INTERACTIVE MULTIMEDIA IN EFL CLASSROOM: A STUDY OF TEACHING READING COMPREHENSION AT JUNIOR HIGH SCHOOL IN INDONESIA

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Abstract. The objectives of the research were to find out: (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 Negeri 4 Panca Rijang. 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 (α = 0.05; df = 38; t-table = 2.021) which means that H₁ 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 interactive multimedia strategy in reading comprehension was interesting for the students.

Keywords: Reading Comprehension, Interactive and Multimedia

http://sastra.unifa.ac.id/journal/index.php/jes/index

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 a writing 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 fail 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 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. Some previous studies indicated that the good educator must make an improvement to their methods or technique so the student easy to understand what the teacher teach to them, and it will affect positively to the student’s performance (Mantasiah et al., 2018; Mantasiah et al., 2020, Yusri et al., 2018; 2018, Romadloni et al., 2017).

Related to the statements above, the researcher does an observation on the Eighth-Grade students of SMP Negeri 4 Panca Rijang. 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 Panca Rijang.”

LITERATURE REVIEW

Definition of Reading

Reading is one of the four skills that are taught in schools. Reading is complicated act that involves much more than decoding symbols as quoted in Eyres’s opinion that says reading is a complex process in which the readers actively construct meaning from the text, or not just a passive process of receiving information (Eyres, 2007). This opinion shows the nature of reading, meaning that when someone looks at written or
printed words, she/he will try to understand the meaning of those words. Reading is called as a thinking process involving word recognition, literal comprehension, interpretation and critical/creative thinking skills. Reading is the process constructing meaning from written texts. It is a complex skill requiring the coordination of some interrelated sources of information (Anderson et al., 1984).

Reading is the handle defining the meaning of the content through the dynamic interaction. For case, (1) the reader’s information; (2) the data recommended by the material; and (3) the setting of the reading circumstance (Wixson, Diminishes, Weber, & Roeber, 1987, citing the excellent definition of reading for Michigan).

According to Walter R. Slope (1979) “Reading is what he reader dosage to get the meaning he needs from printed sources”. In the meantime, Fellow L. Bond and Eva Bond Wagner (1969), clarified the meaning of perusing as “the prepare of obtaining an author’s meaning and of translating, assessing, and affecting upon in this way implications.

F. Dubin (1986) clarified the meaning of reading as “reading is fundamentally a cognitive handle, which implies that the brain does most of the work.

We know an extraordinary bargain almost what great readers did when they studied (Pressley & Afflebach, 1995):

1) Good readers are active readers.
2) From the start, they have clear objectives in intellect for their reading.
3) Good readers regularly see over the material some time recently they examined, noting such things as the structure of the content and content segments that might be most pertinent their reading objectives.
4) As they read, great readers habitually make forecasts approximately what is to come.
5) They studied explicitly, persistently making choices around their reading – what to read carefully, what to examined rapidly, what not to discuss, what to rehash, and so on.
6) Good readers develop, change, and address the meaning they make as they read.
7) Good readers attempt to decide the meaning of new words and concepts in the content, and they bargain with irregularities or holes as required.
8) They draw a shape, compare, and coordinated their earlier information with fabric in the content.
9) They think around the creators of the material, their fashion, convictions, eagerly, chronicled milieu, and so on.
10) They screen their understanding of the content, making alterations in their reading as fundamental.
11) They assess the text’s quality and esteem, and respond to the material in a run of ways, both learned people and candidly. Great readers quickly studied distinctive sorts of content.
12) When reading an account, great readers go to carefully to the setting and characters.
13) When reading the interpretive material, these readers habitually build and reexamine outlines of what they have learned.
14) For great readers, content preparing happens not as it were amid “reading” as we have customarily characterized it, but too amid brief breaks taken amid reading, indeed after the “reading” itself has commenced, indeed after the “reading” has ceased.
15) Comprehension is an expanding, nonstop, and complicated action, but one that, for great perusers, is both fulfilling and beneficial.

Aims of Reading

According to Paul S. Anderson in Wiryacahtara (1992), there are seven points of reading, reading for points of interest and reality, reading for first thoughts, reading for grouping or organization, reading for induction, reading for classifying, reading for assessing and reading for comparing of a challenge. Meanwhile, Lester and Alice Crow (1976) classified two general purposes. These purposes includes; Leisure-time reading and more serious reading.

1) Leisure-time reading. It is reading delight which may shift in to take after your favorite wear, comedian, article, and motion picture program.
2) More accurate reading. It is reading to ponder for an object such as to get reliable data and unravel problems.

