

**IMPROVING STUDENTS' READING COMPREHENSION
ACHIEVEMENT THROUGH RECIPROCAL TEACHING TECHNIQUE
AND MNEMONIC TECHNIQUE**

Agung Restu Batari Siregar, Ujang Suparman, Huzairin
Agungrestu37@gmail.com

Abstrak: Penelitian ini bertujuan untuk mengetahui apakah ada perbedaan signifikan antara siswa yang diajarkan dengan RTT dan MT untuk meningkatkan pencapaian pemahaman membaca siswa. Penelitian dilakukan di SMPN 5 Natar. Peneliti memberikan *pretest* untuk mengetahui kemampuan dasar siswa sebelum diberikan pengajaran. Setelah diberikan pengajaran, siswa diberikan *posttest* untuk mengetahui peningkatan pencapaian pemahaman membaca siswa. Di kelas eksperimen 1, total nilai meningkat dari 1296 pada *pretest* menjadi 2095 pada *posttest*. Rata-rata nilai meningkat dari 49.85 di *pretest* menjadi 80.85 di *posttest*. Di kelas eksperimen 2, total nilai meningkat dari 1310 pada *pretest* menjadi 2180 pada *posttest*. Rata-rata nilai meningkat dari 50.38 di *pretest* menjadi 83.85 di *posttest*. Ini membuktikan bahwa siswa yang diajarkan dengan MT mengalami peningkatan yang lebih baik daripada siswa yang diajarkan dengan RTT.

Abstract. This research was aimed to determine whether there is a significance difference between students who are taught through RTT and MT to increase their reading comprehension achievement. This research was done in SMPN 5 Natar. The researcher administered *pretest* to identify the students' basic skill before the treatments. After given the treatments the students were given the *posttest* to determine the improvement of their reading comprehension achievements. In experimental class 1, the total score is increased from 1296 in the *pretest* to 2095 in the *posttest*. The mean score was improved from 49.85 in the *pretest* to 80.58 in the *posttest*. In experimental class 2, the total score is increased from 1310 in the *pretest* to 2180 in the *posttest*. The mean score was improves from 50.38 in *pretest* to 83.85 in *posttest*. It means that the students who are taught through MT get better improvement than the students who are taught through RTT.

Keyword: *reciprocal teaching technique, mnemonic technique, reading.*

INTRODUCTION

There are four language skills that should be mastered in English, i.e. listening, speaking, reading, and writing. Reading skill is very complex in the education field; therefore students need to be trained in order to have a good reading skill. It is obviously that teaching reading is a part of junior high school program which must be covered in teaching learning process, and the aim of teaching reading skill is to enable students to comprehend the text. In reality most of students at junior high school level still have problems in comprehending a reading text and it is still far from the objectives stated in curriculum of junior high school.

Based on the writers' observation in SMPN 5 Natar, it was found that some problems made the students difficult to comprehend English text. The problem is that; the students' lack of vocabulary, they are lazy to look at the dictionary, and the way of their teacher to teach them is difficult to understand.

Therefore the students tend to be passive in the class. It is because of the students' lack of self confidence in learning English. They are lazy to remember the word and to practice so that, the students lack of vocabulary. They also need translations of unsimplified text. They get difficulty with idiomatic expressions and easily bored to look up dictionary.

Perhaps one may have difficulties to comprehend a passage because of some problems like unfamiliar word in which the text is expressed, the amount of previous knowledge that the reader brings to the text, the complexity of the concept expressed, and vocabulary knowledge. Besides that, the teaching reading technique is also a substantial factor that may become students' problem in

reading. As a matter of fact, the conventional reading technique cannot give satisfied results.

Based on the condition above, this study tries to compare the two teaching techniques that may help teacher to teach reading. That is, Reciprocal Teaching Technique (RTT) and Mnemonic Technique (MT). Reciprocal Teaching Technique (RTT) might be suitable for teaching reading because it is an effective way to improve the students reading comprehension. This technique is used to develop comprehension of expository text in which teacher and students take turns leading a dialogue concerning the section of a text. The systematic sections are incorporated into the technique: predicting, questioning, clarifying, and summarizing. At the beginning, teacher leads the students the steps or section correctly. Thus, students gradually learn to assume the role of teacher in helping their peers construct meaning from text by doing the steps. The structure of the dialogue and interaction of the group members require that all students participate and foster new relationships between students of different ability levels.

Mnemonic is a strategy to make the brain work maximally so that it can make new information as an input more memorable even though it preserve for the long term in the memory. This technique is intended to make the student think harder to get the information from the English text that they read. They try to get the information word by word, sentence by sentence, and paragraph by paragraph.

Considering these, the researcher decides to conduct these two techniques and compares which one is better. This research was administered in SMPN 5 Natar. Therefore, the researcher tries to find out whether there is any significant

difference of students' reading comprehension between students who are taught through Reciprocal Teaching Technique and those who are taught through Mnemonic Technique (MT).

