

DIRECTED READING THINKING ACTIVITY (DRTA) ON STUDENTS' READING COMPREHENSION

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Abstract: This research was aimed to investigate whether there was a difference of students' reading comprehension achievement, to find out reading aspect which mostly improved, and to describe the implementation of DRTA with cooperative learning. This research was conducted at SMA Minhajuttullab Way Jepara East Lampung to the eleventh grade students. In collecting the data, the researcher administered reading comprehension test, observation, and interview. The data were analyzed both quantitatively and qualitatively. The result indicated there was a difference of the students' reading comprehension achievement. In addition, understanding specific information aspect mostly improved. Furthermore, the observation and interview results indicated the students participated actively in teaching and learning activities of reading, especially during DRTA activities. Thus, it could be concluded the implementation of DRTA with cooperative learning was effective to improve students' reading comprehension achievement.

Keywords: cooperative learning, DRTA, reading comprehension.

Abstrak: Penelitian ini bertujuan untuk mengetahui apakah ada perbedaan pemahaman membaca siswa, untuk mengetahui aspek membaca yang paling meningkat, dan untuk menggambarkan pelaksanaan DRTA dengan pembelajaran kooperatif. Penelitian ini dilakukan di SMA Minhajuttullab Way Jepara Lampung Timur untuk siswa kelas sebelas. Dalam pengumpulan data, peneliti memberikan tes pemahaman membaca, pengamatan, dan wawancara. Data dianalisis secara kuantitatif dan kualitatif. Hasil penelitian menunjukkan bahwa ada perbedaan dan peningkatan pada pemahaman membaca siswa. Selain itu, pemahaman informasi spesifik merupakan aspek membaca yang paling meningkat. Selain itu, hasil observasi dan wawancara menunjukkan bahwa siswa berpartisipasi aktif dalam kegiatan belajar mengajar membaca, terutama selama kegiatan DRTA. Dengan demikian, dapat disimpulkan bahwa pelaksanaan DRTA dengan pembelajaran kooperatif efektif untuk meningkatkan pemahaman membaca siswa.

Kata kunci: pembelajaran kooperatif, DRTA, kemampuan pemahaman membaca.

INTRODUCTION

Reading is one of essential language skills that must be learnt and developed by all language learners. This is because most of beneficial information and many education sources are come up in a piece of writing that requires every person who wants to get something from it reads it first. This skill is not a matter of reading only, but more crucial than that comprehends what people read. This term is known as reading comprehension. According to Neufeld (2005) reading comprehension can be defined broadly as the process of constructing a supportable understanding of a text. Without comprehension, reading is just an activity to decode printed materials with no understanding.

The way how people can comprehend such a reading text firstly comprehends what the words mean on that text. Since there are abundant number of vocabularies in a written text, whose meaning are partly unknown, the problem of comprehending a text may appear. That is in line with what the observer found in the pre-observation done at SMA Minhajuttullab Way Jepara East Lampung. Based on the interview with the English teacher there, it was found most of the students had the same obstacle in reading comprehension that they could understand only little part of the reading text or sentence due to the fact that they did not know the meanings of almost all the words. In order to realize this goal, learners are supposed to interact with other learners in the classroom through pair and group work.

Cooperative Learning is an approach to group work that minimizes of occurrence of those unpleasant situations and maximizes the learning and satisfaction that result from working on a high performance (Felder and Brent, 2007). In cooperative learning situations there is a positive interdependence among students' goal attainments; students perceive that they can reach their learning goals if and only if the other students in the learning group also reach their goals. In addition, considering the importance of reading comprehension for the students' successful English mastery, it is necessary to overcome the aforementioned problems above. Those problems indicate the need in an appropriate teaching strategy that cannot only help improve students' comprehension ability but that can make them actively participate in the reading class as well.

DRTA is a technique that encourages students to make predictions while they are reading. After reading segments of a text, students stop, confirm or revise previous predictions, and make new predictions about what they will read next (Stauffer, 1969). DRTA is used in each of the three stages of reading, i.e. pre-reading, during reading, and post-reading. DRTA helps students comprehend texts by activating their background knowledge related to the texts and promote the use of reading strategies. Also, the students' comprehension progress before, while and after reading is monitored during the discussion to prevent the students from misunderstanding the texts.

Related with DRTA and cooperative learning researches on reading comprehension, Almanza (1997) examined a study which compared the effectiveness of cooperative learning and the DRTA during reading stories. Fifty three students from sixth grade were taught stories during the 8-week instruction. Findings, based on a reading comprehension test, indicated that the majority of children scored higher in the cooperative reading groups than their counterparts from the DRTA activity groups. The study suggested the use of cooperative learning as an instructional strategy.