Types of Reading

Depending on the purposes of reading it moreover can be classified into two sorts of exercises, seriously and broad reading (Christine Natal, 1982)

1) Intensive reading:

Intensive reading implies reading shorter writings to extricate particular data. This movement is likely more the precision movement including learning the detail. The prepare of filtering takes a more conspicuous part here than skimming. The reader is attempting to assimilate all the data given, illustration: Reading dose instruction for medicine.

2) Extensive reading:

Francoise Grellet (1981) characterizes that “skimming is rapidly running one’s eyes over content to get the significance of it. While “scanning is rapidly going through content to discover a specific piece of information”. So if an individual needs to get an address, phone number, a date in a book over a section in arrange to find an original piece of data, which exercises are called “scanning.”

Teaching Reading

Reading may allude to “a familiar prepare of perusers combining data from a content and their possess foundation information to construct meaning” (Nunan, 2003: 68). Besides he includes that the objective of reading is comprehension. There are slightest two viewpoints of instructing reading that require considering. To begin with is whether the learners learn reading to start with time, and the moment is whether the learners as of now have reading aptitudes in the begin with dialect (Nunan, 2003). In expansion he accentuation that on the off chance that the learners are as of now able to read in their L1, what they require to memorize encourage is how to exchange the perusing abilities to the “an unused reading setting and a modern language”. Reading is a noiseless movement. Hence, classroom approaches, Nunan says (2003), require underlining “the quiet nature of reading aptitude and maintain a strategic distance from the overemphasis on verbal reading”. A few instructors, in any case, accept that teaching oral reading is the most excellent approach to instruct reading.

Principles of Teaching Reading

According to Nunan (2003), there are some principles that must be applied in teaching reading. Those are:

1) Exploit the reader’s background knowledge
2) Build a strong vocabulary base
3) Teach for comprehension
4) Work on increasing reading rate
5) Teach reading strategies
6) Encourage readers to transform strategies into skills
7) Build assessment and evaluation into your teaching
8) Strive for nonstop enhancement as a reading teacher

Other principles of learning to reading are:

1) The student must have purpose and motivation to learn.
2) Learning must have meaning for the learner.
3) A background experience and knowledge is necessary for learning
4) The learner must be active in his learning
5) Learning requires the forming of habits
6) Much learning by association
7) Learning requires the practice
8) Favorable attitudes toward learning foster effective learning
9) Students learn at distinctive rates and in various strategy.
10) Learning is more effective if the learner knows for what he is learning

(Sharpen in Simanjuntak, 1998:16)

Reading Comprehension

The main goal of reading is comprehension of what is being read. The comprehension is an interactive process. Anderson (2003) says that reading comprehension is a prepare that includes the important development of an author’s message by the utilize of earlier information, especially the knowledge of language. It means that reading comprehension as a process of negotiating, understanding between the reader and the writer. In most of cases, especially in academic setting, a reader expects a text to make sense.
To support this idea, Harris (1969) explains reading comprehension can be gained from several skills. They are:

1) If the students have a large amount of vocabulary
2) If the students have skill in identifying unfamiliar words
3) If the students have proper habits of posture, holding books, etc
4) If the students have a good eye-movement habits
5) If the students have speed and fluency in silent reading
6) If the students can develop oral reading skill; phrasing, expression, pitches.

Reading with comprehension implies to get it what has been read Dorothy Rubin (1982) states that reading comprehension is a complex mental prepare including some capacities. The two major capacities concern word implications and thinking with verbal concepts.

English has been instructed as a remote dialect in our nation, be that as it may, it does not cruel that result of instructing English in our school is palatable, in spite of the truth that it is instructed persistently for six a long time at the tall school, three a long time at SMP, and three a long time at SMA. Ramelan (1992) says that most SMA graduates are still exceptionally destitute in their reading comprehension since they cannot ordinarily study or get it articles in English dailies.

There are different lists of skills that they feel are basic to understanding. The skills usually listed are as follows (Dorothy Rubin, 1982):

1) React to the sensory images (visual, kinesthetic, taste, smell) suggested by words.
2) Interpret verbal connotations and denotations.
3) Recognize and understand the writer’s purpose.
4) Determine whether the content certifies, denies, or comes up short to express a conclusion almost a gathered reality or condition.
5) Identify the predecessors of such words like who, a few, or they.