RESEARCH METHOD

The researcher conducts quantitative research with pretest and posttest design this belongs to the true experimental design. The design is used because the researcher wants to compare students' reading achievement between those taught through Reciprocal Teaching Technique (RTT) and those taught through Mnemonic Technique and which technique is more effective. According to Hatch and Farhady (1982: 22) define the basic characteristic of true experimental design into three:

- a. a control group is present
- b. the students are randomly selected and assigned to the group, and
- c. a pretest is administered to capture the initial differences between the groups.

Those are the three basic characteristics allowed the researcher to avoid almost all the problems associated with internal and external validity.

The population of this research is the second grade of SMPN 5 Natar. The researcher takes two classes as the sample of this research; class VIII B as the experimental class 1 that given Reciprocal teaching technique as the treatment and VII C as the experimental class 2 that given Mnemonic Technique as the treatment. The classes were chosen randomly by lottery.

The experimental class 1 was given the treatment using Reciprocal Teaching Technique (RTT) that is a technique that is used to develop comprehension of expository text in which teacher and student take turns leading a dialogue concerning sections of a text. Four activities are incorporated into the technique: *predicting, questioning, clarifying, and summarizing*. It is based on Palinscar and Brown (1984) who developed a technique called reciprocal teaching that taught the student to predict, summarize, clarify, and ask questions for section of a text.

The technique has positive outcomes. Since then, the use of strategies like summarizing after each paragraph have come to be seen as effective strategies for building students' comprehension. The idea is that students will develop stronger reading comprehension skills on their own if the teacher gives the explicit mental tools for unpacking text.

According to Alverman and Phelps (1998), reciprocal teaching has two major features: (1) Instruction and practice of the four comprehension strategies predicting, questioning generating, clarifying, and summarizing and (2) a special kind of cognitive apprenticeship where students gradually learn to assume the role of teacher in helping their peers construct meaning from the text.

According to Rosenshine and Meister (1994), there are four important instructional practices embedded in reciprocal teaching:

1. Direct teaching strategies, rather than reliance solely on teacher questioning
2. Student practice of reading strategies with real reading, not with worksheet or contrived exercises
3. Scaffolding of instruction: student as cognitive apprentices

4. Peer support for learning

Whereas in experimental class 2 was given the treatment using Mnemonic Technique (MT) that is a memory enhancing instructional strategy that involves teaching student to link new information that is taught to information they already know. It means that the researcher tried to lead the students to link or associate the new vocabulary word to the knowledge that they had already known before. Simply, the terms of Mnemonic according to Bruning (1995: 92), are rhymes, saying and other procedures designed to make new material more memorable. In addition, Bruning later states those mnemonic are memory strategies that help people remember information by making it easier to elaborate, chunk, or retrieve it from memory (1995: 85). In short, mnemonic is a strategy to make the brain work maximally so that it can make new information as an input more memorable even though it preserve for the long term in the memory.

Simply, the terms of mnemonic according to Bruning are rhymes, sayings and other procedures designed to make new material more memorable (1995: 92). In addition, Bruning later stated those mnemonics are memory strategies that help people remember information. It helps us learn information by making it easier to elaborate, chunk, or retrieve it from memory (1995: 85). In short, mnemonic is a strategy to make the brain work maximally so that it can make new information as an input more memorable even though it preserve for the long term in the memory.

RESULT OF PRETEST

To get the data on the students' basic reading comprehension ability, the researcher administered the pretest on September 5th, 2015 in experimental class 1 and on September 2nd, 2015 in experimental class 2, in 60 minutes with 30 items. In the experimental class 1, the total score is 1296; the mean score is 49.85, the highest score is 63 and the lowest score is 43. The median score is 50 and the mode is 50 since there were 6 students who got 50. Meanwhile, in the experimental class 2, the total score is 1310; the mean score is 50.38; the highest score is 33. The median score is 51.50 and the mode is 53 since there were 6 students who got 53 (see appendix 17). Look at the tables 2 and 3 below:

RESULT OF POSTTEST

The posttest has been administered on November 12th, 2015 in experimental class 1 and November 9th, 2015 in experimental class 2, in 60 minutes with 30 items. In the experimental class 1, the total score is 2095; the mean score is 80.58; the highest score is 90 and the lowest score is 73. The median score is 80.00 and the mode is 80.00 since there were 10 students who get 80.00. Meanwhile, in the experimental class 2, the total score is 2180; the mean score is 83.85; the highest score is 90 and the lowest score is 73. The median score is 83 and the mode is 83 since there were 8 students who got 83 (see appendix 17) the distribution frequency of post test scores in both classes and statistic computation were completely served in table 4.

