 minutes they used the "English Vocabulary" application and the researcher asked about the new vocabulary they had obtained from the applications they used and then the final activity, researcher with students made a summary of the lesson.

The third meeting, the researcher came to the classroom, made greeting, and checked students' attendance list. The researcher described the material to be taught. The researcher asked students to play the "English Vocabulary" application on their Android. In treatment, the researcher gave the explanation of topics about vocabulary that using mobile gaming. The researcher introduced and explained the topic about things at school. After 60 minutes they used the "English Vocabulary" application and the researcher asked about the new vocabulary they had obtained from the applications they

used and then the final activity, researcher with students made a summary of the lesson.

The third meeting, the researcher came to the classroom, made greeting, and checked students' attendance list. The researcher described the material to be taught. The researcher asked students to play the "English Vocabulary" application on their Android. In treatment, the researcher gave the explanation of topics about vocabulary that using mobile gaming. The researcher introduced and explained the topic about things at home. After 60 minutes they used the "English Vocabulary" application and the researcher asked about the new vocabulary they had obtained from the applications they used and then the final activity, researcher with students made a summary of the lesson.

The fourth meeting, the researcher came to the classroom, made greeting, and checked students' attendance list. The researcher described the material to be taught. The researcher asked students to play the "English Vocabulary" application on their Android. In treatment, the researcher gave the explanation of topics about vocabulary that using mobile gaming. The researcher introduced and explained the topic about my family and friends. After 60 minutes they used the "English Vocabulary" application and the researcher asked about the new vocabulary they had obtained from the applications they used and then the final activity, researcher with students made a summary of the lesson.

The fifth meeting, the researcher came to the classroom, made greeting, and checked students' attendance list. The researcher described the material to be taught. The researcher asked students to play the "English Vocabulary" application on their Android. In treatment, the researcher gave the explanation of topics about vocabulary that using mobile gaming. The researcher introduced and explained the topic about public places. After 60 minutes they used the "English Vocabulary" application and the researcher asked about the new vocabulary they had obtained from the applications they used and then the final activity, researcher with students made a summary of the lesson.

Finally, the researcher gave the post-test to the students at the last meeting. It was similar test with the pre-test. After the students finished it, the researcher collected it to analyze. The purpose of this test was to know the students' vocabulary mastery after they are taught by mobile gaming.

3.6. Data Analysis Technique

1. After doing the teaching vocabulary by using mobile gaming, the collected of the data was analyzed the following formula below :

$$M = \frac{x}{N} \times 100$$

Notes :

M = Individual Score

x = the number of correct answer

N = the number of Items

To know the level of student's vocabulary by using mobile gaming, the researcher used the percentage grading based on the following classification.

Table 3.6
Criteria of Score Interpretation

No	Test of Score	Level of Achievement
1	90-100	Excellent
2	79-89	Very Good
3	68-78	Good
4	57-67	Fair
5	<56	Poor

(Hughes 2003:117)

2. To know the mean score, by formula:

$$\overline{X} = \frac{\sum xi}{n}$$

$\overline{X}$ = mean score

X = individual score

n = number of respondents

(Syofian Siregar, 2013)

3. To know the percentage of students' score, by formula:

$$P = \frac{F}{N} X\ 100$$

Where :

P = The percentage

F = Frequency

N = The number of the students

4. To find out the standard deviation of each group the researcher used SPSS version. 24

5. To know the value of t-test the researcher used SPSS version.24

The final step is to find out the t-score so to figure out the degree of freedom for the two groups, the following formula is used :

$$df = (n_1 - 1 + n_2 - 1)$$

df   = the degree of freedom for of two groups

n   = the number of individual in the two groups

1   = constant number

(Hatch and Farhady, 1982:112)

If the value of t-score calculated is the same or less than the value of t-table, the null hypothesis is accepted. On the other hand, if the value of t-score calculated is more than the value of t-table, the alternative hypothesis is accepted.

CHAPTER IV

RESEARCH FINDING

4.1 Data Presentation

The researcher has been conducted the research that has been done in Junior High School for seventh grade of SMP Negeri 4 Siak Hulu. There were two classes in this research. They were experimental class and control class, VII-2 as a experimental class and VII-3 as a control class. The researcher gave written test consists of 30 Items. Topics and Sub subject are provided including: Greeting, At school, At home, public place, and family.

The researcher gave two tests. There were the pre-test and post-test for each of class. The pre-test for the experimental class was given before the researcher applying the mobile gaming as the media while the control class was given before the lesson begins that taught by their English teacher. During in the treatment, the researcher using the mobile gaming in teaching conducted for five times meetings. At the end of the treatment, the students were given post-test. In the post-test happened increase the student' score and some of the student can answer the question correctly.

4.1.1 Data Presentation of Experimental Class

a. Data of Pre-test of Experimental Class

The pre-test was conducted for experimental class on Thursday / July 18th, 2019. The pre-test was taken before teaching by using mobile gaming in the experimental class.

Table 4.1

The Students' Score of Pre-test of Experimental Class

Students	Correct Answer	Score	Level
Student 1	23	76.6	Good
Student 2	13	43.3	Poor
Student 3	11	36.6	Poor
Student 4	14	46.6	Poor
Student 5	14	46.6	Poor
Student 6	12	40.0	Poor
Student 7	10	33.3	Poor
Student 8	8	26.6	Poor
Student 9	13	43.3	Poor
Student 10	11	36.6	Poor
Student 11	9	30.3	Poor
Student 12	9	30.3	Poor
Student 13	12	40.0	Poor
Student 14	15	50.0	Poor
Student 15	13	43.3	Poor
Student 16	8	26.6	Poor
Student 17	11	36.6	Poor
Student 18	11	36.6	Poor
Student 19	8	26.6	Poor
Student 20	12	40.0	Poor
Student 21	13	43.3	Poor
Student 22	14	46.6	Poor
Student 23	6	20.0	Poor
Student 24	18	60.0	Fair
Student 25	8	26.6	Poor
Student 26	13	43.3	Poor
Student 27	13	43.3	Poor
Student 28	12	40.0	Poor
Student29	14	46.6	Poor
Student 30	16	53.3	Poor
Total	**364**	**1212.8**	**-**
Mean	**-**	**40.42**	**-**

Base on the table above showed that the total students who get the excellent and very good level was 0 student (0%), for the good level was 1 student

(3.3%), for the fair level was 1 student (3.3%), and for the poor level was 28 students (93.3%). It means the students' ability for the pre-test experimental class was still less or low average.

Table 4.2

Descriptive Statistics of Pre-Test of Experimental Class

	N	Minimum	Maximum	Mean	Std. Deviation
Score Pre-Test Valid N (list wise)	30 30	20.00	76.6	40.42	11. 215

Base on the data above, we know that the minimum score of The pre-test of experimental class was 20.0 and maximum score was 76.6. And then the mean Score of the pre-test of experimental class was 40.42 and the standard deviation was 11.215 it was calculated by the SPSS version 24.

b.   Data of Post-test of Experimental Class

The post-test was conducted for experimental class on Thursday / August8[th], 2019. The post-test was given after treatment by using mobile gaming in the experimental class. After teaching five meetings, a post-test was given to see if there any change in the score of students between experimental class and control class.