Types of Genre in Reading Comprehension

Gerot and Wigell (1995) compile kinds of genre in a different form namely, exposition (analytical), anecdote, report, exposition, narrative, discussion, news item, procedure, explanation, and description. Then they divide those types into technical and humanities. The technical texts such as argument: metal work, report, and so on which related to technical work or workshop. The descriptions of each genre are as follows:

1) Narrative

   The function of this text is to amuse, entertain and to deal with actual or vicarious experience in different ways or as a reconstruction of event (Gerot and Wignell, 1995:204).

2) Anecdotes

   The social function of anecdotes is to share an account of an unusual or amusing incident (Gerot and Wignell, 1995:202)

3) Descriptive

   The genre is aimed at describing a particular person, place or thing

4) Analytical exposition

   This kind is used to persuade the readers that something is an important matter (Gerot and Wignell, 1995:197)

5) Hortatory exposition

   Gerot and Wignell (1995:209) argue that hortatory exposition is kind of text that is used to persuade the readers that something should or should not be the case.

6) Discussion content is the content which presents a risky talk.

7) Explanation text is which tells process relating to forming of natural, social, scientific and cultural phenomena.

8) News thing content is a real content which advises reader or every day daily papers around occasions of the day which are respected as news worth or vital.

9) Procedure text is the text that functions to help us to do a task or make something.

10) Recount text is telling the reader what happened.

11) Report is essentially a description that classifies and describes things in general and specific terms.
7) Spoof is text which tells factual story, happened in the past time with and funny endings. Its social function is to entertain and share the story.

8) Review is one of the text genres. Some text which has been explained deviously, researcher takes text types of narrative.

The Concept of Interactive Multimedia

Agreeing to Modern Oxford American Lexicon, the term “Multimedia” when it alludes to computer applications, they are implied to “incorporate sound and video, particularly interactively”, while when interactive media alludes to craftsmanship or instruction frameworks at that point it is inferred that they are “using more than one medium of expression or communication”. Interpretation of the word “Expression” and “Communication” used in the definition, signifies implicitly the existence of interactive processes. Communication in that respect may be considered as an interactive process between two parties that exchange information and evolve or change as a result. Today, multimedia is used to define an extremely wide area that includes the fields of informatics, telecommunications, the audio-visual production sector, cinema and digital media. In that respect, the term “interactive multimedia” is used to describe a scientific and creative research field within “multimedia” that supports expression or communication through multiple media with the ability to influence and alter their content and context.

The same dictionary states that when the term “Interactive” is used in conjunction to two people or things, it means they have an effect or influence each other. To extend the interactive definition further, this effect may be identified in the physical world, i.e. an action that may trigger a reaction, or a change of the user’s mental state and condition. Both conditions may also co-exist, particularly when the process is temporally examined. Take for example a painter who in order to create a painting interacts both mentally and physically when using the canvas, palette of color and the fitting devices. Despite the fact that these forms halt for the craftsman when the portray is completed, the medium itself proceeds to actuated interaction when another individual is affected, motivated or moved by that portray. This may result into a physical response communicated by the encourage to capture the picture or buy a duplicate or the real craftsmanship, which may at that point be a client as the beginning point for modern intelligent behavior. Additionally, in Modern Media Expressions, this intuitively prepare frequently includes different media.

The term “Interactive Multimedia” may be utilized to portray a real or advanced framework where different media or individuals have an impact on each other through their intelligent behavior. When “Interactive Multimedia” is utilized in fields such as craftsmanship or instruction it infers the utilize of different media utilized for expression or communication and the presence of an energetic user-state or content-altering capability.

Other Values and Benefits of Interactive Multimedia

Instructive Benefits of Mixed media apparatuses (from an Educator’s Point of view):
1) Provide students with openings to speak to and express their prior knowledge.
2) "Allow students to operate as architects, utilizing devices for analyzing the world, getting to and translating data, organizing their individual information, and speaking to what they know to others."
3) Multimedia applications lock in students and give profitable learning opportunities.
4) Empower students to make and plan Or maybe then "retaining representations made by others."
5) Encourages deep intelligent thinking.
6) Create important learning opportunities.

Instructive Benefits of Mixed media devices (from the Student’s Viewpoint):
1) Giving students an opportunity to create records of their claim gives a few instructive preferences.
2) Students that involvement the specific steps required to create compelling interactive media reports ended up way better customers of mixed media archives created by others.
3) Students demonstrate they learn the fabric included in their introduction to a much more prominent profundity than in conventional composting ventures.