THE INCREASE OF STUDENTS' READING COMPREHENSION ACHIEVEMENT

The result of pretest and posttest in experimental class 1 implied Reciprocal Teaching Technique (RTT) taught students to predict, question, clarify and summarize for section of a text had increased the students' reading comprehension achievement. Moreover, the mean of the pretest that is 49.85 increased to be 80.58 in the posttest. Whereas, in the experimental class 2, implied Mnemonic Technique (MT) had increased the students' reading comprehension achievement. Moreover, the mean of pretest that is 50.38 increased to be 83.85 in the posttest.

The significant value (2-tailed) was $p = 0.000 < 0.05$ ($p < 0.05$). H_1 is accepted. It meant that there is a significance difference between those taught through Reciprocal Teaching Technique (RTT) and those taught through Mnemonic Technique (MT). Besides that, there is an increase of students' reading comprehension mean from pretest to posttest that is 30.73. It can be state that there is significant increase of students' reading comprehension after being taught using Reciprocal Teaching Technique (RTT) in experimental class 1 and the students that taught through mnemonic technique (MT). The table below shows the result of paired sample t-test and how the students' reading comprehension score increases significantly from pretest and posttest. By using mnemonic technique (MT), there is also an increase from pretest to posttest score in control class. It is proved from the total score pretest, 1310 up to 2180, where the mean is from 50.38 up to 83.85. It means that the increase of students' reading comprehension achievement in experimental class 2 that taught through

Mnemonic Technique (MT) is higher than experimental class 1 that taught through Reciprocal Teaching Technique (RTT).

DISCUSSIONS

Before conducting the research, the researcher administered the pretest to both classes in order to know the students basic reading comprehension achievement, before they were given the treatments in both classes.

Pretest result indicates that most students had low ability in reading comprehension. The computation of T-Test showed that the two groups had the same level of reading comprehension before the treatments. In other words, the two classes had fulfilled the criteria of equality level and the research could be conducted to both classes. After administering the pretest, treatment were conducted tree times in experimental class 1, who are taught through Reciprocal Teaching Technique (RTT) and experimental class 2, who are taught through Mnemonic Technique (MT).

THE INCREASE OF EACH ASPECT OF READING

In this research the researcher did pretest and posttest. The researcher gives the students pretest before the treatments and posttest after the treatments. In the pretest and posttest questions there are five reading sub skills that are: identifying main idea, interpreting specific information, finding inference, vocabulary and finding reference. Here the finding increases of each aspects of reading sub skills:

1. Identifying main idea, in pretest 1 there are 3 questions about identifying main idea that is questions: 17, 24, and 26. In experimental

class 1 the mean percentage of correct answer is 42.30% and in the experimental class 2 is 43.58%. In posttest there are 4 questions about identifying main idea that is questions: 6, 8 and 12. In experimental class 1 the mean percentage of correct answer is 78.15% and in experimental class 2 is 82.22%. The increases of students mean percentage score of pretest and posttest in experimental class 1 is 35.81% and in experimental class 2 is 38.64%. The gain of increases of pretest to posttest in experimental class 1 and experimental class 2 is 2.83%. It means that Mnemonic Technique (MT) that taught in experimental class 2 is more effective to increase students' ability in identifying main idea than Reciprocal Teaching Technique (RTT) that taught in experimental class 1.

2. Interpreting specific information, in pretest there are 11 questions about interpreting specific information that is questions: 1, 7, 13, 14, 16, 19, 20, 21, 22, 28, and 30. In experimental class 1 the mean percentage score of correct answer is 50.34% and in experimental class 2 is 46.50%. In posttest there are 15 questions about interpreting specific information that is questions: 2, 5, 14, 15, 19, 21, 24, 26, 27, 28 and 29. In experimental class 1 the mean percentage score of correct answer is 82.86% and in experimental class 2 is 84.59%. The increases score of pretest to posttest in experimental class 1 is 32.22% and in experimental class 2 is 38.09%. The gain of increases score in experimental class 1 and experimental class 2 is 5.87%. It means that Mnemonic Technique (MT) that taught in experimental class 2 is more

effective to increase students' ability in interpreting specific information than Reciprocal Teaching Technique (RTT) that taught in experimental class 1.

3. Finding inference, in the pretest there are 6 questions about finding inference that is questions: 4, 5, 9, 11, 23 and 25. In experimental class 1 the mean percentage score of pretest correct answer is 50.63% and in experimental class 2 is 46.18%. In posttest there are 5 questions about finding inference that is questions: 4, 10, 18, 20, 23 and 30. In experimental class 1 the mean percentage score of posttest is 76.94% and in experimental class 2 is 83.96%. The gain score of pretest to posttest in experimental class 1 is 26.31% and in experimental class 2 is 37.78%. The gain of increases score in experimental class 1 and experimental class 2 is 11.47%. It means that Mnemonic Technique (MT) that taught in experimental class 2 is more effective than Reciprocal Teaching Technique (RTT) that taught in experimental class 1.
4. Vocabulary, in the pretest there are 7 questions about vocabulary that is questions: 2, 3, 6, 10, 15, 18, and 29. In experimental class 1 the mean percentage score of pretest correct answer is 53.54% and in experimental class 2 is 52.74%. In posttest there are 2 questions about vocabulary that is questions: 3, 7, 9, 13, 16, 17 and 25. In experimental class 1 the mean percentage score of posttest is 81.90% and in experimental class 2 is 82.41%. The gain score of pretest to posttest in experimental class 1 is 28.36% and in experimental class 2 is 29.67%.