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Table 4.3

The Students' Score of Post-test of Experimental Class

Students	Correct Answer	Score	Level
Student 1	26	86.6	Very Good
Student 2	23	76.6	Good
Student 3	16	53.3	Poor
Student 4	25	83.3	Very Good
Student 5	26	86.6	Very Good
Student 6	27	90.0	Excellent
Student 7	18	60.0	Fair
Student 8	24	80.0	Very Good
Student 9	28	93.3	Excellent
Student 10	21	70.0	Good
Student 11	19	63.3	Fair
Student 12	15	50.0	Poor
Student 13	19	63.3	Fair
Student 14	25	83.3	Very Good
Student 15	19	63.3	Fair
Student 16	25	83.3	Very Good
Student 17	23	76.6	Good
Student 18	19	63.3	Fair
Student 19	17	56.6	Poor
Student 20	27	90.0	Excellent
Student 21	27	90.0	Excellent
Student 22	17	56.6	Poor
Student 23	5	16.6	Poor
Student 24	30	100.0	Excellent
Student 25	18	60.0	Fair
Student 26	13	43.3	Poor
Student 27	25	83.3	Very Good
Student 28	17	56.6	Poor
Student 29	23	76.6	Good
Student 30	17	56.6	Poor
Total	**634**	**2112.3**	**-**
Mean	**-**	**70.41**	**-**

Base on the table of above showed that the total number of students who

get the excellent level was 5 students (16.6%), for the very good level was 7

students (23.3%), for the good level was 4 students (13.3%), for the fair level 6 students (20%), and for the poor level 8 students (26.6%). It means the students' ability for the post-test in experimental class after doing the treatment by the mobile gaming has increased.

Table 4.4

Descriptive Statistics of Post-test of Experimental Class

	N	Minimum	Maximum	Mean	Std. Deviation
Score of Post-Test	30	16.60	100.00	70.41	18.06
Valid N (list wise)	30				

Base on the data above, we know that the minimum score of the post-test of experimental class was 16.6 and the maximum score was 100. And then, the mean score of the post-test of experimental class was 70.41 and the standard deviation was 18.06. it was calculated by the SPSS version24.

4.1.2 Data Presentation of Control Class

a. Data of Pre-test of Control Class

The pre-test was conducted for control class on Thursday / July 18th, 2019. The pre-test was taken without using the treatment (mobile gaming).

Table 4.5

The Students' Score of Pre-test of Control Class

Students	Correct Answer	Score	Level
Student 1	4	13.3	Poor
Student 2	16	53.3	Poor
Student 3	6	20.0	Poor
Student 4	9	30.3	Poor
Student 5	12	40.0	Poor
Student 6	11	36.6	Poor
Student 7	13	43.3	Poor
Student 8	5	16.6	Poor
Student 9	12	40.0	Poor
Student 10	9	30.3	Poor
Student 11	4	13.3	Poor
Student 12	9	30.3	Poor
Student 13	18	60.0	Fair
Student 14	8	26.6	Poor
Student 15	16	53.3	Poor
Student 16	12	40.0	Poor
Student 17	18	60.0	Fair
Student 18	17	56.6	Poor
Student 19	13	43.3	Poor
Student 20	11	36.6	Poor
Student 21	14	46.6	Poor
Student 22	12	40.0	Poor
Student 23	11	36.6	Poor
Student 24	9	30.3	Poor
Student 25	8	26.6	Poor
Student 26	9	30.3	Poor
Student 27	13	43.3	Poor
Student 28	10	33.3	Poor
Student 29	13	43.3	Poor
Student 30	9	30.3	Poor
Total	**331**	**1104.3**	**-**
Mean	**-**	**36.81**	**-**

Based on the table above showed that the total number of students who

get the excellent level was 0 students (0%), for the very good level was 0 students

(0%), for the good level was 0 students (0%), for the fair level 3 students (10%) , and for the poor level 27 students (90%). it means the students' ability for the pre-test in control class was still less or below average.

Table 4.6

Descriptive Statistics of Pre-test of Control Class

	N	Minimum	Maximum	Mean	Std. Deviation
Value of Pre-Test	30	13.30	60.00	36.81	**12.57**
Valid N (list wise)	30				

Based on the data above, we know that the minimum score of the pre-test of control class was 13.30 and the maximum score was 60.00. And then, the mean score of the pre-test of control class was 36.81 and the standard deviation was 12.57. It was calculated by the SPSS version 24.

b.   Data of Post-test of Control Class

The post-test was conducted for control class on Thursday / August 8th, 2019. The post-test was given after treatment by using mobile gaming in the experimental class while no treatment in the control class. The post-test was given to see if there any change in the score of students between experimental class and control class.

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Table 4.7

The Students' Score of Post-test of Control Class

Students	Correct Answer	Score	Level
Student 1	9	30.0	Poor
Student 2	19	63.3	Fair
Student 3	2	6.6	Poor
Student 4	3	10.0	Poor
Student 5	10	33.3	Poor
Student 6	11	36.6	Poor
Student 7	6	6.20	Poor
Student 8	21	70.0	Good
Student 9	10	33.3	Poor
Student 10	11	36.6	Poor
Student 11	8	26.6	Poor
Student 12	3	10.0	Poor
Student 13	24	80.0	Very Good
Student 14	16	53.3	Poor
Student 15	23	76.6	Good
Student 16	7	23.3	Poor
Student 17	21	70.0	Good
Student 18	26	86.6	Very Good
Student 19	21	70.0	Good
Student 20	19	63.3	Fair
Student 21	14	46.6	Poor
Student 22	14	46.6	Poor
Student 23	8	26.6	Poor
Student 24	4	13.3	Poor
Student 25	1	3.33	Poor
Student 26	18	60.0	Fair
Student 27	18	60.0	Fair
Student 28	23	76.6	Good
Student 29	6	20.0	Poor
Student 30	3	10.0	Poor
Total	**379**	**1248.63**	**-**
Mean	**-**	**41.62**	**-**

Base on the table of above showed that the total number of students who get the excellent level was 0 student (0%), for the very good level was 2 students

(6.6%), for the good level was 5 students (16.6%), for the fair level 4 students (13.3%), and for the poor level 19 students (63.3%). It means the students' ability for the post-test in control class after teach in traditional method has increased, but there still many students with low score.

Table 4.8

Descriptive Statistics of Post-test of Control Class

	N	Minimum	Maximum	Mean	Std. Deviation
Score of Post-Test	30	3.33	86.60	41.62	**25.92**
Valid N (list wise)	30				

Based on the data above, we know that the minimum score of the pre-test of control class was 3.33 and the maximum score was 86.60. And then, the mean score of the pre-test of control class was 41.62 and the standard deviation was 25.92. It was calculated by the SPSS version 24.