4) Students work with the same data from four points of view: 1) as research, they must find and select the data required to get it the chosen subject; 2) as creators, they must consider their expecting group of onlookers and choose what sum of data is required to allow their perusers an understanding of the point; 3) as originators, they must select the suitable media to share the concepts chosen; and 4) as journalists, they must discover a way to fit the data to the holder counting the way of connecting the data for others to recover (Smith, 1993). All of these contribute to understudy learning and offer assistance to clarify the progressed understudy learning that is frequently related with IT-assisted PBL.

Okolo and Ferretti (1998) Appeared that understudy composition speaking to thoughts at the same time through content and sound, video and sound expanded the probability that students will procure an understanding of complex data. It is a sensible guess that utilizing an indeed more extensive extent of media will amplify this impact. The same think about too famous that students with an extensive run of capacities "promptly aced these instruments and were exceedingly persuaded by the opportunity to expand their composting with other media." That is, this expanded assortment of expression improved states of mind as well.

Beichner (1994) A fundamentally subjective, observational examination was conducted over a two-year period while the students worked agreeably to make intuitively shows for a touch-sensitive interactive media booth for the zoo.

**The Concept of Interest**

Interest is a feeling that a accompany or causes special attention to objects or readiness to attend and to stir by certain class of objects in other word, interest is to engage the attention of, to awaken interest in; to excite emotion or passion in behalf of a person or thing; to interest someone in charitable work.

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. Based on the definitions above, the researcher can conclude that interest is a feeling or attitude toward an object that will determine someone’s activity, motivation and behavior.

There are two factors that can influence the students’ motivation as well as their interest in learning; they are internal and external factors. Internal factors such as the students’ attitude towards a subject and the students aptitude or linguistic ability. External factors as school factor, which may involve the teachers, the students, and the lesson material; Family factors such as mental support; and social environmental factors.

**RESEARCH METHOD**

This research would apply mixed method design. Mixed method research is an approach to inquiry that combines or associated both qualitative and 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 (qualitative-quantitative) 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”

The population of this research is the Eighth-Grade students of SMP Negeri 4 Panca
Rijang. The students are spread in four classes. The classes are classified based on the students’ registration number when they register to enter the school. VIII.A consist of 21 students, VIII.B consist of 21 students, VIII.C consist of 20 students, and VIII.D consist of 20 students. The number of population is 81 students.

Table 1.
Population Eight-Grade SMP Negeri 4 Panca Rijang

<table>
<thead>
<tr>
<th>No.</th>
<th>Class</th>
<th>Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>VIII.A</td>
<td>21</td>
</tr>
<tr>
<td>2</td>
<td>VIII.B</td>
<td>21</td>
</tr>
<tr>
<td>3</td>
<td>VIII.C</td>
<td>20</td>
</tr>
<tr>
<td>4</td>
<td>VIII.D</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td>SUM</td>
<td>82</td>
</tr>
</tbody>
</table>

In this research, the sample is taken by using cluster sampling technique. The researcher would choose two classes of four classes of Eighth-Grade students of SMP Negeri 4 Panca Rijang. The researcher select VIII.C consisted 20 students as the experimental group and VIII.D consist of 20 students as the control group. The ability of these classes is varying. That is why they are considered representative for all Eighth-Grade students.

Table 2.
Sample Eight-Grade SMP Negeri 4 Panca Rijang

<table>
<thead>
<tr>
<th>No.</th>
<th>Class</th>
<th>Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>VIII.C</td>
<td>20</td>
</tr>
<tr>
<td>2</td>
<td>VIII.D</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td>SUM</td>
<td>40</td>
</tr>
</tbody>
</table>

The researcher would use a reading test as the instrument to collect the data. The students would be asked to read a text. This test would be administered to the students twice namely pre-test and post-test. The pre-test would be given before treatment to get students’ prior knowledge in reading. The post-test would be conducted to find out the students’ reading comprehension after treatment is give (using interactive multimedia and without interactive multimedia).

Questionnaire was used to obtain information about students’ interest toward the using of interactive multimedia in reading comprehension. The questionnaire consisted of 20 items, 10 items positive statements and 10 items negative statements. The researcher gave optional those are: (1) Strongly agree, (2) Agree, (3) Undecided, (4) Disagree, (5) Strongly disagree. The questionnaire would be distributed to the students of experimental group in post-test, after the treatment is given.
RESULT AND DISCUSSION

The Students’ Reading Comprehension

Table 3.

