THE IMPACT OF VIDEO GAME: "AGE OF EMPIRES II" TOWARD STUDENTS' READING COMPREHENSION ON NARRATIVE TEXT

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Abstract

With the development of technology that never stops year by year, the development of learning media also follows particularly from digital media and all device. All media has been massively used by teachers and researchers to make learning activities interesting. Teachers always keep searching to find new learning media to keep students' moods are still in line. One of media that able to use in education field is video game. A few studies have looked into the impact of video game on students learning English especially for reading comprehension. However video games is full with content that can increasing students' English skill especially on their reading comprehension. One of the video game that full with reading text and also has historical thing is Age of Empires II. This study is designed to see how video games influenced students' reading comprehension on narrative text games. The study consisted of 72 students from MAN 1 Bandar Lampung in tenth grade. X MIA 3 and X MIA 4 were the class samples of this study. The effect of video games can be reflected in the multiple-choice students' score. The writer used a quantitative and quasi-experimental method as the methodology with a random sampling approach. Multiple-choice test was used as the tool of test. The research findings in this study explain that video games has significantly impact.

Keywords: video games, reading comprehension, narrative text

INTRODUCTION

English is a popular language studied by foreign learners in formal and informal education. In Indonesia, English included in the curriculum program, and a primary material school for national examination. It was taught elementary school to university level. According to Fitriana (2012) the uses of English is also becoming widespread, almost in every field. It is used not just for communication only, but also in business and goverment thing. Most people succesful carrier are equip in good command with english (Özdemir, 2015). Therefore, students are requiered to mastered english skill for the key of their success.

There are four essential skills for all students to master English fluently. According to Sadiku (2015), for the teaching of English to be successful, the four skills, reading, listening, speaking and writing, should be integrated in an effective way. The four basic English skills are the main foundation that must be completely solid for students to be able to speak English; these four basic skills have their ways of learning for students to master them. For this reason, many learning media can be used for students to make learning English easier.

One of the most important English skills as the central core is reading. Reading is the ability to read, which examines the information we can visually from the written texts people read. According to Bharuthram (2012) Reading is one of the most important academic tasks encountered by students. Reading is also an essential factor in how students can get the latest resources to help them, master English. A simple example is the discovery of new vocabulary in English that they do not meet in English daily. However, the problem is the students' lack of interest in reading to master reading skills. It is stated by Hassan (2012), word knowledge is crucial to reading comprehension and determines how well students will be able to comprehend the texts they read. For those people who are good in reading are also indicated to have good linguistic intelligence which can be a basic provision for the future (Aminatun, Ngadiso, et al., 2018).

In reading, particularly reading comprehension is the capacity to comprehend a written passage of a text by combining the reader's prior knowledge or world knowledge with information in the text to develop an understanding of the text itself. However, reading comprehension for students is somewhat difficult to get. It may

be a direct result of the absence of remembering the words, their learning technique, their motivation or the intercessions from another subject that can view as more significant than English. According to Olviyanti, Marbun, and Arifin (2015), there are five characteristics of reading comprehension that can help students understand a text efficiently there are main ideas, detailed information, vocabulary in context, reference, and inference.

Various reasons why students are less interested in reading skills even though it is the primary key source of knowledge, namely monotonous learning. This monotonous learning tends to make students not enthusiastic about mastering reading skills. There are various ways to raise the spirit of students so that they want to master it, but most of them are temporary. Rahmawati (2011) argues that the problem faced in understanding reading texts lies in the lack of knowledge about reading materials and not knowing how to connect ideas between sentences. So teachers must try hard to find the latest media to bring an atmosphere that attracts students to learn English reading skills so interesting. The function of media in teaching and learning is to increase the stimulation of the learners in learning activities (Ali, 2009). A novel, short stories, and audiobooks can be used for teaching reading comprehension, but some of students lack interest with reading so they are easy getting bored when reading text. It is stated Wahyudin, Pustika, et al (2021), a lot of students' have been bored when reading text in common form of media such as story books. Students also have their role to find out proper media for help them to increasing their reading skill. However, there is one medium is rarely used in the education field but always exists for entertainment. The thing mentioned is Video games.