Pan (2013) conducted study on English reading comprehension by combining cooperative learning and learning motivation of EFL Freshmen. He used Reciprocal Cooperative Learning, that is, the combination of Inter teaching strategy, SQ3R reading strategy, and Cooperative Learning. He found that EFL freshmen who received Reciprocal Cooperative Learning instruction performed better on English reading comprehension examinations than those who received traditional lecture instruction.

From those previous researches above, this research has been conducted on the benefits of DRTA with cooperative learning. One area that has not yet been researched involves how well DRTA through using cooperative learning affects English students' reading comprehension. Hence, it remains unknown whether students instructed through this particular strategy will be able to be better readers and

acquire higher reading comprehension. Thus, this study hopes to address a new frontier.

The researcher formulated the research questions as follows: (1) Is there any significant difference of students' achievement by using DRTA with cooperative learning and DRTA without cooperative learning on students' reading comprehension? (2) What reading comprehension aspect is the most improved after being taught by DRTA with cooperative learning? (3) How is the implementation of DRTA with cooperative learning on students' reading comprehension?

METHOD

The population was the eleventh grade students of SMA Minhajuttullab Way Jepara in 2016/2017 academic year. The population of this study was the second grade students of SMA Minhajuttullab Way Jepara with the total number was 134 students. The sample consisted of two classes. They are class XI-1 as experimental class and class XI-2 as control class consisting of 28 students. The experimental class was taught by using DRTA with cooperative learning and in control class was taught by using DRTA without cooperative learning. This research used an experimental design. The data was analyzed both quantitatively and qualitatively.

The researcher used three instruments to analyze the data. Those are observation, interview, and reading comprehension test. To analyze the quantitative data, the researcher used SPSS program

version 16.00. The data obtained from tests were compared before and after treatments. The researcher compared the scores between control class and experimental class. All the comparisons of the tests above were analyzed by using independent t-test to know the differences between and after the treatments given. In addition, in attempt to explain the implementation of DRTA with cooperative learning, the researcher conducted observation and interview during the implementation of DRTA with cooperative learning to find out their interest, participation, and obstacles during the three meetings of the treatments.

RESULTS AND DISCUSSIONS

After administering both reading comprehension pre-test and post-test, the result of the pre-test was compared with the result of the post-test to analyze the difference on the students' reading comprehension achievement before and after being taught through DRTA in the control class and experimental class.

The difference between the pre-test and the post-test in the experimental class showed that the students' mean score of reading comprehension post-test was higher than that of in the pre-test, that is, $80.89 > 69.25$. It indicates that the students' reading comprehension achievement has increased after being taught through DRTA into cooperative learning and that shows the improvement on the students' reading comprehension achievement.

The difference between the pre-test and the post-test in the control class showed that the students' mean score of reading comprehension post-test was higher than that of in the pre-test also, that is, $75.21 > 68.00$.

The mean difference between score in experimental class and control class was calculated to determine the significant difference of the three treatments. In determining the significant difference of the mean score in experiment and control class, quantitative data collected through the pre-test and the post-test was examined through statistical analysis. For the purpose of examining the effect of the experimental treatments, a research hypothesis corresponding to the research question was proposed. The hypothesis is as follow:

H_0 : There is no significant difference of the students' reading comprehension achievement after being taught DRTA with cooperative learning and conventional DRTA.

H_1 : There is a significant difference of the students' reading comprehension achievement after being taught DRTA with cooperative learning and conventional DRTA.

From the results of the data analysis, it was found that there was a significant difference of students' reading achievement between those who have been taught using DRTA with cooperative learning and those who have been taught by using DRTA without cooperative learning method.

Table 1. Descriptive Statistics of Students' Reading Achievement

Independent Samples Test

	Levene's Test for Equality of Variances		t-test for Equality of Means						
	F	Sig.	t	df	Sig. (2-tailed)	Mean Dif.	Std. Error Dif.	95% Confidence Interval of the Difference	
								Lower	Upper
Equal variances assumed	.018	.894	3.048	54	.004	3.929	1.289	1.344	6.513
Equal variance not assumed			3.048	53.993	.004	3.929	1.289	1.344	6.513

In Table 1 above shows that the two tail significance shows that $p < 0.05$, ($p = .004$). Referring to the criteria, that is, H_1 was accepted if $p < 0.05$, H_1 was accepted and H_0 was rejected because $.000 < 0.05$. That meant, there was a significant difference on the students' reading comprehension achievement before and after being taught through DRTA into cooperative learning.

Results of statistical analysis pointed to statistically significant difference between the performance in reading comprehension measures of scores in experimental class and control class. Hence, the instructional procedure had contributed to the improvement of the students' reading comprehension. The improvement on the students' reading comprehension achievement could be seen firstly from the significant difference on the students' reading comprehension mean score in the post-test which

was higher than that of in the pre-test. That improvement could be seen in table below.

