



The Effect Of Game Application “Mr. Detective” In Students’ Vocabulary Mastery

Elvira Glaudia Lubis¹, Zulfitri²

Universitas Muslim Nusantara Al-Washliyah

Corresponding Author: ✉ elviraglubis@gmail.com

ABSTRACT

The objective of this research is to determine the effect of game application “Mr. Detective” in vocabulary mastery on verbs for students at tenth grade of SMA Swasta Cerdas Murni. This research is experimental quantitative and was conducted on June 2021. In this research, the sample was from students of class X MIPA 1 and X MIPA 2 with each class containing 36 students and a total sample were 72 students. Data were collected through multiple choice tests on verbs and then through quantitative procedures to both classes that are the experimental class for X MIPA 1 and the control class for X MIPA 2 were given a test twice such as a pre-test and a post-test using different media. In the experimental class using game application media and for the control class using conventional media. Based on the results of the research, it is known that the use of media in the experimental class has a higher score than the control class with a mean value of 80.00 for the experimental class and 70.56 for the control class. This proves that there is a significant effect through this game.

Keywords

Experimental, Mr. Detective, Quantitative, Verb, Vocabulary

How to cite

(2022). Jurnal Ability, 3(1).

INTRODUCTION

Language is a communication tool used by everyone in their daily life as a means to convey information and arguments to others. English is an international language as one of the most influential languages in the world. Nowadays, mastering more than one language, at least learning English from an early age is very important.

In some countries English has become a second language, but in Indonesia, English is still as a foreign language. If the younger generation is able to master English, namely as an international language then they will also have the opportunity to get news information from abroad easily, make new friends from various countries in the world, learn how the education system in each country is different, study technological progress and exchange culture and it all has an intermediary through the international language which is English.

The younger generation is needed later for the progress of the country in the future. Preparing students to learn English from an early age is a very good practice because their brains will quickly remember and it is easy to master it. In some schools in Indonesia, English is used as the language of instruction in schools, but it is only a few compared to other schools that still use Indonesian language or *Bahasa* as a medium of instruction and when they learn English in class, they find it difficult to understand it, in the end English becomes one of the lessons which students dislike.

In learning languages, there are four skills that must be mastered, namely reading, writing, listening and speaking. Apart from mastering these four skills, we also have to master grammar, vocabulary, pronunciation and others. Many of those who want to master English think that learning grammar is the most important, after which they will learn through the songs or films they watch to master their listening skills hoping to have good pronunciation like native speakers. Learning grammar first and hoping to have a good pronunciation with it is important, but there is something more important than that is learning 'Vocabulary'.

Vocabulary is the key to be good at learning English, this is an important aspect that students often forget. As states by Thornbury as cited in Utami (2014) he says that without grammar very little can be conveyed but without vocabulary nothing can be conveyed. It means, vocabulary takes more impact in conveying meaning of a language rather than grammar.

The more words the learners know, they will be better to understand what they hear or read. In addition, the more words they have, they will be more accurate to express their ideas in spoken or written form. We cannot arrange sentences, we cannot understand when someone speaks English to us if we do not have vocabulary.

When we lack of vocabulary, we will not be good at learning English, we will not understand what they are saying. As Schmitt (2010: 4) noted, "learners carry around dictionaries and not grammar books". Teaching vocabulary helps students understand and communicate with others in English. Therefore, it is important for students to master as much vocabulary as possible to make it easier to master English.

In the present, we have gone through difficult times related to the Covid-19 virus which interferes with learning, work and other activities, not only has a bad impact in Indonesia but in the world it is very disturbing and makes students have to study independently at home. Students who were previously lazy to open books will be lazier and ignore their assignments when studying independently.

There are so many media that can help students to add their vocabulary, through music, watching movies and other things that are fun and not boring because in fact many students are lazy if asked to read a dictionary. Astuti (2014) states that teachers can make their class more attractive and effective by using media in delivering materials. One of the media that teachers can use as a learning resource tool that is attractive and in demand by students is learning media while playing through game applications.

The use of technology, such as the use of smartphones is increasing, especially during the current pandemic. Students are more interested in playing games on the phone than opening textbooks, without them knowing it rather than spending time just playing games which have no better benefit, they are playing games while studying, playing but can also get new vocabulary.

In this research, the researcher uses the game application media "Mr. Detective" to help students' vocabulary mastery in English. The game "Mr. Detective" is a play-while learning application focusing on verbs. This game has a different story at each level, students will act as an assistant detective who will solve a case through the instructions given and students must also read carefully in order to pass each level of this game. This game is also very internet quota friendly because students can play offline.