4.1.3 Students' Progress in Experimental Class and Control Class

	Experimental Class	Control Class
■ Pre-test	40.42	36.81
■ Post-test	70.41	41.62
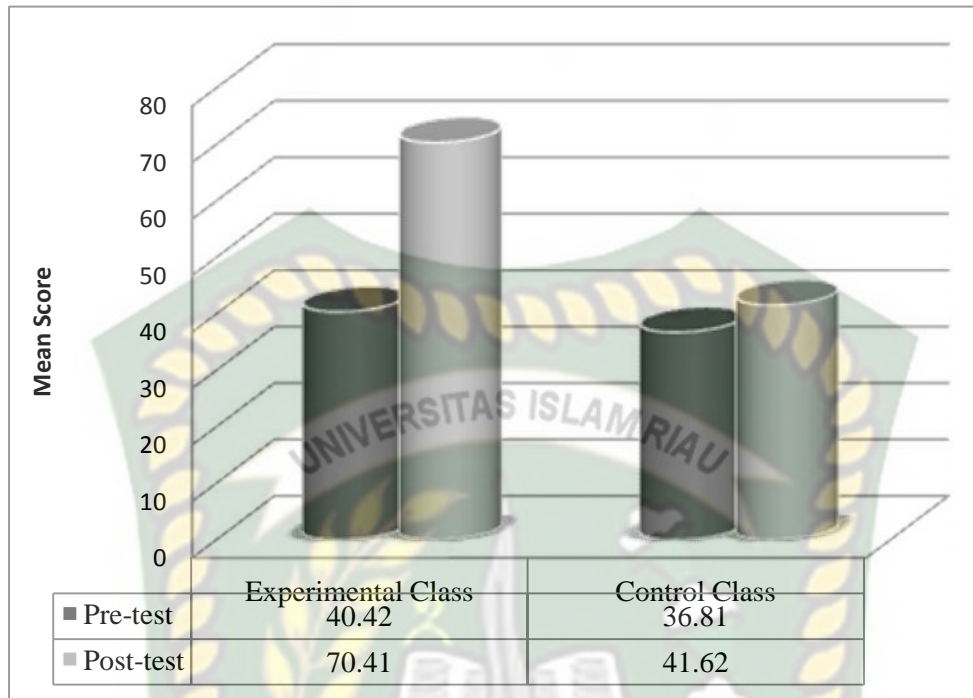
Figure 4.1

4.1.4 The Result Differences of Pre-test and Post-test of Experimental Class and Control Class

Based on the figure above, we can see that differences of students' score in pre-test and post-test of experimental class and control class. The result is mean score of pre-test of experimental class was 40.42 while the control class was 36.81. And then, the mean score of post-test of experimental class was 70.41 while control class was 41.62. it can be stated that the mean score of pre-test and post test of experimental class was higher than the mean score of control class. The mean score of pre-test and post-test of experimental class has increased 29.99 points. And the mean score of pre-test and post-test of control class has increased

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4.81 points. So, there were significant progress between experimental class and control class.

4.2 Data Interpretation

4.2.1 Data Interpretation in Experimental Class and Control Class

After calculating the data for experimental class, there was significance increasing of students' score in vocabulary test between pre-test and post-test. It was found the mean score of pre-test of experimental class was 40.42 and the post-test was 70.41. It means the students have the higher increasing in their score after doing treatment by mobile gaming during five meetings.

