



Reading Comprehension and Interactive Multimedia in English Classroom

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ABSTRACT

The study aim is to describe (1) whether or not the use of interactive multimedia improve students reading comprehension in the Eighth-Grade of SMP Negeri 4 Panca Rijang and (2) whether or not the use of interactive multimedia interest students 'in learning reading comprehension in the Eighth-Grade of SMP Negeri 4 Panca Rijang. This research employed mixed method design that applied experimental and control group. The population of the research was the Eighth Grade students of SMP Negeri4 Panca Rijang. Total number of population was 82 students and two classes of them were taken as sample by using cluster sampling technique, class VIII.C as experimental group and class VIII.D as control group. The number of each class was 20 students so the total sample of the research was 40 students. The result of data analysis showed that there was significant difference between achievement of the students who used interactive multimedia and those who did not use interactive multimedia (conventional technique) in reading comprehension. It was proved by the mean score of experimental group was higher than control group in post-test (59.35>46.75). Furthermore, the result of the t-test value (3.581) was greater than t-table ($\alpha = 0.05$; $df = 38$; $t\text{-table} = 2.021$) which means that H_1 was accepted. The data analysis of questionnaire showed that the students had high interest toward the use of interactive multimedia in reading comprehension. It was supported by 4 students (20%) who were strongly interested, 14 students (70%) who were interested and 2 students (10%) who were moderate. The mean score of students' answers in questionnaire (79.55) was classified as interested category. Based on the data analysis, the researcher concluded that: (1) the application of interactive multimedia enhanced the students' ability in reading comprehension; (2) the application of

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interactive multimedia strategy in reading comprehension was interesting for the students.

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INTRODUCTION

Nowadays, development science and technology require people to increase their knowledge and experience. One way to increase their knowledge is must read an update information. Reading is one step to study more effectively. By read many textbooks, article, short story and a novel, it can develop our memory, comprehension, and more knowledge. Reading is a good way to increase our science and own knowledge. Reading activity for many purposes, sometimes we read, for instance, to gain information and existing knowledge, to critique awriting style and writer's ideas or another.

Reading is one of the basic communicative skill, but it has a very complex process. Reading comprehension is a movement to know what the data are given by the author in the composed frame. In this case, reading can be said as an intelligently handle, checks, and inquire questions approximately what the content is almost. Leonard (1961) states that reading includes nothing more than relating sound picture, that is "spelling" while Robert Karim (1980) characterizes that reading is a handle direction the thoughts of the creators.

Reading comprehension is not just reading with a loud voice, but reading is established to understand the meaning of the word, sentences, and paragraph sense relationship among ideas as it is. If a student just reads loudly but can't understand the content of the text, it means that he fails in comprehending the passage (Simanjuntak 1998:4).

The hypothesis of comprehension expects that compelling understanding is a work of the relationship between show data and dynamic information and that persuasive communication, subsequently, depends on the degree to which audience and speakers share a common semantic "field." (Buhler, 1908). When

planning understudies for a reading action, we can offer assistance them gotten to be mindful of relevant earlier information, while we judge whether or not that information is adequate for comprehension of the content. Moreover, that point we will be able to make knowledgeable decisions about reading assignments and instruction and related concepts, (Langer, 1981:153).

Related the information above we can conclude that reading comprehension is an activity to find the main idea of the text and then we can know what is the message that writer will give to the reader. Reading comprehension also can say that we are trying to see how the writer sees something that they ever do or just in their fantasy. We can also say that reading is about understanding the words, sentence, and paragraph and make an interpretation of the text.

Educating reading comprehension for junior high school understudies must be diverse from children in rudimentary school since of their diverse characteristic of a mental foundation. Peer endorsements may be impressively more vital for the understudy than the consideration of the instructor which, for more active children is so significant. It is critical for considering their classmates as the inspiration for profound learning of making strides the teaching-learning prepare of perusing. Understudies must be empowered to reply the content and circumstance with their contemplations and involvement, Or maybe than fair replying the address and doing theoretical exercises. English educator must deliver them assignments which they can do, Or perhaps than mortifying chance.

As we know most of the teacher only use conventional teaching in the class, so the researcher has an idea to apply a new technique to teach student reading comprehension, because a new technique can

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attract student interest. A technique can bring the students easy to comprehend the lesson. The technique of teaching reading is very important to influence the student to be a good reader. The good teacher must make an improvement to their methods or technique so the student easy to understand what the teacher teach to them.