The Classification of Students’ Score for Experimental Group and Control Group on Pre-test

<table>
<thead>
<tr>
<th>Classification</th>
<th>Score</th>
<th>Experimental Group</th>
<th>Control Group</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>F</td>
<td>%</td>
<td>F</td>
</tr>
<tr>
<td>Very Good</td>
<td>86-100</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Good</td>
<td>71-85</td>
<td>2</td>
<td>10</td>
</tr>
<tr>
<td>Average</td>
<td>56-70</td>
<td>11</td>
<td>55</td>
</tr>
<tr>
<td>Poor</td>
<td>41-55</td>
<td>7</td>
<td>35</td>
</tr>
<tr>
<td>Very Poor</td>
<td>0-40</td>
<td>20</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Based on the table 3, 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.

Table 4.

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

<table>
<thead>
<tr>
<th>Class</th>
<th>Mean Score</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experimental Group</td>
<td>44</td>
<td>7.04</td>
</tr>
<tr>
<td>Control Group</td>
<td>43.80</td>
<td>12.56</td>
</tr>
</tbody>
</table>

Table 4 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.

Table 5.

The Classification of Students’ Score for Experimental Group and Control Group on Post-test

<table>
<thead>
<tr>
<th>Classification</th>
<th>Score</th>
<th>Experimental Group</th>
<th>Control Group</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>F</td>
<td>%</td>
<td>F</td>
</tr>
<tr>
<td>Very Good</td>
<td>86-100</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Good</td>
<td>71-85</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>Average</td>
<td>56-70</td>
<td>12</td>
<td>60</td>
</tr>
</tbody>
</table>
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.

Table 6.
The Mean Score and Standard Deviation of Post-test for Experimental Group and Control Group

<table>
<thead>
<tr>
<th>Class</th>
<th>Mean Score</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experimental</td>
<td>59.35</td>
<td>9.37</td>
</tr>
<tr>
<td>Control Group</td>
<td>46.75</td>
<td>12.64</td>
</tr>
</tbody>
</table>

The table above 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.

**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 α = 0.05 or non independent sample, degree of freedom (N1 + N2 - 2) = 38. The result of calculation is shown as follow:

Table 7.
The T-test Value of The Students’ Reading Comprehension on Experimental Group and Control Group

<table>
<thead>
<tr>
<th>Variables</th>
<th>T-test Value</th>
<th>T-test Table</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-test</td>
<td>0.062</td>
<td>2.021</td>
</tr>
<tr>
<td>Post-test</td>
<td>3.581</td>
<td>2.021</td>
</tr>
</tbody>
</table>

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 H₀ is accepted and H₁ 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 H₀ is rejected and H₁ is accepted, on significant level of α = 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.

**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>
<thead>
<tr>
<th>Category</th>
<th>Interval Score</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly Interested</td>
<td>85 – 100</td>
<td>4</td>
<td>20</td>
</tr>
<tr>
<td>Interested</td>
<td>69 – 84</td>
<td>14</td>
<td>70</td>
</tr>
<tr>
<td>Moderate</td>
<td>52 – 68</td>
<td>2</td>
<td>10</td>
</tr>
<tr>
<td>Uninterested</td>
<td>36 – 51</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Strongly Uninterested</td>
<td>20 – 35</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>20</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

In relation to the percentage analysis of students’ interest on the table above, 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>
<thead>
<tr>
<th>Total Respondent</th>
<th>Total of Students’ Score</th>
<th>Mean Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>24</td>
<td>1591</td>
<td>79.55</td>
</tr>
</tbody>
</table>

The table 9 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 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 H0 was accepted and H1 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 H1 was accepted and H0 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

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 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 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.

CONCLUSION

Based on the findings and discussion, the researcher put forward conclusions as follow:

1. The using of interactive multimedia enhanced students’ reading comprehension in the Eighth-Grade of SMP Negeri 4 Panca Rijang. The achievement in reading comprehension of the students who used interactive multimedia and those who did not use interactive multimedia had significant difference. It was proved by the mean score in post-test of experimental group was higher than the mean score of control group (59.35 > 46.75) and the t-test value on post-test was higher than t-table (3.581 > 2.021).

2. The using of interactive multimedia in reading comprehension was interesting for the Eighth-Grade students of SMP Negeri 4 Panca Rijang. It was supported by the mean score of students’ answer in questionnaire (79.55) which was classified as interested category.

REFERENCES


Yusri, Y., Mantasiah, R., & Jufri, J. (2018). The Use Of Two Stay Two Stray Model in English Teaching to Increase Student’s Learning