Table 2. The Difference on the Students' Reading Comprehension Pre-test and Post-test Mean Score in the Experimental Class

	Pre-test	Post-test	Gain
Total students (n)	28	28	
Mean (m)	69.25	80.89	11.64

In accordance with Table 2 above, the difference between the pre-test and the post-test in the experimental class showed that the students' mean score of reading comprehension post-test was higher than the pre-test, that is, $80.89 > 69.25$. Having analyzed the result above, the researcher found out that there had been a significant increase of the students' scores from the pre-test to the post-test. Its better and significant increase indicated there

had been improvement of reading comprehension achievement to the students.

This finding is supported by Erliana (2011), the study was to describe how DRTA strategy can improve reading comprehension. The data were taken from observation, field notes, questionnaire, and achievement test. The result reveals that the DRTA not only improves students' comprehension but also increases their motivation in learning.

In addition, DRTA is a strategy to build independent readers because the readers are equipped with the abilities to set reading purposes, examining reading material based on these reading purposes, and making decisions based on the information

from the text. Moreover, DRTA helps students become aware of the reading strategies, understand the reading process, and develop prediction skills (Stauffer: 1969). DRTA aims to have students employ reading strategies, to elicit their prior knowledge related to the topic of the text, to set a purpose for reading and to encourage them to monitor their comprehension while they are reading.

There were five aspects of reading comprehension measured in this research; identifying main idea, identifying supporting specific information, identifying reference, making inference, and understanding difficult vocabulary.

Table 4.3 The Students' Achievement of Reading Comprehension Aspects

No.	Aspect of Reading	Pre-test	Post-test	Increase
1.	Main Idea	196 (77.77%)	216(85.71%)	20(7.94%)
2.	Specific Information	182(65%)	221(78.92%)	39(13.92%)
3.	reference	203(72.5%)	227(81.7%)	29(9.2%)
4.	Inference	118(70.23)	134(79.76%)	16(9.53%)
5.	Vocabulary	172(61.42%)	210(75.00)	38(13.58%)

Based on Table 4.3 above, DRTA with cooperative learning mostly increased the students' reading comprehension achievement in understanding specific information questions, in which their ability in that aspect was 39 points (13.92%) increased. It was followed by the increase of understanding difficult vocabulary aspect 38 points (13.58%) increased, Understanding reference aspect 29 points (9.2%) increased, identifying main idea aspect 20 points (7.94%) increased, and understanding inference aspect 16 points (9.53%) increased.

Understanding specific information was aspect which most improved after being taught DRTA with cooperative learning. From the result of interview, the students used scanning strategy to help them to comprehend the text to find specific information in a text. Scanning is one of specific reading techniques necessary for quick and efficient reading. When doing scanning, students only locate specific information to what they are looking for, whether it is a name or a date. Scanning strategy has a significant effect to the improvement of eye

movements in reading. If eye movements improve, the reading ability will also improve.

In line with Maxwell (1970), he stated that scanning is defined as the ability to locate specific facts and details quickly that is regarded as a desirable reading skill and is taught in most developmental reading courses. With this technique, the students look for specific information within a text such as dates, names, and places, among others. The finding of this research is in line with the previous research done by Purnama (2012). The result showed that the use of scanning strategy gives positive effect to the achievement of students' reading skill.

From the explanation above, it could be seen that there was an increase of every aspect in reading comprehension from the pre-test to the post-test. Therefore, it could be stated that DRTA with cooperative learning had increased the students' reading comprehension achievement.

In accordance with the implementation of DRTA with cooperative learning, the students had DRTA and comprehended the text together in their groups. There did those three principles of DRTA; namely predicting, reading, or proving/ disproving. This strategy motivated the students to be more active to do their work well, comprehending the text, and grew up their bravery to deliver their ideas. The students did the discussion cooperatively in their groups. While in the conventional DRTA, the students had DRTA under three principles; namely predicting,

reading, and proving/ disproving individually.

However, in conventional DRTA, there were some students who were not active and still shy in giving their opinion although the researcher invited and approached them to be active in delivering ideas during teaching-learning process in the classroom. During the implementation of DRTA with cooperative learning in experimental class, the students were actively involved during teaching-learning process in the classroom. They cooperated with their friends in order to comprehend the text; they would have some comprehension that they can relate to theirs. This strategy is useful to compare what the readers have noticed or done that another did not. Group members can teach one another's strategies in comprehending a reading text.

The positive effects of cooperative learning strategies on students' reading comprehension may also be due to the characteristics of these strategies where all members who work in a heterogeneous group were completely cooperative. Also, these strategies encouraged and reinforced all members of each group to work as a team so as to accomplish the skills and activities they had to do and inquire about. Moreover, the role of the teacher has changed, his role was to guide his students to learn, and to encourage, facilitate and reinforce them to accomplish the activities they had to do in a certain time in the implementation of DRTA.

