Reading Comprehension Achievement on Narrative Text by Using REAP Strategy

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Abstract

This study was conducted to find out whether or not: *(*1) there was a significant difference in narrative reading comprehension achievement of the eighth grade students of SMP Muhammadiyah 1 Palembang before and after they were taught by using REAP strategy, (2) there was a significant difference in reading comprehension achievement on narrative text between the eighth grade students of SMP Muhammadiyah 1 Palembang who were taught by using REAP strategy and those who were not. The population of the study was the eighth-grade students of SMP Muhammadiyah 1 Palembang in the academic year 2015/2016 consisting of 240 students. The sample was 70 students who were divided into experimental and control group that were taken by using purposive sampling technique. To collect the data and to measure students' reading comprehension achievement, the reading comprehension test was given.The test was administered twice as a pretest and posttest. The result from paired sample t-test showed that t-obtained was higher than t-table (11.604>2.0301) at the significance level of $p<0.05$. It means that H_01 was rejected and there was a significant difference in students' reading comprehension achievement of experimental group. The result from independent sample t-test of the post-test in both experimental and control groups showed that there was a significant difference at the significance level of $p<0.05$ and t-obtained was higher than t-table (2.029>1.9955). Therefore, there was a significant difference in reading comprehension achievement between the students who were taught by using REAP strategy and those who were not.

Key Words: *teaching reading, REAP strategy, reading comprehension achievement*

INTRODUCTION

Reading is one of the receptive skills that functions as communication way between a writer and a reader. In reading, there is an activity where the conversation does between the reader and the author through the text (Zare & Othman, 2013). In addition, the reader interacts with the text to get the meaning by using various kinds of knowledge such as linguistics or systemic knowledge and schematic knowledge (Alyousef, 2006).

Reading is a complex activity that requires an integration of memory and meaning construction to get information in society (Alfassi, 2004). According to Zare and Othman (2013), "Students need to know how to learn from reading in order to be able to enter literate society and have a successful communication" (p.187). Therefore, reading is a way to know the world because from reading, the reader can have a lot of information and build good communicative competence.

Unfortunately, some students in Indonesian still have difficulties in comprehending the text. According to the OECD (2013), Indonesia got the 64th rank out of 65 countries in reading achievement in the national language (i.e., Bahasa Indonesia) that participated in Program for International Student Assessment (PISA) (2012). The reading score of the students was only 396 from the average of OECD that reaches 496. Furthermore, according to IEA (2012), the rank of reading comprehension achievement of Indonesian students in national language (i.e., Bahasa Indonesia) was only in the 42nd rank out of 45 countries that participated in Progress in International Reading Literacy Study (PIRLS) 2011. From the facts above, it can be stated that Indonesian students have low achievement and problem in reading even though the reading test was in Bahasa Indonesia.

There are many difficulties that influence the students reading comprehension achievement.

For examples, students have difficulties in finding main idea and detail information from the text. Besides, students are difficult to understand the meaning of words in the text. According to Attaprechakul (2013), "Students often struggle with texts: reading at a painfully slow speed, picking up tiny bits of information while being barely able to grasp even major ideas that directly state" (p.82). In addition, Spivey and Cuthbert (2006) state that students are difficult in mastering reading skill because they have to have adequate skill and comprehension.

Considering those problems in reading, Fan (2010) states that reading strategy instruction can provide an efficient method for teachers to motivate students' participation in learning, teach them how to read effectively and help students become a strategic reader. Therefore, appropriate strategies are needed for helping the reader to determine the meaning of unfamiliar lexical items and for clarifying syntactic ambiguity (Attaprechakul, 2013). In summary, it is necessary for English teacher to find the appropriate strategy that can encourage students' ability in reading comprehension.

One type of the strategies that can be used in teaching reading is REAP strategy. REAP is an acronym that stands for Read, Encode, Annotate, Ponder. REAP strategy was first developed in early 1976 by Eanet and Manzo to stress the use of writing as a means of improving thinking and reading. According to Powell, Ceveland, Thompson, and Forde (2012), "REAP is a strategy that incorporates high order thinking and analysis. It is designed to teach students a variety of ways to respond to a literacy piece using the four key steps: read, encode, annotate, and ponder" (p.46). It means that each stage of REAP strategy makes students respond the content of the text.