The gain of increases score in experimental class 1 and experimental class 2 is 1.31%. It means that Mnemonic Technique (MT) that taught in experimental class 2 is more effective than Reciprocal Teaching Technique that taught in experimental class 1.

5. Finding reference, in the pretest there are 3 questions about finding reference that is questions: 8, 12 and 27. In experimental class 1 the mean percentage score of pretest correct answer is 48.71% and in experimental class 2 is 41.02%. In posttest there are 5 questions about vocabulary that is questions: 1, 11 and 22. In experimental class 1 the mean percentage score of posttest is 83.10% and in experimental class 2 is 84.61%. The gain score of pretest to posttest in experimental class 1 is 33.39% and in experimental class 2 is 43.59%. The gain of increases score in experimental class 1 and experimental class 2 is 9.2%. It means that Mnemonic Technique (MT) that taught in experimental class 2 is more effective than Reciprocal Teaching Technique (RTT) that taught in experimental class 1.

Based on the finding increase of each aspects of reading above we know that Mnemonic Technique (MT) was more effective to increase students' ability than Reciprocal Teaching Technique (RTT) in five aspects that are: identifying main idea, interpreting specific information, finding inference, Vocabulary and finding reference.

CONCLUSIONS

In line with the result of the data analysis and discussion, the researcher draws the following conclusions:

- a. There is a significant difference of students' reading comprehension achievement between those taught through Reciprocal Teaching technique (RTT) in Experimental class 1 and those are taught through Mnemonic Technique (MT) in experimental class 2, as seen from the result of the hypothesis testing which shows that the value of two-tail significance is smaller than 0.5. It also can be seen from the data of student's pretest and posttest score of both classes.
- b. Mnemonic Technique (MT) is more effective than Reciprocal Teaching Technique (RTT) to help students improve their reading comprehension. In the experimental class 2 the students follows the reading class enthusiastically. They enjoy the lesson because they think easier to do the learning method. The students think easier to understand the text that had been given by looking the keyword and the picture. Whereas, in experimental class 1 the students thinks that the lesson make them confused because the steps in Reciprocal Teaching Technique (RTT) that is; *predicting, questioning, clarifying* and *summarizing* is difficult to understand. It makes them not interested to the lesson.

In addition to the conclusion above, it was found that there were 3 problems found after being taught through Reciprocal Teaching Technique (RTT) in experimental class 1, that is; (1) The students thinks that the four steps in Reciprocal Teaching

Technique (RTT) makes them confusing. (2) Some students were lazy to do the steps. (3) The students think difficult to explain their learning logs to their friends. Whereas, in experimental class 2 that taught through Mnemonic Technique (MT) there are no valuable problems.

SUGGESTIONS

Referring to the conclusion above, the researcher suggest that the teacher should apply Mnemonic technique in teaching reading because the technique has advantage; (1) Makes the teaching learning activity more effective. (2) Improves language skills, especially reading. (3) Makes student easier to understand English text. (4) Makes students actively engaged in process of learning. (5) Increase students' reading comprehension achievement. It proved from the result of research in SMPN 5 Natar, Lampung Selatan in experimental class 2.

REFERENCE

- Alverman and Phelps. 1998. *Reading Strategies scaffolding Students' Interactions with Texts*. New York: Greece Central School District. ([Http://www.greece.k12.ny.us/interaction/ela/6-12/reading/Reading Strategies/Reciprocal Teaching.rtf](http://www.greece.k12.ny.us/interaction/ela/6-12/reading/Reading%20Strategies/Reciprocal%20Teaching.rtf))
- Bruning, R. H. 1995. *Cognitive Psychology and Instruction*. New Jersey: Prentice Hall, Inc.
- Hatch, E. and Farhady, H. 1982. *Research Design and Statistic for Applied Linguistics*. London: New Burry House Publishers, Inc.
- Palinscar, A. S. and Brown, A. 1984. *Reciprocal Teaching Technique of Comprehension Fostering and Comprehension Monitoring Activities Instruction*. New York: College Board Publications.
- Rosensine, B. and Meister, C. 1994. *Reciprocal Teaching: A Review of the Research*. San Diego: Language Arts Cadre 95.