Related to the statements above, the researcher doesan observationon the Eighth-Grade students of SMP Negeri 4 PancaRijang. The researcher found many problems in teaching learning English. The crucial problem is the students' comprehension. The problem is, the students felt bored to read a text because it is uninteresting. The students did not know the structure of the sentence, it makes the students work hard to translate the word in sentence the next.

Based on the statement above the researcher try to use a strategy in teaching, that is using interactive multimedia. A technique can help students because of a learning strategy for students more effective than without technique. Because of teaching by a technique the students more effective in learning. It is suitable with that Al-A'ny said that to improve the educational productivity, some of the teaching staff sought to a mainstream technology in education, developing traditional techniques and using new educational methods (Al-A'ny, 2000).

Based on the problems discussed previously, the researcher is inspired to apply this technique in teaching English reading and takes a title of this proposal "Increasing Students' Reading Comprehension by Using Interactive Multimedia in the Eighth-Grade of SMP Negeri 4 PancaRijang."

METHODS

Research Design

This research would apply mixed method design. Mixed method research is an approach to inquiry that combines or associated both qualitative quantitative forms of research. The researcher used both qualitative and quantitative method. Creswell divides the combination method into two main models: sequential model (sequential explanatory (quantitative-qualitative) and sequential

exploratory (quantitative-quantitative), and concurrent model (concatenation mix) which includes concurrent embedded and concurrent triangulation (balanced mixture). Based on this, researchers are interested to use research methods with the model of Sequential Explanatory (a sequential combination from quantitative to qualitative).

According to Creswell explanatory strategy in mixed methods research is characterized by the collection and analysis of quantitative data in a first phase followed by the collection and analysis of initial qualitative data in a second phase that build on the result of initial quantitative result".

RESULT AND DISCUSSION

Findings

This section the researcher was discussed what about researcher was found in the field of the research. The findings presented of the students' achievement in reading comprehension.

1. The Students' Reading Comprehension

a. Scoring classification of students' pre-test

After giving a test, the researcher analyzed the students' score of VIII.C as experimental group and VIII.D as control group. The scoring classification of the students score is presented in table 1.

Table 1. The Classification of Students' Score for Experimental Group and Control Group on Pre-test

Classification	Score	Experimental Group		Control Group	
		F	%	F	%
Very Good	86-100	0	0	0	0
Good	71-85	0	0	0	0
Average	56-70	2	10	4	20
Poor	41-55	11	55	9	45
Very Poor	0-40	7	35	7	35
Total		20	100	20	100

Based on the table 1, it is known that the students' score in pre-test result of experimental group, most of them were in poor category, 2 (10%) students were classified into average, 11 (55%) students were classified into poor, and 7 (35%) student was classified into

very poor. On the other side, most of students' pre-test score of control group were categorized in poor classification too, 4 (20%) students were classified into average, 5 (25%) students were classified into poor, and 11 (55%) students were classified into very poor.

b. The mean score and standard deviation of students' pre-test

To find out whether or not there is no a significant difference between the experimental group and control group of the pre-test it is shown in the following table 2:

Table 2. The Mean Score and Standard Deviation of pre-test for Experimental Group and Control Group

Class	Mean Score	Standard Deviation
Experimental Group	44	7.04
Control Group	43.80	12.56

Table 2 shows that the mean score of pre-test of experimental group and control group were categorized in average level. Therefore, the researcher concluded that the students' mean score of experimental group was relatively similar with the control group. It means that there was no significant difference between the students' reading comprehension between experimental and control groups before treatment.

c. Scoring classification of students' post-test

At the last meeting after the treatments were performed, the researcher gave the students post-test to know whether or not there would be the students' score improvement. The classification of students' score in post-test is shown in the following table.

Table 3. The Classification of Students' Score for Experimental Group and Control Group on Post-test

Classification	Score	Experimental Group		Control Group	
		F	%	F	%
Very Good	86-100	0	0	0	0
Good	71-85	1	5	1	5
Average	56-70	12	60	4	20
Poor	41-55	6	30	7	35
Very Poor	0-40	1	5	8	40
Total		20	100	20	100

From the table above, it can be seen that most of the students in experimental group were classified into average category, 1 (5%) students were in good classification, 12 (60%) were in average classification, 6 (30%) were in poor classification, and 1 (5%) were in very poor classification. Meanwhile, in the control group, only 1 (5%) student was in good classification, 4 (20%) students were in average classification, 7 (58.33%) students were in poor classification, and 8 (40%) students were in very poor classification.

d. The mean score and standard deviation of students' post-test

The mean score and standard deviation are presented in the table 4 to find out the difference between the post-test score of experimental group and control group.