While the control class, there was no significance increasing of students' score in vocabulary test. There were still some students have low score. It caused the control class did not get treatment, they teaching English by their English teacher as usual. The mean score of pre-test of control class was 36.81 and the post-test was 41.62.

4.2.2 The Description of Research Finding

There were the researcher and the students activities while learning process can be described:

First meeting, the researcher greet the students and introduce herself then teacher checked attendant list. After that, the researcher gave pre-test about vocabulary on Thursday / July 18th. That was to know the students' vocabulary mastery before doing the treatment by mobile gaming. The test was 30 items in essay questions and consisting the indicators of vocabulary; Adjective, Noun,

Verb. Then the students did the pre-test about 60 minutes and submit their paper to the teacher closing the close greeting.

Second meeting, this meeting took place on Saturday / July 20th. 2019. Before playing the mobile gaming.

First, researcher asked students to download the game application on their android.

Second, researcher described about the game application to the students (what is mobile gaming, what is education game, how to play the game application and the rules of the game application).

Third, the student asked by the researcher to open the game application.
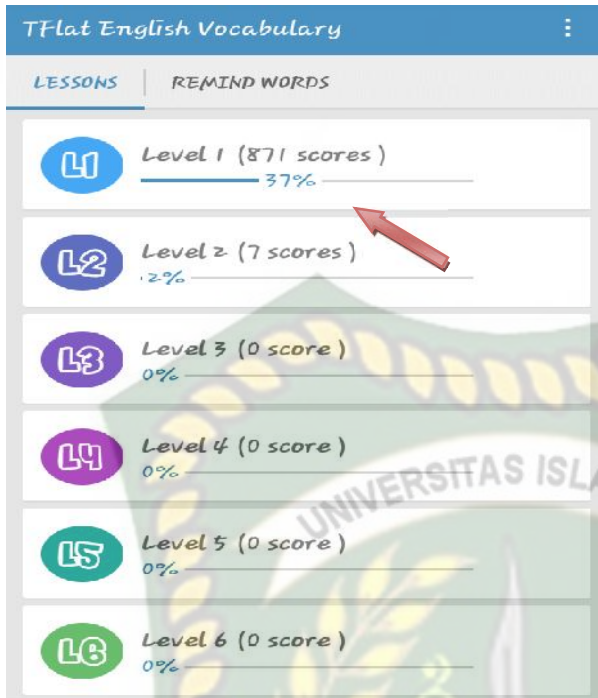
Fourth, Researcher asked the students to choose Level 1 and the topic about "greetings" such as good morning, good afternoon, good evening, etc.
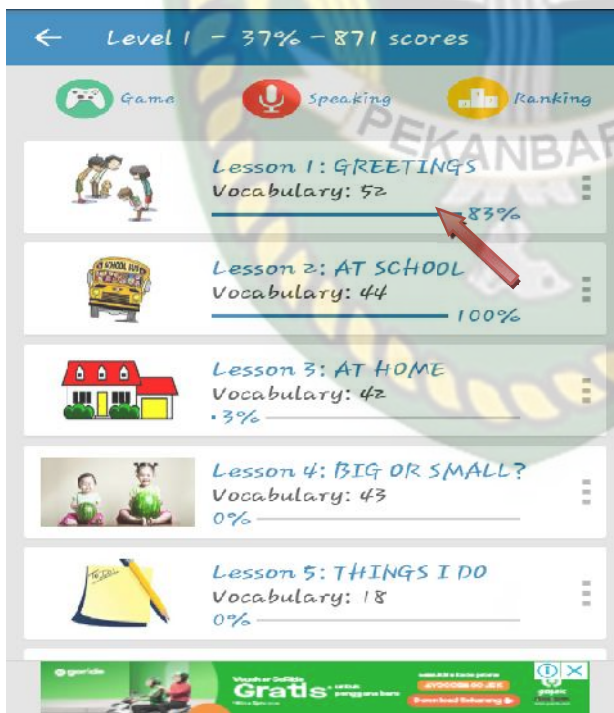
Fifth, Researcher asked students choose option "game"
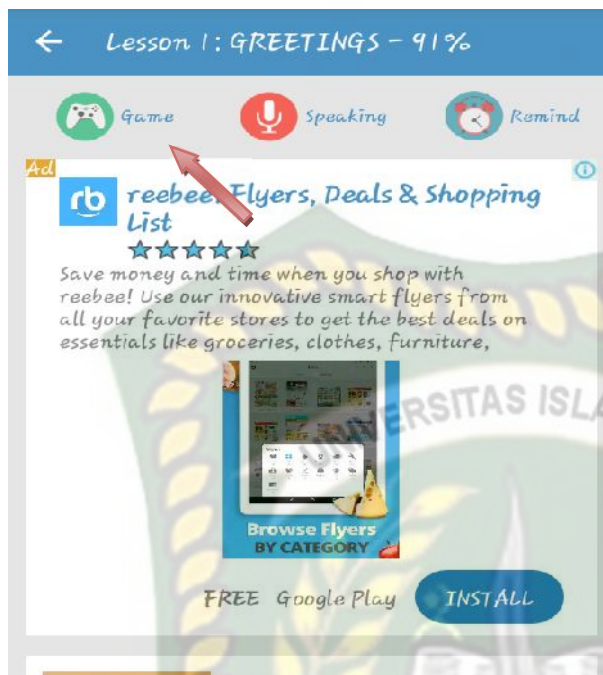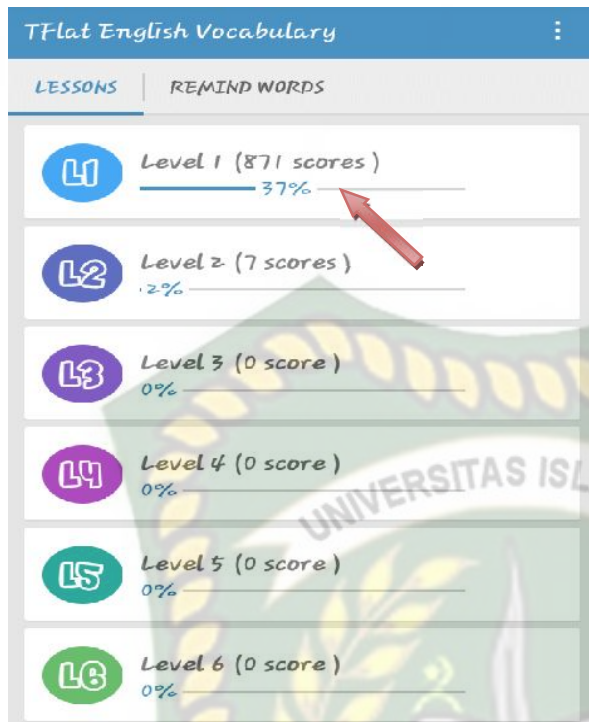
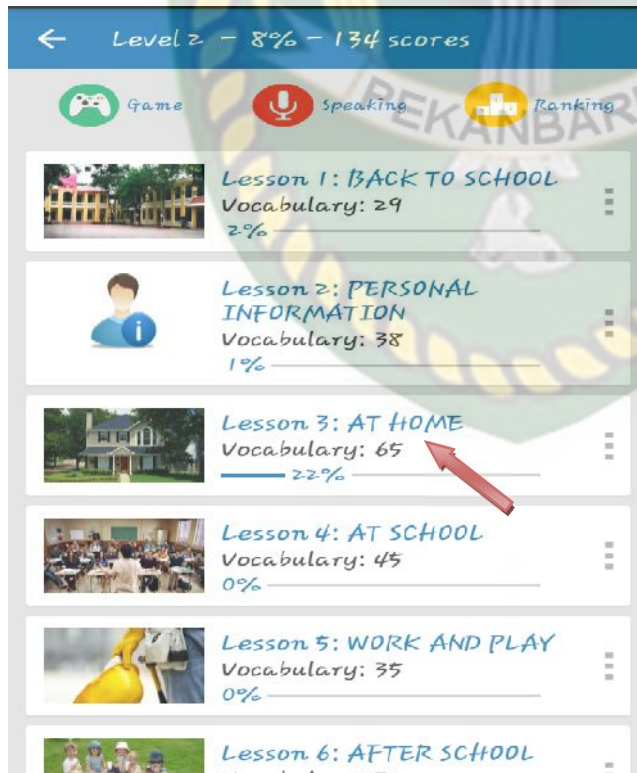