The study conducted by Tiruneh (2014) involving eighth-grade students of Upper Primary School Ethiopia found that REAP strategy improved their reading comprehension. Similarly, Fauziyah (2014) who conducted a research involving seventh grade students of MTs Salafiyah Depok found that there was a significant improvement in students' reading comprehension after they were taught by using REAP strategy. The last, Fadhli (2015) did a study to know the effects of REAP strategy on reading comprehension achievement to the male seventh graders of MTS Alqur'an Harsallakum Bengkulu. The study found that REAP strategy was effective to improve male students' reading comprehension achievement.

Therefore, the writer intended to find out whether or not REAP strategy could increase the students' reading comprehension achievement that focused on narrative text. So, the writer conducted a research study entitled: "Improving Students' Reading Comprehension Achievement on Narrative Text by Using REAP Strategy to the Eighth Grade of SMP Muhammadiyah 1 Palembang".

Grabe and Stoller (2001) state "Reading is the ability to draw meaning from the printed page and interpret the information appropriately" (p.187). Reading involves a complex concept to convey meaning from the text accurately and effectively by interpreting and making sense of it (Yildirim & Ates, 2012). It means that reading is the process where the students read the books or article to get the meaning or information from what they read. Reading is a process where the readers constructing meaning from the words. Reading also gives vocabulary knowledge for those who read. In other words, the readers can get ideas and additional information from the text based on the ways of thinking and increasing their vocabulary.

A good reader requires both the ability to recognize words and the ability to comprehend the text. In reading, students have to have good ability in reading comprehension. Comprehension is the goal of reading.Nakamoto, Lindsey, and Manis (2008) define reading comprehension as a process to construct meaning from a text and understand comprehensively. According to Maneghetti, Carrretti, and Beni (2006), "Reading comprehension is a complex cognitive ability requiring the capacity to integrate text information with the knowledge of the listener/reader and resulting in the elaboration of a mental representation"(p.291). Reading comprehension also involves the construction of a coherent mental representation of the text in readers' memory (McNamara & Kendeou, 2011). In short, reading comprehension requires the reader to actually know and understand what they are reading.

REAP is designed to improve thinking in reading and meaningful writing proposed by Eanet & Manzo (1976). This strategy asks students to revisit the text numerous times as they go through the REAP process. Faisal (2013) states that REAP encourages the students to write the main idea by their own words in order to develop students' independent reading skill. According to Fadhli (2015), "REAP primarily is a cognitive-enrichment approach that teacher students to think more precisely and deeply about what they read."

The basic REAP procedure is summarized by its title as follows:

R = Read, read the text by your own

E = Encode, encode the text by putting the gist of what you read in your own words

A = Annotate, annotate the text by writing down the main ideas in terms of the content of the text

P = Ponder, ponder what you read by thinking and talking with others in order to make personal connections, develop questions about the topic.

In annotation, readers are encouraged to summarize what they read and analyze the writer's writing craft. O'Donnell (2004) states, "Annotating helps readers reach a deeper level of engagement and promote active reading" (p. 82). After that, they are going to move to *ponder* stage where they must connect their idea with the text at a higher level through analysis of the information in the text (Tiruneh, 2014).

Therefore, REAP strategy guides the students to understand the text and to make the connection about what they read in order to combine students' thinking to improve their comprehension for active reading.

METHODOLOGY

This study applied quasi-experimental design with non-equivalent control group design. Both experimental and control were given pre-test and post-test, but the experimental group was taught by using REAP strategy and control group was not.

The population of this study was the eighth-grade students of SMP Muhammadiyah 1 Palembang in the academic year 2015/2016 consisting of 240 students. The sample in this study was selected by using purposive sampling by applying these criteria: 1) They were taught by the same teacher; 2) They had similarity in terms of the number of students; 3) They had the same achievement in English. By these criteria, the writer got the data from the teacher in which there were two classes that can be used as the sample which is VIII A and VIII B. In choosing the sample which one would be the experimental group and control group, the students' average score of each class in English. The class that had the higher score was for the control group. Meanwhile, the class that had the lower score was for an experimental group in order to increase students' score by giving the treatment. Based on the data got from the teacher, the average score of VIIA was lower than VIII B. Therefore, VIII A was the experimental group and VIIIB was the control group.