Table 4. The Mean Score and Standard Deviation of Post-test for Experimental Group and Control Group

Class	Mean Score	Standard Deviation
Experimental Group	59.35	9.37
Control Group	46.75	12.64

The table 4 shows that the mean score of both groups are different after being given treatment. The mean score of experimental group in post-test was increased from 44 to 59.35. It means that the mean score was increased from poor level to average level. On the other hand, in control group the mean score of post-test was increased from 43.80 to 46.75. Both of the mean scores were classified into poor level. Even though it was increased, but the score was not significantly different. It proved that reading comprehension of the

students who used interactive multimedia is better than did not use interactive multimedia.

e. Test of significance (t-test)

The hypothesis stated earlier was tested by using inferential analysis. In this case, the researcher applied independent t-test analysis using SPSS 21.0 program for Windows evaluation version. The purpose is to know whether or not the difference between the result of students' mean score on experimental group and control group is statically significant at the level of significant $\alpha = 0.05$ or non-independent sample, degree of freedom $(N1 + N2 - 2) = 38$. The result of calculation is shown as follow

Table 5. The T-test Value of the Students' Reading Comprehension on Experimental Group and Control Group

Variables	T-test Value	T-test Table
Pre-test	0.062	2.021
Post-test	3.581	2.021

Based on the students' result obtained and stated in findings above, the researcher used t-test in inferential statistic through SPSS 21.0 program for Windows evaluation version to test the hypothesis. In pre-test, the researcher found that the t-test value was lower than the t-table ($0.062 < 2.021$). It means that H_0 is accepted and H_1 is rejected. While in relation to the finding of post-test, the t-test value was higher than the t-table ($3.581 > 2.021$). This means that H_0 is rejected and H_1 is accepted, on significant level of $\alpha = 0.05$. It means that the use of interactive multimedia increase students' reading comprehension in the Eighth-Grade students of SMP Negeri 4 Panca Rijang.

2. The Students' Interest

The main aim to distribute the questionnaire to the students in this research is to know about students' interest toward the application of listen-read-discuss strategy in reading comprehension. The questionnaire was distributed to the students of VIII.C (experimental group) after given a post-test. The questionnaire was answered individually

based on the students' opinion after the treatment was conducted in applying interactive multimedia. The data was analyzed by using Likert Scale. The results show that the students were interested in the application of clustering technique in writing analytical exposition text. These results can be seen in the table below.

Table 6. The Rate Percentage of Students' Interest

Category	Interval Score	Frequency	Percentage
Strongly Interested	85 - 100	4	20
Interested	69 - 84	14	70
Moderate	52 - 68	2	10
Uninterested	36 - 51	0	0
Strongly Uninterested	20 - 35	0	0
Total		20	100.0

In relation to the percentage analysis of students' interest on the table 6, the analysis showed that there were no students who state negative statement to the application of interactive multimedia in reading comprehension, 4 students (20%) were strongly interested who got score in interval 85-100, 14 students (70%) were interested in interval 69-84, and 2 students (10%) were moderate in interval 52-68. The table above indicates the students were strongly interested in the application of interactive multimedia in reading comprehension. This is supported by the following table.

Table 7. The Mean Score of Students' Interest

Total Respondent	Total of Students' Score	Mean Score
24	1591	79.55

The table 7 shows that the mean score of students' interest was 79.55 which was categorized as interested. Then, it can be concluded that the application of interactive multimedia in reading comprehension is interesting.

Discussion

The discussion section deals with the findings that derived from descriptive statistic and inferential statistics, some theories, and the interpretation of test result both of the groups. After doing that, the researcher generally presented the description of the data that were gained from the questionnaire based on the students' interest toward the application of interactive multimedia.

1. The Students' Reading Comprehension by using interactive multimedia

The description of the collected data through the test as explained in the previous section showed that the students' reading comprehension was improved after the treatment by using interactive multimedia especially for experimental group. It was proved by the mean score of post-test for experimental group was higher than the mean score of pre-test for experimental group ($59.35 > 44$). It became average level from poor level.