The researcher hopes to use the game application "Mr. Detective" as a learning media can make students interested and not being lazy, be smart in use smartphone and help students increase vocabulary, especially verbs, also for teachers to be more creative in using media in the teaching and learning process. Based on these description, the researcher is interested in conducting a research entitled '*The Effect of Game Application "Mr. Detective" in Students' Vocabulary Mastery*'.

RESEARCH METHOD

Research design is classified into three categories, namely: quantitative research design, qualitative research design and mixed methods research design. In this research, the researcher uses the quantitative research to analyze the data. It is quantitative because it emphasizes systematic measurement and quantification of variables and the data to be obtained is numerical and analyzed using statistical computations. The quantitative approach emphasizes the analysis of numerical data processed by statistical methods.

According to Kaswan and Suprijadi (2016: 11), "Quantitative research design is a deductive theory-based research process that focuses primarily on testing theories and specific research hypotheses that consider finding

differences and relationships using numeric data and statistical methods to make specific conclusions about phenomena.”

The researcher used quantitative research with the experimental design. According to Sugiyono (2016: 72), “Experimental research design can be interpreted as research methods used to find the effect of certain treatment in control conditions.” This research will be conducted with pre-test and post-test design.

In conducting this research, the researcher will apply an experimental design in order to know the effect of game application “Mr. Detective” in students’ vocabulary mastery on verbs.

This research consists of two different groups, namely experimental group and control group. The experimental taught by using the game application “Mr. Detective” and control group taught by not using game application. Both of group will be given pre-test and post-test to show the differences.

Table 1. Research Design

Group		Treatment	
Experiment al Group	P re-test	The game application “Mr. Detective”	P ost-test
Control Group	P re-test	Not using game application	P ost-test

RESEARCH RESULT AND DISCUSSION

There are two ways to find out the results of the validity test in the table above, namely first by comparing the value of R_{count} with R_{table} which if the value of $R_{count} > R_{table}$ means that the question is valid, but if the value of $R_{count} < R_{table}$ then it means that it is invalid. The value of R_{table} with $N = 20$ with a significance of 5% in the distribution table of the statistical R_{table} value is 0.444. The second way is to look at the significant value (Sig.), if the significant value (Sig.) < 0.05 it means it is valid and if the significant value (Sig.) > 0.05 it means it is invalid.

From the validity table above, it can be seen that the total score in question number 1, the R_{count} value is 0.033, which means that the value is lower than the R_{table} value, which is 0.444. The significant value (Sig.) of $0.890 > 0.05$ means that question number 1 is invalid. Question number 4 is valid because the value of R_{count} is $0.799 > 0.444$ with a value of Sig. of $0.000 < 0.05$.

Hypothesis Test

In related with the objective of this research, the researcher used the t-test, namely the independent sample-t test to distinguish whether the learning outcomes from the student's answer sheets on the verbs vocabularies were significant or not.

Table 2. Independent Samples Test of Students' Score

Independent Samples Test					
		Levene's Test for Equality of Variances		t-test for Equality of Means	
		F	Sig.	t	df
Students Score	Equal variances assumed	.328	.569	3.488	70
	Equal variances not assumed			3.488	69.284

Independent Samples Test

t-test for Equality of Means

		Sig. (2-tailed)	Mean Difference	Std. Error Difference
Students Score	Equal variances assumed	.001	9.444	2.708
	Equal variances not assumed	.001	9.444	2.708

Based on the results in the table above, the value of Sig. (2-tailed) is $0.001 < 0.05$, it can be concluded that there is a difference in the average student learning outcomes in the two classes. In addition to looking at the value of Sig. (2-tailed), can also look at the value of t_{count} . If $t_{count} > t_{table} (0.05) = 1.669$, it means that H_a is accepted and H_o is rejected. From the table above, the t_{count} value is $3.488 > 1.669$, so H_a is accepted.

The following is the difference in mean values in the two classes, so to master verb vocabularies using the game application “Mr. Detective” is more effective than conventional methods. The mean value for the post-test experimental class is 80.00 > the post-test value for the control class is 70.56.

Table 3. Statistics Mean of Students' Score

	Class	N	Mean	Std. Deviation	Std. Error Mean
Students Score	Post-test Experimental Class	36	80.00	10.889	1.815
	Post-test Control Class	36	70.56	12.058	2.010

Documentation

In the documentation, the researcher collected several documents in the form of a list of students' names from both classes and a list of scores obtained after the pre-test and post-test. EC is experimental class and CC is control class.