To collect the data, reading comprehension test in the form of multiple choicewas employed. In order to arrange a suitable reading test for the participants, a reading level test which was taken from IRI Jennings test was done. The test consisted of five reading levels which are 2nd level, 3rd level, 4th level, 5th level and 6th level. From the test, it was found that the reading level of the sample was level 3. Therefore, the reading text used for the test consisted of 2 levels above level 3, level 3 and 2 levels below level 3 which are level 1, 2, 3, 4 and 5. So, 70 questions which include 14 passages with readability levels of 1,2,3,4, and 5 to reading comprehension achievement test were arranged. In order to determine the readability levels of the text, Flesch-Kincaid program was used. Next, the content validity of reading comprehension test was checked by expert judgments in order to check the level of difficulty and appropriateness of the 70 items.Based on the expert judgments' suggestion, 70 items of the reading comprehension test was appropriate for the Junior High School students. Next, those items were tried out to 30 non-sample students of the eighth grade in SMP Muhammadiyah 1

Palembang. Corrected-Item Total Correlation by using SPSS 20 to measure the validity of the test was applied. The value of each item in Corrected-Item Total Correlation was compared to *r*-value of Pearson's Product Moment Correlation in the *r* Table. Based on the *r* table, the minimum *r* value for 30 students was 0.355 at the significance level of 0.05 or 5%. So, the items were considered valid if *r* obtained were 0.355 or higher. Based on the tryout calculation, 20 items were removed. For the reliability result, according to Frankel, Wallen, and Hyun (2011), a test is considered reliable when the reliability coefficient of the test is higher than 0.70. In this study, the value of Cronbach'S Alpha was0.946.

To obtain the result of the research, the data of the research were analyzed by using SPSS 20 Version. The paired sample t-test was applied to compare the pre-test and post-test of the experimental group. In addition, independent sample t-test was applied to analyze whether or not there was a significant difference in reading comprehension achievement between students who were taught by using REAP strategy and those who were not.

FINDINGS AND INTERPRETATION
Findings

For descriptive purpose, the scores of reading comprehension test from 70 samples that consisted of 36 students in an experimental group and 34 students in control group were converted and categorized into 5 categories achievement.

Table 1
The Score Distribution of Reading Comprehension Achievement of Experimental Group

Score Interval	Category	Pretest		Mean	SD	Posttest		Mean	SD
		Frequency and Percentage				Frequency and Percentage			
86-100	Excellent	0	0%	-	-	0	0%	-	-
71-85	Good	7	19.44%	74.57	2.99	17	47.22%	78	3.67
56-70	Average	22	61.11%	63.81	4.13	19	52.77%	66.42	3.37
41-55	Poor	6	16.66%	52.33	3.20	0	0%	-	-
<40	Failed	1	2.77 %	40	-	0	0%	-	-
Total		**36**	**100%**	**63.33**	**8.65**	**36**	**100%**	**71.89**	**6.81**

As presented in table 1, there were 36 students in both pretest and posttest. In the pretest, out of 36 students, nobody was in excellent category, 7 students (19.44%) were in the good category, 22 students (61.11%) were in average category, 6 students (16.66%) were in the poor category and 1 student (2.77%) was in failed category. Moreover, the result of posttest showed that nobody was in excellent category, 17 students (47.22%) were in the good category, 19 students (52.77%) were in average category and none of the students was in poor and failed category. Table 1 also showed that the mean total score of pretest and posttest increased 8.56 point from 63.33 in the pretest and 71.89 in the posttest.

Table 2
The Score Distribution of Reading Comprehension Achievement of Control Group

Score Interval	Category	Pretest		Mean	SD	Posttest		Mean	SD
		Frequency and Percentage				Frequency and Percentage			
86-100	Excellent	1	2.94%	86	-	0	0%	-	-
71-85	Good	9	26.47%	76.66	3	13	38.23%	76.30	3.63
56-70	Average	21	61.76%	66.09	4.49	19	55.88%	64.52	3.76
41-55	Poor	3	8.82%	52.66	2.30	2	5.88%	53	1.41
<40	Failed	0	0%	-	-	0	0%	-	-
Total		**34**	**100%**	**67.06**	**8.67**	**34**	**100%**	**68.35**	**7.76**

As presented in table 2, there were 34 students in both pretest and posttest. In the pretest, out of 34 students, one student (2.94%) was in excellent category, 9 students (26.47%) were in good category, 21 students (61.76%) were in average category, 3 students (8.82%) were in poor category and none of the students was in failed category. Moreover, the result of posttest showed that nobody was in excellent category, 13 students (38.23%) were in a good category, 19 students (55.88%) were in average category, 2 students (5.88%) were in the poor category and none of the students was in failed category. Table 2 also showed that the mean total score of pretest and posttest increased 1.29 point from 67.06 in the pretest and 68.35 in the posttest.

The normality and homogeneity test was conducted before the statistical analyses of the data. The result of Kolmogorov-Smirnov test showed that the p-value (Sig.) from pre-test and post-test of the experimental group were 0.909 and 0.405. Meanwhile, the p-value (Sig.) from pre-test and post-test of the control group were 0.867 and 0.919. In addition, the Levene's test showed the p-value was 0.334. Since all the p-values of normality and homogeneity test were higher than 0.05, it can be concluded that the data were both normal and homogeneous.