Besides that, based on the data in previous section, the reading comprehension of students in experimental group and control group after the treatment is significantly different, where the students who used interactive multimedia had higher score than the students in control group who did not use interactive multimedia in reading comprehension. It was supported by the difference between the mean score of post-test in experimental group (59.33) was higher than the control group (46.75).

This research data indicated that the use interactive multimedia significantly improved the students' reading comprehension. Even though both using interactive multimedia and conventional technique (without using interactive multimedia) could improve the students' reading comprehension, however, the use of interactive multimedia in reading comprehension gave better effect than the use of conventional technique. This result goes in line with this opinion is in the line with Anderson (2003). He said that reading comprehension is a process that involves meaningful construction of an author's

message by the use of prior knowledge, especially the knowledge of the language. Therefore, classroom approaches, Nunan said (2003), need to underline "the silent nature of reading skill and avoid overemphasis on oral reading". Some teachers, however, believe that teaching oral reading is the best approach to teach reading. Furthermore, the result of the research also supports the statement of R. Lehrer - Studies support distinctive differences in ways students retain information gathered and applied using multimedia versus traditional modes of instruction. In a study conducted with eighth graders, R. Lehrer, found that students who learned about the civil war using multimedia had made long lasting connections with the materials while students who learned traditionally had little to no retention of the material on year later. It was also noted that the level of student engagement was significantly higher amongst students with both high and low abilities.

Based on the statistic test in asymptotic significant (2-tailed) column, in pre-test of experimental group and control group, the researcher found that the t-test was lower than t-table ($0.062 < 2.021$). It means that H_0 was accepted and H_1 was rejected. It is concluded that there was no significant difference in pre-test between experimental group and control group. While on statistic post-test result for both groups, it showed that the t-test value was higher than t-table ($3.581 > 2.021$). It means that H_1 was accepted and H_0 was rejected. It is concluded that there was a significant difference between reading comprehension of the students who used interactive multimedia and whom did not use interactive multimedia (conventional technique). In other words, there was an improvement on the reading comprehension after using interactive multimedia in the Eighth-Grade students of SMP Negeri 4 Panca Rijang.

2. The Students' Interest toward the Using Interactive Multimedia in Reading Comprehension

The result of the findings showed that the Eighth-Grade students of SMP Negeri 4 Panca Rijang had high interest on the using

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interactive multimedia in reading comprehension. It was proved by the mean score of the questionnaire was 79.55 which was classified into interested category. In this research, the interest of students was considered as output because they were expected to have interest toward the using of interactive multimedia. The students gave responses that by applying interactive multimedia, they became interested in reading comprehension. It helped the students to enjoy the reading comprehension and grow more confident and comfortable expressing their own thoughts in reading comprehension. Hidi and Renninger (2006:112) defined "interest as a motivational variable refers to the psychological state of engaging or the predisposition to reengage with particular classes of objects, events, or ideas over time." When someone is interesting, it is likely to have a positive feeling about that topic, continue to have interest in it, and as a result learn (more) about it.

Furthermore, from the explanation about the result of reading test and questionnaire above, it indicated that the using of interactive multimedia was more effective and useful to enhance the students' achievement as well as the students' interest in reading comprehension. It was supported by the

REFERENCES

- [1] Anderson et al. in Carrel and Eisterhold. (1984). *A Schema-Theoretic View of Basic Processor in Reading Comprehension*. Cambridge: Cup.
- [2] Anderson, R.C., & Pearson, P.D. (1984). *A Schema-Theoretic View of Basic Processes in Reading Comprehension*. New York: Longman.
- [3] Block, C.C., & Pressley, M. (2001). *Comprehension Instruction: Research Based Best Practices*. New York: Guilford.
- [4] Bloomfield, Leonard and Clarence L. Branhart. (1961). *Let's Read: A Linguistic Approach*. United State: Wayne State University Press.
- [5] Crafton, L, K. (1983). Learning from Reading: What Happen When Students Generate Their Own reading test mean score of experimental group in post-test was enhanced from 44 to 59.35. It means that the score classification was enhanced one levels up, from poor to average level. Meanwhile, the mean score of students' interest was 79.55 which was classified as interested category.
- [6] Depdiknas. (2006). *Kurikulum 2006: Standar Kompetensi SMP/Mts*. Jakarta: Dharma Bakti.
- [7] Dubin, F. and Eskey, D.E. and Grabbe, W. (1986). *Teaching Second Language Reading for Academic Purposes*. California: Edison. Wesley Publishing Company.
- [8] Elihami, E., & Ismail, I. (2017). Increasing Students' Reading Comprehension through Cognitive Strategies of Senior High School of Sidenreng Rappang Regency. *Edumaspul: Jurnal Pendidikan*, 1(2), 61-70. <https://doi.org/10.33487/edumaspul.v1i2.41>
- [9] Eyres, Ian. (2007). *English for Primary and Early Years: Developing Subject Knowledge*. London: Sage/Open University.