Table 4. List of Students' Names

Code	Students' name	Code	Students' name
EC-1	Adi Wangsa	CC-1	Alfiya Tsabilah
EC-2	Ayu Nanda Putri	CC-2	Amanda Amelia Setyorini
EC-3	Az-Zahra Andini	CC-3	Amanda Putri Salsabila
EC-4	Delfanza Balqis	CC-4	Andini Dwi Puspita Sari
EC-5	Desta Andrian Wijaya	CC-5	Annisa Febrianti
EC-6	Dhea Alfyonita Fadhliah	CC-6	Arriyaan Rizqi Ramadhan
EC-7	Dio Fahry Ramadhan	CC-7	Arza Ratu Zahra
EC-8	Hairun Tsaniah Azhari	CC-8	Ayu Lestari
EC-9	KHhairunnisa Nasution	CC-9	Az Zahra Dwi Putri
EC-10	Kharisma	CC-10	Cindy Emalinda Putri
EC-11	Khairul Arifin	CC-11	Dhea Ema Nurlia
EC-12	Maily Chung	CC-12	Difa Luthfi Az-Zahra
EC-13	Miftahul Jannah	CC-13	Dimas Eka Pradilla
EC-14	Muhammad Aqmal Lubis	CC-14	Elvina Nur Annisa
EC-15	Muhammad Arief Ikhsan	CC-15	Fajri Ramadhan

EC-16	Muhammad Fhadlan Ananda	CC-16	Fitri Amelia
EC-17	Muhammad Fhadlin Ananda	CC-17	Hafiz Khalik Lubis
EC-18	Muhammad Hafis	CC-18	Hanifah Sindy Utami
EC-19	Muhammad Rifaldy Chery	CC-19	Ihsan Achsan
EC-20	Nabila Putri	CC-20	M. Khayrul Reza Simbolon
EC-21	Nadilla Muthalib	CC-21	Muas Farhanda Friski
EC-22	Naila Putri Siregar	CC-22	M. Rozan Pratama
EC-23	Nazwa Maisya Nasution	CC-23	Nadine Rara Pranosa
EC-24	Novita Savitri Arwira	CC-24	Najma Khairunnisa Nst
EC-25	Nurul Nisrina	CC-25	Nayara Sabila Lubis
EC-26	Qamaruddin Fadhlilah Harahap	CC-26	Nayla Hadisti
EC-27	Revita Dewi	CC-27	Nirmala Rahmadani
EC-28	Risna Putri Ariani	CC-28	Putri Maharani
EC-29	Rizky Ahsandi Pulungan	CC-29	Ranti Antika Lestari
EC-30	Roffi Qosbi	CC-30	Ratna Triana
EC-31	Salsabila Nofitria	CC-31	Retno Triani
EC-32	Sarifah Hidayah	CC-32	Rizki Fatahillah Hutasuhut
EC-33	Sartika Maharani Nst	CC-33	Rosa Sari Amalia Nst
EC-34	Sri Wahyuni Putri	CC-34	Sigit Dwi Cahyo
EC-35	Tatia Ramadhani	CC-35	Siti Laila Karimah
EC-36	Zaki Asyrof Ibrahim Lubis	CC-36	Zahra Maulida Rasyida

CONCLUSION

Based on the results of the study, the researcher concluded that the students' scores in the experimental class were higher than in the control class. The researcher gave the same pre-test and post-test to both classes but with different treatment. In the experimental class, the researcher used the game application "Mr. Detective" as a media that can help students in mastering their verb vocabularies and for the control class only with conventional media.

As evidence that it can be seen from the two classes, the mean values obtained are quite different, the experimental class with the mean value: 80.00 and the control class with the mean value: 70.56. Then to answer the formulation of the problem and to find out the results of the hypothesis in this research, it was proven in the results of the research that the game application "Mr. Detective" has effective in mastering students' verbs vocabularies with a t_{count} value of 3.488.

In the hypothesis, it is known that if $t_{count} > t_{table} (0.05) = 1.669$, it means that H_a is accepted and H_o is rejected. Therefore, with a value of $3.488 > 1.669$, the hypothesis in this research is answered by stating that H_a is accepted = there is a significant effect on verbs vocabularies mastery for students at Tenth Grade of SMA Swasta Cerdas Murni by using the game application "Mr. Detective".