The Result of Paired and Independent Sample t-Test
Table 3
Summary Statistical of Paired t-Test of Experimental and Control Group

Group	Test	Mean	Mean Difference (Pre & post within)	T-Value (Pre & post within)	Sig.2-tailed (Pre & post within)	Df	t-Table
Experimental	Pre-test	63.33	8.55	11.604	.000	35	2.0301
	Post-test	71.88					
Control	Pre-test	67.06	1.29	1.981	.056	33	2.0345
	Post-test	68.35					

As presented in table 3, the result of paired sample t-test in the experimental group showed that the mean score of post-test (71.88) was higher than the mean score of pre-test (63.33) with 8.55mean difference. It was considered that the scoreshad significant improvement when p (Sig.) < 0.05 (0.000<0.05), and t-value was higher than t-table (11.604>2.0301). Therefore, it can be stated that the alternative hypothesis (Ha1) was accepted and the null hypothesis (Ho1) was rejected. It means that there was any significant improvement the students' reading comprehension achievement after they were taught by using REAP strategy.

Meanwhile, in the control group, the result of the test showed that the mean of pre-test was 67.06 and the mean of post-test was 68.35 with a mean difference was 1.29. The t-obtained was 1.981 at significant level 0.56 (2-tailed) and t-value was lower than t-table (1.981<2.0345). It means that there was no significant improvement in the students' reading comprehension achievement in the control group.

Table 4
Summary Statistical of Independent Sample t-Test of Experimental and Control Group

Post-test	Mean	Mean Difference	T-Value	Sig.	Df	t-Table
Experimental Group	71.88	4.82	2.029	.046	68	1.9955
Control Group	67.06					

Based on the result of the independent sample t-test of the post-test in both experimental and control group, the t-value was higher than t-table (2.029>1.9955) at the significant level of p<0.05 (0.046<0.05) for a two-tailed test. It means that the null hypothesis (Ho2) was rejected and the

alternative hypothesis (Ha2) was accepted. So, it can be stated that there was a significant difference in reading comprehension achievement between the eighth-grade students of SMP Muhammadiyah 1 Palembang who were taught by using REAP strategy and those who were not.

Interpretation

Based on the findings above, some interpretations are drawn as follow:

First, the finding of paired sample t-test showed that REAP strategy could improve students' reading comprehension achievement on narrative text significantly. The mean score of pre-test of the experimental group (71.88) was higher than the pre-test of the experimental group (63.33) with the mean difference 8.55. Meanwhile, in control group, the mean difference of pre-test (67.06) and post-test (68.35) was 1.29. It means there was no significant improvement in students' reading comprehension achievement in the control group.

Second, the finding of independent sample t-test showed that there was a significant difference between students who were taught by using REAP strategy and those who are not. The t-value was 2.029 at the significant level of 0.046<0.05.

Third, the improvement of the students' reading comprehension achievement could be affected by some stages of REAP strategy. *Read* and *Encode* which are the first and second steps of REAP strategy were helpful in giving a general picture of the text read by the students. While reading a text, the students were asked to note some keywords which they thought related to the main idea of the text. This activity could help the students to understand the text even though they did not understand all of the words. Next, by applying the third stage, *Annotation,* the students were asked to focus on finding the three structures of the text (orientation, complication, and resolution)and wrote a summary about the text. This process could improve students' reading development because it could motivate the students to focus while reading the text (Fadhli, 2015). The last stage is *Ponder,* the students were asked to give their opinion to criticize the text or conclude what they have read. This stage was helpful to encourage the students' thinking. Those four stages of REAP strategy showed that when teachers create learning environments that make students are actively engaged during the reading lessons, the students' reading comprehension achievement increases (Tiruneh, 2014).

In conclusion, the significant difference between the experimental and control group was believed to be influenced by the strategy applied in the experimental group

CONCLUSION

Based on the findings and interpretation, it can be concluded as follows. First, there was a significant improvement in students' reading comprehension achievement on the narrative text after they were taught by using REAP strategy. Meanwhile, there was no significant improvement in students' reading comprehension achievement on narrative text in control group because they were not taught by REAP strategy. Second, there was a significant difference in reading comprehension achievement between the students who were taught by using REAP strategy and those who were not. Third, some stages of REAP strategy were effective in improving students' reading comprehension achievement on narrative text.

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