sixth, the students play the game of vocabulary

Finally, in the last ten minutes the researcher asked students what new vocabulary they had obtained from the game application and asked each student to mention it. Salomo can answer two vocabularies

Third meeting, this meeting took place on Thursday / July 25th, 2019. Teacher greeted the students, checked the attendance list and opened the class. The researcher started the class with reviewing the vocabulary obtained last meeting. After that, the researcher asked the students to play the game application on their Android again with different lesson and topic from the previous meeting.
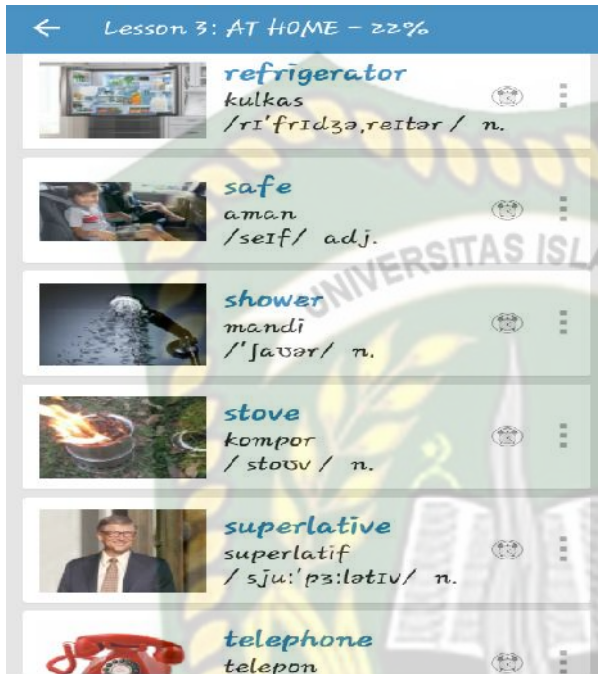
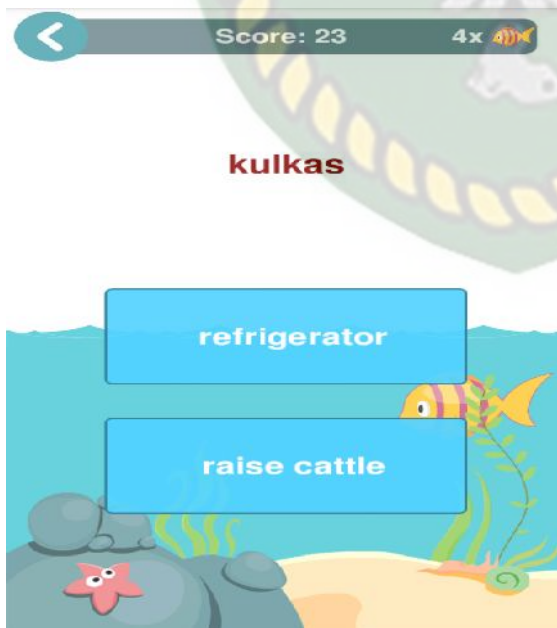First, researcher asked students to open the game application.
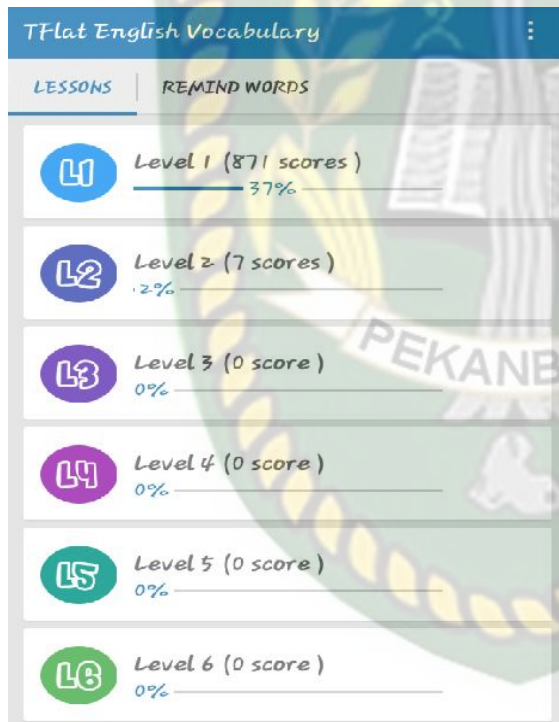
After that researcher ask the students to choose the level 1, and choose lesson 2 "At school" .
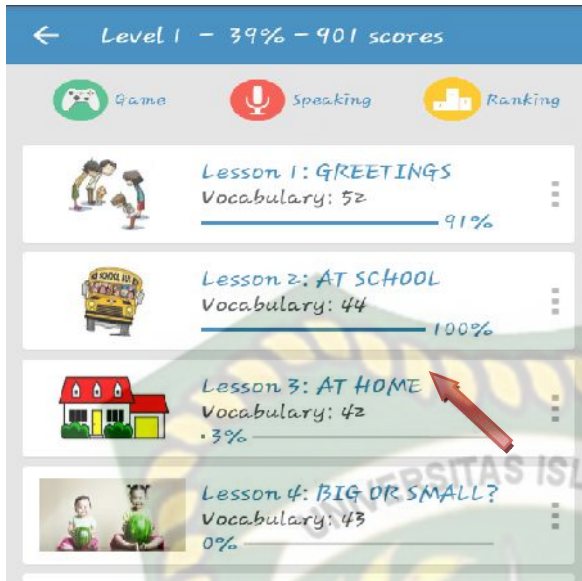
The topic in third meeting was about Things at School such as white board, waste basket, pencil case, etc.
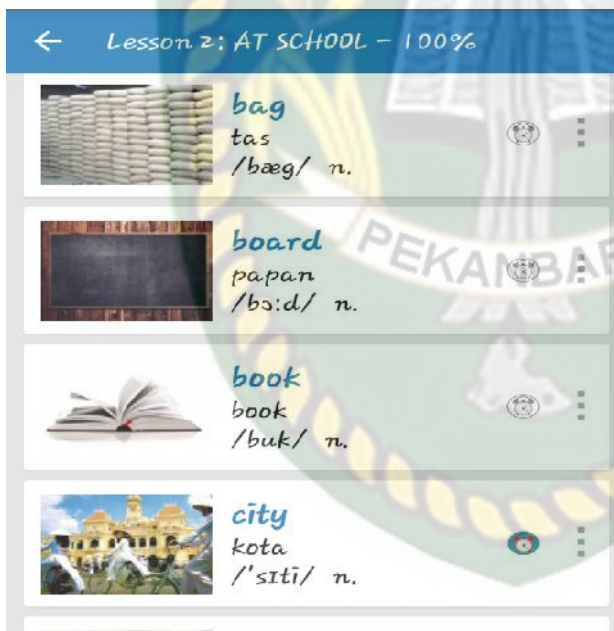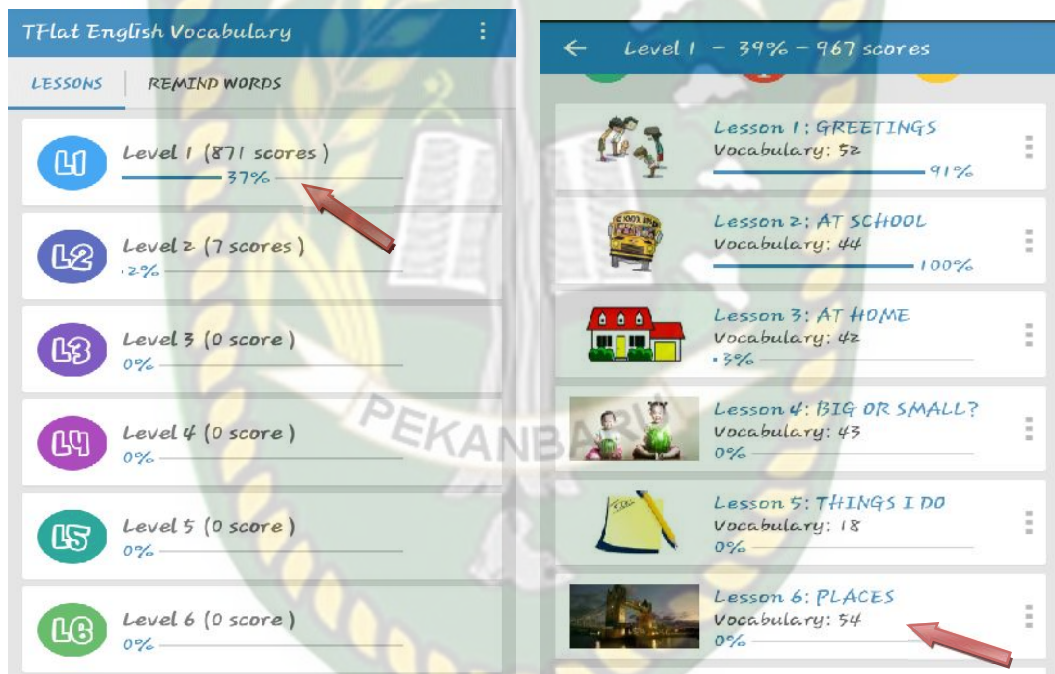

Next, the students play the game of vocabulary

Finally, in the last ten minutes the researcher asked students what new vocabulary they had obtained from the game application and asked each student to mention it. Josua can mentioned three vocabularies

Fourth meeting, this meeting took place on Saturday / July 27th, 2019. Teacher greeted the students, checked the attendance list and opened the class. The researcher started the class with reviewing and asked the vocabulary obtained last meeting. After that, the researcher asked the students to play the game application on their Android again with different levels and topics from the previous meeting.

First, researcher asked students to open the game application.

After that researcher ask the students to choose the level 2, and choose

lesson 3 the topic about things at Home.

The topic in fourth meeting was about Things at Home such as sink, refrigerator, bedroom, etc.

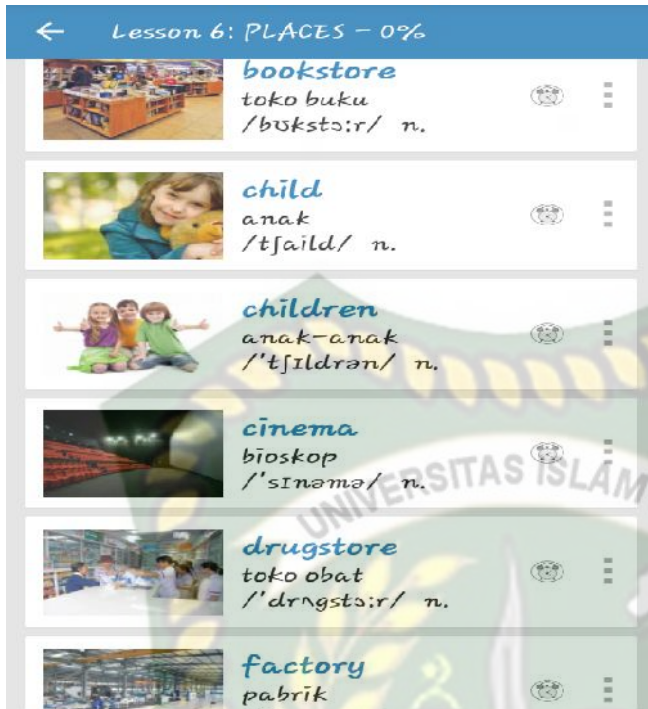

Next, the students play the game of vocabulary

Finally, in the last ten minutes the researcher asked students what new vocabulary they had obtained from the game application and asked each student to mention it.