- [10] Feathers. K. M., & Smith, F. R. (1987). Meeting the reading demands of the real world: Literacy based content instruction. *Journal of Reading*, 30, 506-511.
- [11] Gerot and Wignell. (1995). *Types of Genre of Reading*. New York: Oxford University Press.
- [12] Grellet, Françoise. (1981). *Developing Reading Skills*. Cambridge: Cambridge University Press.
- [13] Harste, J. (1978). Instructional implication of Rumelhart's model. In W. (A.) Diehi (Ed.). *Secondary reading: Theory and application. The 1978 Lilly Conference on secondary reading*. Bloomington: Indiana University, School of Education.
- [14] Hasan, H., & Ismail, I. (2020). The Effectiveness Material Based Stories in Improving Students Reading Comprehension. *MAJESTY JOURNAL*, 2(1), 40-46. <https://doi.org/10.33487/majesty.v2i1.332>
- [15] Hidi, Suzanne and K. Ann Renninger. (2006). The Four-Phase Model of Interest Development. *Educational Psychologist*. Vol. 41 (2): 111-127.
- [16] Hill, Walter R. (1979). *Secondary School Reading: Process, Program, Procedure*. Boston: Allyn and Bacon.
- [17] Ismail, I. (2019). The Impact of Interactive Reading Using Local Folktales Stories in Supporting Students' Vocabulary Achievement in Indonesian EFL Learners. *MAJESTY JOURNAL*, 1(2), 25-37. <https://doi.org/10.33487/majesty.v1i2.119>
- [18] Ismail, Ismail, [Converting a Story from Students' Own Language in English to Increase Speaking Ability] (May 31, 2020). Available at SSRN: <https://ssrn.com/abstract=3615172> or <http://dx.doi.org/10.2139/ssrn.3615172>
- [19] Ismail. (2018) Reading in professional context. CV. Rasi Terbit.
- [20] Ismail, I., Mustakim, M., & Samad, I. (2021). Integrating Google Classroom in Teaching: Changing the Learning Culture in Higher Education during a Pandemic. *MAJESTY JOURNAL*, 3(1), 22-36. <https://doi.org/10.33487/majesty.v3i1.954>
- [21] Ismail, Samad, I.S., Muliyadi, Rahmat, Tini. (2021, June). Teaching in the Pandemic COVID-19: Transition to Online Learning after Spending Years in Class. In *2nd Annual Conference on blended learning, educational technology and Innovation (ACBLETI 2020)* (pp. 415-422). Atlantis Press.
- [22] Ismail, Mustakim. (2018). *Fundamental English Conversation*. CV. Rasi Terbit.
- [23] Ismail, I., Tini, T., & Rahmat, R. (2022). Menjadi Dosen Online Inovatif Berbasis Praktik Esensial di Era Disrupsi Pendidikan. *Edumaspul: Jurnal Pendidikan*, 6(1), 55-63. <https://doi.org/10.33487/edumaspul.v6i1.3027>
- [24] Khoshsima, Hooshang. (2014). The Effect of Summarizing Strategy on Reading Comprehension of Iranian Intermediate EFL Learners. *International Journal of Language and Linguistics*, 2(3): 134-139.
- [25] L. Bond, Guy and Bond Wagner, Eva. (1969). *Teaching the Child to Read*. New York: The Macmillan Company.
- [26] Leddy, Thea. (2011). *Reading Comprehension Strategies in a Remedial Elementary Classroom*. Michigan: Northern Michigan University Press.
- [27] Lester and Crow, Allice. (1976). *How to Study: to Learn Better, Pass Examination, Get Better Grades*. USA: Collier Macmilan Publishers.