REFERENCES

- Arikunto, Suharsimi. (2006). *Prosedur Penelitian: Suatu Pendekatan Praktek*, Jakarta : PT. Rineka Cipta.
- Arikunto, Suharsimi. (2010). *Prosedur Penelitian Suatu Pendekatan Praktik*. Jakarta : PT Rineka Cipta.
- Arikunto, Suharsimi. (2014). *Prosedur Penelitian Suatu Pendekatan Praktik*. Jakarta : Rineka Cipta.
- Hornby, A. S. (2010). "Oxford Advanced Learner's Dictionary of Current English", English Dictionary (5th ed) (Oxford: Oxford University Press, p. 1662).
- Astuti, Jatmiko Puji. (2014). *The Use of Cooking Academy Game to Enrich Vocational Students' English Vocabulary (A Classroom Action Research at the Tenth Grade Students of SMK N 1 Mojosongo in the Academic Year of 2012/2013)*. Universitas Negeri Semarang.
- Asyiah, D. N. (2017). *The Vocabullary Teaching and VocabullaryLearning : Perception, Strategies, and Influences on Students' Vocabullary Mastery*. Jurnal Lingua Scientia.
- Bintz, W. P. (2011). *Teaching Vocabulary across the Curriculum*. Middle School Journal.
- Delahunty, G. P. and Garvey, J. J. (2010). *The English Language from Sound to Sense*. Colorado: Library of Congress Cataloging-in-Publication Data.
- Dykes, Barbara. (2007). *Grammar for Everyone*. Victoria: Acer Press.
- Faliyanti, Eva. and Sari, EviPuspita. (2018). *The Influence of Using Hangaroo Game Towards Students' Vocabullary Mastery*. Intensive Journal : University of Metro.

- Hanson, S. and Padua, J. F. M. (2011). *Teaching Vocabulary Explicitly*. Hawai: Pacific Resources for Education and Learning.
- Harmer, Jeremy. (2007). *How to Teach English*, (2nd Edition). Pearson Education Limited.
- Harmer, Jeremy. (2011). *The Practice of English Language Teaching*. London: Longman.
- Hwang, W-Y.Huang, etall. (2014). *Effects of Using Mobile Devices on English listening Diversity and Speaking for EFL Elementary Students*. Australasian Journal of Educational Technology 30 (5), 503-516.
- Indaryati, Tri. (2011). *English Alive*. Bogor: Yudhistira.
- James Milton. (2009). *Measuring Second Language Vocabulary Acquisition*. London: Short Run Press Ltd (p. 3).
- Jonas. (2013). *The Effects of English Vocabulary Mastery on Geometry Achievement*. Florida (p. 5).
- Kaswan, Suprijadi. (2016). *Research in English Education*. Bandung: Putra Praktisi.
- Kaswan, etall. (2016). *Metode dan teknik penulisan karya ilmiah*. Edisi 2 (2015) Revisi 1 (2016). Bandung: STKIP SILIWANGI Press.
- Kurniati, Erisa. (2018). *Game on Android App in Support The Students' English Learning*.
- Marzuki, H. (2015). *Improving Students' Vocabullary Mastery by Using Pictures Media at The Third Grade of SDN 010 Kepenuhan*. Journal Mahasiswa Prodi Bahasa Inggris.
- Nasution, Firdaus. (2014). *Increasing Students' Ability in Mastering Vocabulary in Reading Text by Using Two Stay-Two Stay at Eleven Years Of MAS Ishlahiyah Panipahan Riau*, thesis: UINSU.
- Paulins, N., Signe, B., and Irina, A. (2014). *Learning Content Development Methodology for Mobile Devices*. Procedia Computer Science, 43, 147 -153.
- Polem, Abdul Muhsin. (2017). *The Implementation of Simon Say Game to Improve Students' Vocabulary Mastery in Learning English at MTs*. Laboratorium UIN-SU Medan. Medan: Universitas Islam Negeri Sumatera Utara.
- Reverso Dictionary. (2014). *English Collins Dictionary-English Definition & Thesaurus*.
- Richards, Jack C. and Richard Schmidt. (2010). *Dictionary of Language Teaching and Applied Linguistics*. Fourth Edition. Great Britain: Pearson.
- Sari, Yuni. (2017). *The Effect of Spelling Bee Game on Students' Vocabulary Mastery*. Banda Aceh: UIN AR-RANIRY.
- Schmitt, N. (2010). *Researching Vocabulary: A Vocabulary Research Manual*. New York: Palgrave Macmillan.

- Sugiyono. (2013). *Metodelogi Penelitian Kuantitatif, Kualitatif, dan R&D*. (Bandung : ALFABETA)
- Sugiyono. (2016). *Metode Penelitian Kuantitatif, Kualitatif dan R & D*. Bandung : Alfabeta
- Sugiyono. (2017). *Metode Penelitian Kuantitatif, Kualitatif dan R & D*. Bandung : Alfabeta, CV.
- Utami Y. (2014). *Improving Students' Vocabulary Mastery using Crossword Puzzle for grade VII of SMP N 2 Sreandakan*. Yogyakarta State University.
- Yulianto. (2010). *The Use of Software Games to Improve Students' Vocabulary Mastery*. Surakarta: Universitas Sebelas Maret