Fifth meeting, this meeting took place on Thursday / August 1st, 2019. Teacher greeted the students, checked the attendance list and opened the class. The researcher started the class with reviewing the vocabulary obtained last meeting.
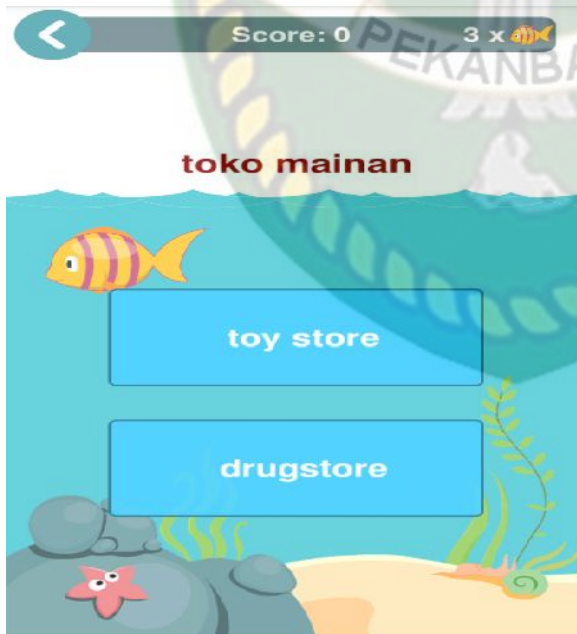
First, researcher asked students to open the game application

After that researcher asked the students to choose still on the level 1, but the topic on lesson 6 about public places such as hospital, cinema, police station, etc
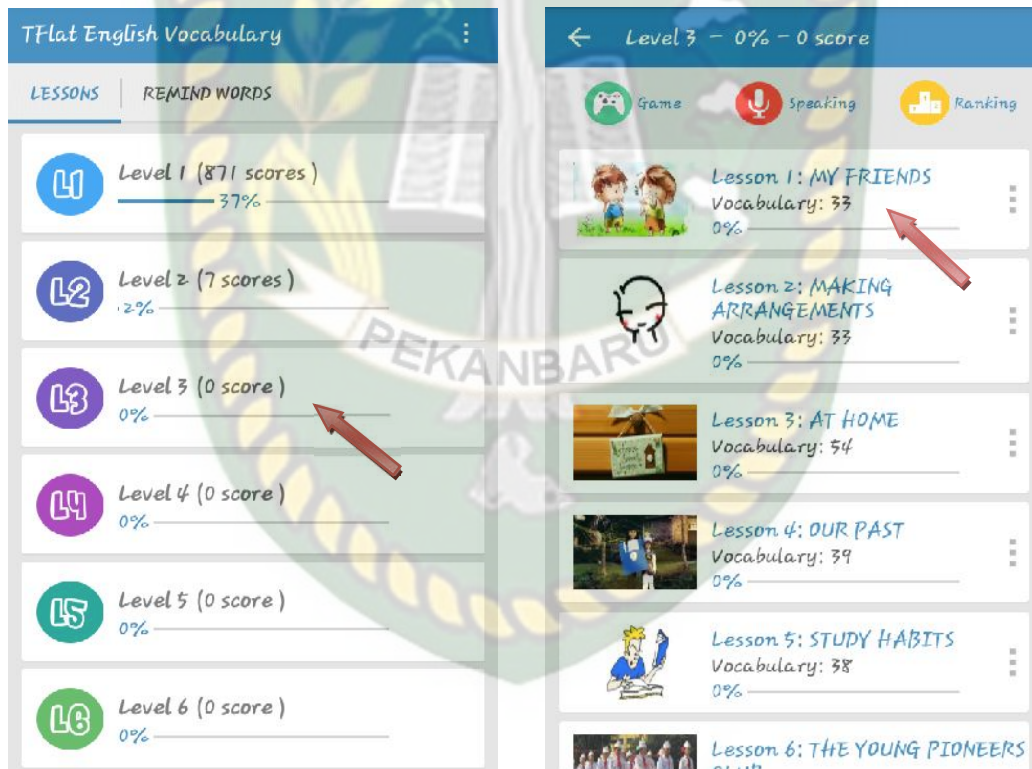
After that, the researcher asked the students to play the game application on their Android again.
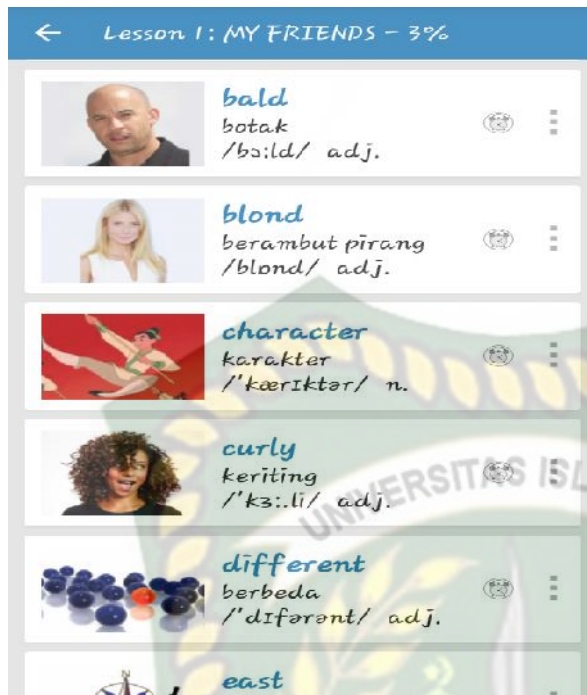
Finally, in the last ten minutes the researcher asked students what new vocabulary they had obtained from the game application and asked each student to mention it. Fikry mentioned two vocabularies and Yuliani can spell one vocabulary.

Sixth meeting, this meeting took place on Saturday / August 3rd, 2019. Teacher greeted the students, checked the attendance list and opened the class. The researcher started the class with reviewed and asked the vocabulary obtained last week. After that, the researcher asked the students to open the game application as last meetings.
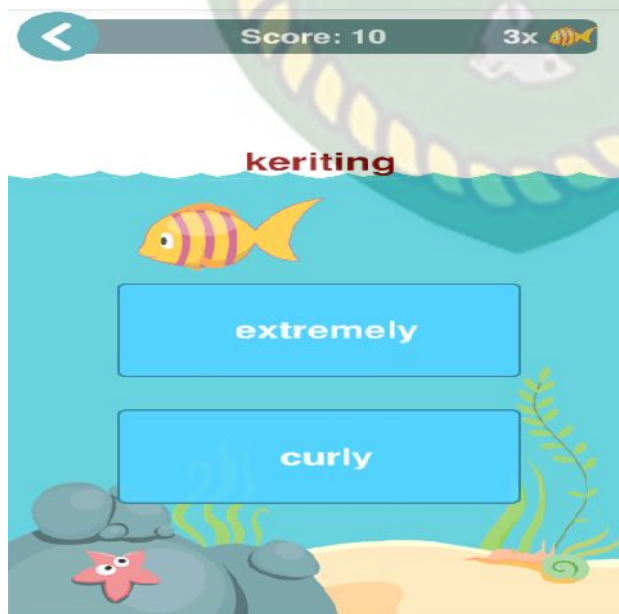

Secondly, researcher asked students to choose level 3 and choose lesson 1 "My Friends".

The topic in Sixth meeting was about characteristic of Family and friends such as bald, curly, slim, etc.