Nicholas, (2005). video games are played with a visual and audio apparatus and can be based on a story. Video games are devices designed for games played digitally by many people, from young to adults. The primary purpose of video games is to entertain people to get rid of the boredom they go through in their spare time after working or studying. In its role, video games in the world of education, it is very rarely used in teaching and learning activities because educators have a stigma that the role of video games is under their nature, namely entertainment tools. Shaffer, Halverson, Squire, and Gee (2005) found that the typical stereotype among people is that video games are made for "entertainment" only. However, that does not mean it is impossible if teaching English can use video games to learn media, especially English. Griffith (2002) stated Videogames could provide elements of interactivity that may stimulate learning. According to Costikyan (2002), The use of video games as media itself is present a combination of audio, video, and text that allows students to take part in an action with Computer program on the game and achieve the mission while they (player) complete every mission.

In Indonesia, video games have become part of entertainment for many people from young people and also adults. It is approved from many events available on the news about electronic sport (E-sport). More hundred thousand people, including students, are playing video games in their spare time. Commonly video games themselves are interactive personal computer games used to entertain the user. However, Tavinor (2009), led an observation to discover the meaning of video games and emerge with the end that he questions assuming a video game would be able to characterize. the study done by Tavinor (2009) highlighted that video games are a digitally designed amusement object that will create however long there is innovation improvement.

Video games as learning media aim to stimulate student learning to feel fun. In several studies, the use of game media as a learning medium has increased the players' enthusiasm for learning (Wibawanto, 2013). Educational Game is one type of media used to teach and improve users' knowledge through unique and exciting media (Fatima et al., 2019). According to Schlimmer (2002), video games create a context in which participants can discuss scenarios and outcomes to facilitate their understanding of other concepts. They improve children's reading, spelling, spatial abilities and critical-analyzing skills.

Cabarse (2018), found improvement but no have difference between two class that he treat about the effect of video games. He stated, video games can be an alternative method for learning media. Komala and Rifai (2021) revealed a significant difference in score, with the experimental group achieving significantly higher grades. Video games were proven to trigger students' participation while they are learning. Nadhif (2021), shows that video game increase students' motivation to learn and entertain them during their learning process.

In this study, to prove the explanation from researchers above. The author use Age Of Empires 2 for video game research. This game was released in 1999, the game is based on a true story in the history of the medieval era. This game tells the story of the previous kingdom, which is then visualized through game images. Some of the characters listed are based on historical stories, but for the narrator as a third character's point of view the story is fictional.

By the explanation described above. This study will aim to prove whether there is an impact of video games on students' reading comprehension in the form of narrative text. This study took the subject of high school students, namely MAN 1 Bandar Lampung. MAN 1 Bandar Lampung has a population of 432 students in grade 10. The researcher then took samples in 2 classes as the main subject, namely X-MIA 3 and X-MIA 4, which had 36 students per each class.

RESEARCH METHOD

This research based on the data collected in 2022 from Faculty of Art and Education student of private university. The research method used in this research is quantitative research with a quasi-experimental approach. By giving a test to two classes, namely the Experiment class and the Controlled class. The tests used are pre-test and post-test. Pre-test is used at the beginning to find out whether the two classes already know what lessons will be given to them or not. Meanwhile, the post-test was used to determine whether the research subjects had understood the material that had been given by the researcher. Then the results of the calculation of the value are measured by looking for normality, homogeneity, and the t-test hypothesis. The search is carried out using statistical calculation software, namely SPSS version 26.

FINDINGS AND DISCUSSION

1. Normality test

A normality is used to identify whether the data collected are normal to distribute or not. Since the sample size is 36 from 72. The researcher used Kolmogorov-Smirnov to assess normality. The test result stated that oth classes in pre-test and post-test scores were normally distributed (see Table 1 and Table 2). As a result, the following:
H0: The data is normal distributed.
H1: Data is not normal distributed.

Table 1. Normality test of Pre-test

Tests of Normality

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Exprettest	.144	33	.079	.938	33	.061
Conprettest	.143	33	.086	.958	33	.229

a. Lilliefors Significance Correction

Table 2. Normality test of Post-test

Tests of Normality

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	Df	Sig.	Statistic	df	Sig.
Exposttest	.147	33	.067	.931	33	.038
Conposttest	.127	33	.196	.951	33	.146

a. Lilliefors Significance Correction

The table above reveals that the significant value of normality test in Pre-test on Experiment class was 0.079 while in the Controlled class was 0.086. The table above reveals that the significant value of normality test in Post-test on Experiment class was 0.067 while in the Controlled class was 0.196. As the result shows both normality test of pre-test and post-test between two classes is distrubuted normal.