The implementation of DRTA with cooperative learning had run

effective. There were three principles of DRTA; namely predicting, reading, and proving/ disproving. The procedures of the implementation of DRTA above were supported by Stauffer (1969) that the sequences of DRTA are: students read the title and make prediction; then they read a segment of a text and confirm or revise the previous predictions; finally, the steps continue until they finish reading the whole text. In line with the research had been conducted by Al Odwan (2012), Palincsar & Brown (1984), and Fard (2014). DRTA can improve reading comprehension ability. Moreover, the result showed that cooperative learning was effective to promote students' interaction via working in small groups to maximize their learning and reach their shared goal. Each member of a team was responsible not only for learning what was being taught but also for helping teammates learn, thus creating an atmosphere of achievement.

Students worked through the assignment until all group members successfully understand and complete it. This type of learning approach is not only decreases competitiveness and individualism, but also increases opportunities to actively construct or transform the knowledge among students. Furthermore, cooperative learning produces higher achievement and more positive relationships among students.

However, after getting result from interview with some students related with students' reading comprehension ability, they still found it difficult to make predictions.

In addition, the students tended to translate every single unfamiliar word for them instead of using reading strategies. In order to overcome those problems, the researcher encourages students to make predictions, reading, and prove/disprove the predictions through the activity of DRTA. To facilitate the prediction making, the researcher also displayed a picture and questions related to the content of those text parts and to state whether the predictions were accurate or not, the researcher encouraged the students to support their conclusion with information in the text to promote students' reading comprehension.

CONCLUSIONS

In line with the results of the data analysis and discussions above, the researcher draws the conclusions in two major parts as follows. Firstly, based on the results and discussions of reading comprehension test and implementation of DRTA with cooperative learning, the researcher draws the following conclusions:

1. Using DRTA with cooperative learning improved students' reading comprehension because these activities were rich with more communicative tasks and consequently provided students with new concepts, ideas, and styles of thinking or opinions.
2. The implementation of DRTA with three stages, i.e. predicting, reading, and proving/disproving predictions was effective to improve the students' reading comprehension ability and

engaged them in the teaching and learning activities. The implementation of DRTA especially during the predicting stage taught the students that to comprehend English text, translating every single word composing the text is not a sole strategy to achieve comprehension.

Secondly, in accordance with the results and discussions of the observation and interview, the researcher draws the conclusions of the problems faced by the students in the implementation of DRTA with cooperative learning into the following things.

1. The students get difficulty to make predictions.
2. The students tended to translate every single unfamiliar word for them instead of using reading strategies.

REFERENCES

- Almanza, T. 1997. *The Effects of the DRTA and Cooperative Learning Strategies on Reading Comprehension*. (ERIC Document Reproduction Service No. ED 405 565).
- Al Odwan, T. A. 2012. *The Effect of the Directed Reading Thinking Activity through Cooperative Learning on English Secondary Stage Students' Reading Comprehension in Jordan*. International Journal of Humanities and Social Science, 2, 138-151.
- Erliana. S. 2011. *Improving Reading Comprehension through Directed Reading-Thinking Activity (DRTA) Strategy*. Journal on English as a Foreign Language. Volume 1,1.
- Fard, M.H.. 2014. *The Effect of Question-Answer Relationship (QAR) and Cooperative Learning (CL) on First Grade High School EFL Students' Reading Comprehension*. IJLLALW Journal, 7, 367-383.
- Felder, M.R. and Brent Rebecca. 2007. *Active Learning: Models from the Analytical Sciences*. Washington, DC: American Chemical Soc.
- Neufeld. 2005. *Comprehension Instruction in Content Area Classes*. International Reading Association. 302-312.
- Palincsar, A.S and Brown, A.L. 1984. *Reciprocal Teaching of Comprehension-Fostering and Comprehension-Monitoring Activities*. Cognition and Instruction. 1 (2): 117-175.
- Pan, C.Y. 2013. *The Cooperative Learning Effects on English Reading Comprehension and Learning Motivation of EFL Freshmen*. Washington, DC: American Chemical Soc.
- Purnama, Y.H. 2012. *The Effectiveness of the Use of Scanning Strategy to Improve Students' Reading Achievement of the Second Year of MTs N Wonosegoro in the Academic Year 2011/2012*. (Unpublished research). Central Java: State

Institute for Islamic Studies
(STAIN) Salatiga.

Stauffer, R. G. (1969). *Directing
Reading Maturity as A Cognitive
Process*. New York: Harper &

Row. (Online). Available:
[http://www.nea.org/tools/directe
d-reading-thinking-activity.html](http://www.nea.org/tools/directe
d-reading-thinking-activity.html).
retrieved on Monday, 20
September 2016.