Next, Researcher asked students to play the game application on their Android again with different levels and topics from the previous meeting.

Finally, in the last ten minutes the researcher asked students what new vocabulary they had obtained from the game application and asked each student to mention it. Veby Azahra and Moses can mentioned 3 vocabularies.

Seventh meeting, this meeting took place on Thursday / July 8th, 2019. In the last meeting, the researcher greeted to students and check attendant list. After the researcher gave post-test to the students to know is there an effect of mobile gaming towards students' vocabulary mastery during treatment in five meetings. The test was essay, there 30 questions and consisting of indicators of vocabulary; Adjective, Noun, Verb. Then the students answer the questions about 60 minutes and submit their paper to the teacher.

Researcher said thank you for all students and give gift to students. Researcher close the class with praying and greeting.

4.3 Hypothesis Testing

There were two hypothesis in this research, alternative hypothesis (Ha) and null hypothesis (Ho). Alternative hypothesis means that there is significant effect of using mobile gaming towards students' vocabulary mastery at the seventh grade of SMP Negeri 4 Siak Hulu. The kind of hypothesis is comparative hypothesis (Asyti Febliza & Zul Afdal, 2015:131).

To know there is significant or not, the researcher used the independent sample T-test to know the effect of using mobile gaming towards students' vocabulary mastery at the seventh grade of SMP Negeri 4 Siak Hulu. The

researcher used the SPSS version 24. The calculated can be seen in the table below.

Table 4.9

Independent Sample Test

		Levene's Test for Equality of Variences		t-test for Equality of Means					95% Confidence Interval of the Difference	
		F	Sig.	T	df	Sig. (2-tailed)	Mean difference	Std. Error difference	lower	upper
Score of Post test	Equal variances assumed	7.682	.007	4.990	58	.000	28.789	5.769	17.240	40.337
	Equal Variances not assumed			4.990	51.798	.000	28.789	5.769	17.211	40.366

Based on the table above, it can be concluded that the $t_{calculated}$ was 4.990 and based on the distribution table, the score of t_{table} was 2.001 .it means that $t_{calculated} > t_{table}$ (4.990 > 2.001). It means that the null hypothesis is rejected and the alternative hypothesis is accepted, so, there was any significant effect of seventh grade students' vocabulary mastery after taught by using mobile gaming at SMP Negeri 4 Siak Hulu.

CHAPTER V

CONCLUSION AND SUGGESTION

5.1 Conclusion

From the theory Mobile Game Base Learning is e-learning games using through mobile devices and wireless transmission (Lee, 2005; Sánchez et al., 2007), and it can be directed at children aged from 8 to 15, or young adults from 16 to 24 years or even older generations.

By playing mobile gaming, it can make students feel comfortable and the class more fun. And then, the students can more easy to remember the vocabulary because on the game has image that can help students in imagine and spell the word.

This research was an experimental research. It is done in two classes: experimental class and control class. The experimental class taught by mobile gaming and the control class taught without mobile gaming. After teaching by using mobile gaming, the researcher found the significant effect of using mobile gaming towards students' vocabulary mastery at the seventh grade of SMP Negeri 4 Siak Hulu.

Based on the analysis of data in the previous chapter, the result of research can be concluded as follows :

1. The application of mobile gaming for seventh grade at SMP Negeri 4 Siak Hulu is helpful the students in increase they are vocabulary

mastery. The students enjoyable in teaching and learning by using mobile gaming in the classroom.

2. T- test in post-test gave the value of $t_{calculated}$ 4.990. Meanwhile, the value of t_{table} on the degree of freedom was 58 (30-1 + 30-1) at = 0,05 level of significant for two tailed 2.001. So, there was significant difference between $t_{calculated}$ and t_{table}. $t_{calculated}$ is much higher than t_{table} (4.990 > 2.001). It means there is significant differences between the students' vocabulary mastery after taught by using mobile gaming of the seventh grade at SMP Negeri 4 Siak Hulu.

5.2 Suggestion

Based on the result of the researcher, the researcher wants to give the suggestion that will be useful for the reader. The suggestions are :

a. Suggestion for the English Teacher

The English teacher can use game as one of best strategy and media in teaching English. It is can avoid the monotonous and boring situation in the classroom. Mobile gaming is one of good media that can be used by the English teacher to enrich the students' vocabulary mastery because the students can learn while playing in once time.

b. Suggestion for the Student

English is a important language. So, the students' should be more seriously in learning English. If the students can seriously in learning English,

the lesson will be more easily obtained. Mobile gaming is affective because it can provide the students' motivation, lower students' stresses, and give them opportunity to increase their vocabulary.

c.   Suggestion for the Next Researcher

The next researcher can try this media by using any topic and subtopic related with the curriculum in the school. The researcher expected that the next researcher can do better than the researcher had done in this research.
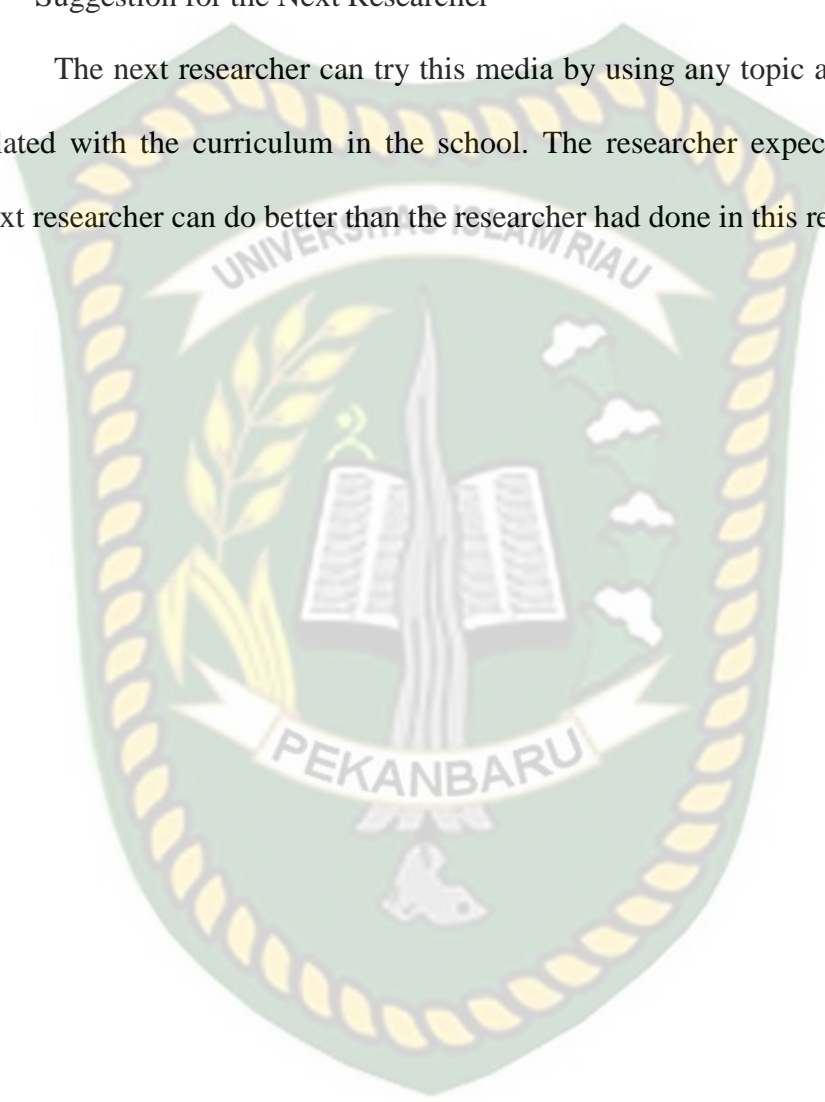
REFERENCE

Alqahtani, Mofareh.2015. *"The Importance of Vocabulary in Language Learning and How to be Taught"*. Saudi Arabia*:* International Journal of Teaching and Education. Vol. III (3), pp. 21-34.