2. Homogeneity test

After calculates normality data, the researcher need to calculate the homogeneity of data. Whethere the both are homogeneity on their pre-test and heterogenic on their post-test. It will be calculated using Compare Means Independent Sample T-test in SPSS 26 program for Windows Operation System. The indicator of Homogenity Test for the result:

H0 : The sample of Experiment class is homogenous or above 0.050 from Controlled Class. Which means there is no differences between Experiment class and Controlled Class.

H1 : The sample of Experiment class is heterogenous or below 0.050 from Controlled Class. Which means there is identified differences between Experiment Class and Controlled Class

Tabel 3. Homogeneity test of pre-test

Independent Samples Test		Levene's Test for Equality of Variances		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
Result	Equal variances assumed	0,746	0,391	0,809	70	0,421	3,111	3,847	-4,561	10,784
	Equal variances not assumed			0,809	69,988	0,421	3,111	3,847	-4,561	10,784

Tabel 4. Homogeneity of post-test

Independent Samples Test		Levene's Test for Equality of Variances		t-test for Equality of Means					95% Confidence Interval of the Difference	
			Sig.	T	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Result	Equal variances assumed	2,134509	0,1485	2,611146	70	0,011032	11,88889	4,5531304	2,807957	20,96982
	Equal variances not assumed			2,611146	67,5148	0,011109	11,88889	4,5531304	2,802076	20,9757

From Table 3 above it can be seen the significance between Experiment Class and Controlled Class on Significance 2 tailed, it is shown 0,391 > 0.050 that indicates both class are homogenous. While Table 4 significance between Experiment Class and Controlled Class. It is shown 0,148 > 0.050 that indicates both class are also homogenous. However, there has been a decrease in the sig column which shows there is a difference in the homogeneity test results from the pre-test and post-test.

3. Hyphothesis test

After the researcher found the result of normality and homogeniety test, the next step is find out Hyphotesist by using t-test. T-test was used to examine hyphothesis of the research whether video games give significant effect on students' reading comprehension. IBM Statistic SPSS 26 was used to calculate the independent sample test. The test used data from post-test of Experiment Class and Controlled Class.

Table 5. Hyphotesist test using Independent Sample T-Test

Independent Samples Test									
		Levene's Test for Equality of Variances		t-test for Equality of Means					
		Sig.	T	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
								Lower	Upper
Result	Equal variances assumed	2,134509	0,1485	2,611146	70	0,011032	11,88889	4,5531304	2,807957	20,96982
	Equal variances not assumed			2,611146	67,5148	0,011109	11,88889	4,5531304	2,802076	20,9757

. The table above shows the significance (2-tailed) of the post-test is 0.011 and it is below than 0,05. It indicates that there is statistical difference between experiment class and controlled class in post-test result.

Table 6. Group Statistic

Group Statistics

	Class	N	Mean	Std. Deviation	Std. Error Mean
Result	Exposttest	36	70.25	17.366	2.894
	Conposttest	36	58.36	21.089	3.515

The mean score and standart deviation of both classes focusing the subject' response were calculated, for the experimental score (M = 70.25, SD = 17.36), the controlled class (M = 58.36, SD = 21.09). The table 6 mentioned standard error of each class. For the experiment class shows SE = 2.89 and controlled class shows SE = 3.51.

DISCUSSION

This section discusses the impact of Age of Empires 2 video games on students' reading comprehension in narrative texts. How the students' reading comprehension in the experimental class can be improved with the video game media and how the flow of treatment learning takes place.

Before treating students. The researcher prepared lesson plans that was designed for four meetings. Before the researcher plunged into the field. Researchers observed the location taken to conduct research at MAN 1 Bandar Lampung. Researchers get permission to borrow the room and install learning media that will be used before the day of giving the treatment. The installation of the media is accompanied by members of the extracurricular students who are concerned about the world of computers and robots who of course understand how to install video games on a computer that they want to use for learning media. The video game installation is carried out on a computer per computer and then tested whether there are problems that need to be repair or not on the computer that the video games cannot be played. This media installation was carried out in an Arabic language laboratory which has 29 computer units. In the second week before the meeting arrived, the researcher returned to the Arabic language laboratory to check the computer whether there were obstacles that needed to be repair or not again.

On the first day the researcher conducted a pre-test to find out whether the students had known the lesson that would be delivered by the researcher. This pre-test was followed by the full experimental class with a total of 36 students in the class. The pre-test sampling was carried out directly with the reading question cards given by the researcher. On the first day of taking the pre-test, the experimental class was given an introduction to material about reading comprehension. Likewise the control class, the control class was also given a pre-test which was to find out whether the control class students knew the material that would be delivered by the researcher. The control class was fully attended by 36 students. The researcher also gave the same treatment to the control class students regarding what reading comprehension was.