Asyiah, Nur. D. (2017). *"The Vocabulary Teaching and Vocabulary Learning: Perception, Strategies, and Influences on Students' Vocabulary Mastery"*. Jurnal Bahasa Lingua Scientia.Vol.9.

Bakhsh, Ameer. S. (2016).*"Using Games as a Tool in Teaching Vocabulary to Young Learners"*. Saudi Arabia. Journal of English Language Teaching. Vol. 9, No. 7.ISSN 1916-4742.

Caro, K., & Mendinueta, N.R. (2017). *"Lexis, Lexical Competence and Lexical Knowledge: A Review"*. Columbia. Journal of Language Teaching and Research.Vol. 8. 2.

Cahyana, Ucu, et al. (2017). *"Developing and Application of Mobile Game Based Learning (M-GBL) for High School Students Performance in Chemistry"*. Indonesia. EURASIA Journal of Mathematics Science and Technology Education. ISSN: 1305-8215.

Coombe, Christine. "Assessing Vocabulary in the Language Classroom". 2015.

Derakhshan, Ali and Elham, Davoodi Khatir.2015. *"The Effects of Using Games on English Vocabulary Learning"*. Iran: Journal of Applied Linguistics and Language Research. Vol. 2. pp. 39-47.

Elyas, T., & Alfaki,I. (2014). "*Teaching Vocabulary: The Relationship between Techniques of Teaching and Strategies of Learning New Vocabulary Items"*.Saudi Arabia.Journal of English Language Teaching.Vol.7, No. 10.

Fansur, Hamzah Andi and Restu, Januarty. (2017).*Model Pembelajaran Picture and Picture Dengan Media Games Android Dalam Meningkatkan Kemampuan Kosa Kata Siswa Kelas VII SMPN 35 Makassar. Jurnal Keguruan dan Ilmu Pendidikan (JKIP). Volume 4 No. 1.*

Goz,Furkan and Mehmet Ozcan. (2017). *An Entertaining Mobile Vocabulary Learning Aoolication. The Eurasia Proceedings of Educational & Social Sciences (EPESS). Volume 7. Pages 63-66.*

Gaballa, M.E.H. and Al-Khayri.A.M. (2014)."*Testing Collocational Knowledge of Taif University English Seniors"*.Saudi Arabia.IOSR Journal Of Humanities And Social Science (IOSR-JHSS). Vol.19.

Gozcu, E. & Caganaga, C., K. (2016). "*The importance of using games in EFL classrooms"*. Cypriot Journal of Educational Science. Vol. 11(3), 126-135.

Hidayati, Rohmah, Nur. (2016*). "The Use of Charade Game to Teach Vocabulary (An Experimental Study of the Seventh Graders of MTs. Miftahul Khoirot*

Branjang in the Academic Year of 2014/2015)". Semarang. Journal of English Language Teaching.5 (1).

Idaryani.(2015). *"Bahasa Inggris Untuk Perguruan Tinggi"*. Lhokseumawe: Unimal Press. ISBN: 978-602-1373-37-8.

Karaaslan, Hatice, et al. "*Students' Reflection on Vocabulary Learning Through Synchronous and Asynchronous Games and Activities"*. Turkish.Turkish Online Journal of Distance Education-TOJDE. Volume: 19 Number: 3. ISSN 1302-6488 (2018). Web. 16 Nov. 2018

Khan, Ishtiaq, Muhammad.R, et al. (2018)."*The Role of Vocabulary Knowledge in Speaking Development of Saudi EFL Learners"*.Saudi Arabia.Arab World English Journal (AWEJ).Vol. 9 (1), pp. 406-418.

Mukoroli.J. 2011. "*Effective Vocabulary Teaching Strategies For The English For Academic Purposes Esl Classroom"*. [thesis]. Brattleboro. SIT Graduate Institute.

Marwat, Khan, Mohibullah , Syed Zia-ul-Islam, and Hazratullah Khattak. (2016). "*Motivators, Constraints and Benefits of Participation in Sport As Perceived by the Students"*. Pakistan. International Journal of Science Culture and Sport.4(3).

Pertiwi, Intan. (2017), *"The Effect of Taboo Games Towards Students' Vocabulary Mastery Of The Seventh Grade At SMP Negeri 40 Pekanbaru"*. [thesis]. Pekanbaru.Islamic University of Riau.

Putri, Anggi S.D.2013.*"The Use of Jigsaw II Technique and Still Picture Combination to Improve Students' Vocabulary Mastery"*.Indonesia: Journal of English Language Teaching. Vol. II (2). ISSN 2252-6706.

Ratnaningsih, Endah. (2016). *"Improving Students' Writing Ability Through the Use of Dictogloss Technique. Transformatika"*.Vol.12 , No.2. ISSN 0854-8412.

Saeidi, Lida, Omid Mazandarani, and Ghasem Barani.(2016) *"The Relationship between Iranian Elementary EFL Learners' Vocabulary Learning Strategies and Reading Comprehension Strategies"*.Iran. International Journal of Modern Language Teaching and Learning. Vol. 1, Issue 3, pp. 99-106.

Salih.M.K. (2015).*"The Importance of Teaching and Learning English Words"*.International Journal of Advancements in Research & Technology.Vol.4.

Shiratuddin, Norshuhada and Syamsul Bahrin Z. (2010).*"Mobile game-based learning with local content and appealing characters"*.Malaysia.International Journal Mobile Learning and Organisation. Vol. 4, No. 1.

Siregar, Ramadhan, Ahmad, Taufan Maulamin, and Irkham Arifianto.(2017). "*The Influence of Leadership and Motivation on Employees Performance of the national library of Indonesia*".Indonesia.International Journal of Management and Applied Science.Vol.3(2).

Trisnadoli, Anggy, Istianah Muslim, & Wenda Novayani.(2016). "*Software Quality Requirement Analysis on Educational Mobile Game with Tourism Theme*". Indonesia. Journal of Software.

Wayan, Ni. D. K. S, Nyoman Dantes, & A.A.I.N Marhaeni. "*Pengaruh Penggunaan Education Games dan Asesmen Portofolio Terhadap Pemerolehan Kosakata Bahasa Inggris Siswa Kelas V SD Gugus I Kecamatan Gianyar*".Indonesia.e-Journal Program Pascasarjana Universitas Pendidikan Ganesha Program Studi Penelitian dan Evaluasi Pendidikan. Vol.3. (2013).Web.21 Nov.2018.

Widyastuti. MytaHermariyanti, Kusumadewi. (2018). Penggunaan Aplikasi Duolingo Dalam Meningkatkan Kamampuan Kosakata Bahasa Inggris Pada Tenaga Pengajar Bimbingan Belajar Omega Sains Institut. Vol. 1 No. 2. Hal. 237-244

Yuliani, Sri. (2019). *The Role of Mobile Phone for English Language Teaching. Journal of English for Academic*.Volume 6 No.1, p.45-47.