On the second day the researcher as well as the researcher went to the field to give treatment to both classes. In the experimental class, apart from providing material on reading comprehension, they were also given an introduction to the video game to be played, namely Age Of Empires 2. The researcher then reviewed the definition of reading comprehension and the structure in it. On this occasion the researcher explained in detail

about reading comprehension. The researcher explains what structures are in reading comprehension. In reading comprehension there are Main Idea, Reference, Specific Information, Inference, Vocabulary In Context. Then related to the game used, the structure is then shown that in the game there is a reading comprehension structure that is discussed. This is contained in the narrative of a mission from the game Age Of Empires 2, about an Islamic historical figure, namely Salahudin Al-Ayyubi or called Saladin. The storyline is set in Egypt, where Saladin's troops try to save the city of Cairo which is being attacked by crusader soldiers. The students then follow the instructions given by the researcher on how to complete the game and what mission tasks are listed on the mission. Then, at the end of the lesson, the researcher reviews the material being studied. Meanwhile, the treatment in the control class was carried out in a conventional way with powerpoint slides and the same text as examples to study.

On the third day, problems occurred for the meeting on that day due to the schedule of the month of Ramadan which required students to study online and forcibly could not continue the next treatment in the experimental class. At the meeting, the researcher conducted online teaching through Google Meet to deliver the next material, namely narrative text. The researcher also did not forget to review the material given at the previous meeting regarding reading comprehension and the structure of reading comprehension detected in the Age Of Empires 2 game about Saladin. At the third meeting the researchers gave online treatment by playing the second story with different historical figures in the Age of Empires 2 game. The researcher then chose a story about a female knight from France, Joan of Arc. The reason why the researcher chose the story is because it has a fairly fast and easy gameplay. So that it can help the researcher to manage the learning time given to experimental students. Active communication occurred on the third day to keep students enthusiastic about being treated by the researcher. In the narrative text material, the researcher explains what narrative text is, its genre, and its structure. The researcher explained that the storytelling in video games mostly uses narrative text. The narrative text used in the Age Of Empires 2 game is Historical Stories with the point of view of a third person character as the narrator in it. During the control class learning hours, the researcher provides an explanation of similar material through audio text from the game installed in the PowerPoint slide show.

On the last day of the meeting, the researcher took a post-test for both classes. The researcher did not forget to provide repeated reviews of reading comprehension and the structure of reading comprehension and also a review of narrative text material and its structure by providing a slide show from the game Age of Empires 2. The post-test was also taken on the last day. Students begin to work on and implement what has been given and learned by the researcher.

After taking the post-test sample, the researcher as well as the researcher began to perform statistical calculations using SPSS version 26 software. The results from the Pre-test and Post-test were then tabulated and then the average of each class was calculated. The results obtained that the average pre-test score of the experimental class students got 35.16, and the control class got an average pre-test score of 32.05. Then the calculation of the average number of post-test scores increased in both classes in the experimental class to get a value of 70.25 while the value of the control class was 58.16. This shows that the experimental class that was given the video games media treatment was superior to the control class. This can be seen from the significant results.

After treating English material in the research field, researchers did the process data that was obtained. The results of the four meetings gave significant results in students' learning of reading comprehension in narrative text using video games as learning media. The test questions are given with the reading comprehension aspects described by Olviyanti, Marbun, et al. (2015) regarding five aspects of reading comprehension included main idea, references, inferences, factual or specific information, and unfamiliar vocabulary. The results found among five aspects, identifying reference get the highest improvement. The researcher assumed that it is because of the easiest aspect that able to answered. The text and the picture description in video games helped students to guess the questions about reference. Meanwhile the lowest improvement of five aspects of reading comprehension is identifying inference. Because it made students thinking critically to conclude a whole story inside video game. Thus, students are difficult to answered the questions of the test.

CONCLUSION

In conclusion, the findings of this study confirm that there is an impact of the video game "Age Of Empires 2" on students' reading comprehension in the form of narrative text. It can be seen that there has been a significant difference between the two classes, namely the experimental class and the control class. The experimental class showed the results of post tests were superior to the control class. Thus, video games can be used as an alternative learning media to improve students' English skills, especially reading comprehension. It is recommended that a game that is rich in story content and a plot has the potential to be used as a medium of learning.

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