The Effect of Numbered Head Together and Question Answer Relationship Techniques on Students' Reading Comprehension : A Comparative Study

Nuruddin, I. K. Seken, L. P. Artini

Program Studi Pendidikan Bahasa, Program Pascasarjana Universitas Pendidikan Ganesha Singaraja, Indonesia

Email: <u>nuruddin79@gmail.com</u>, <u>putu.artini@pasca.undiksha.ac.id</u>, ketut.seken@pasca.undiksha.ac.id

Abstract

The objectives of the study was, first, to investigate whether there is a significant effect of numbered head together and question answer relationship technique on students' reading comprehension; second to compare the effect of NHT and that of QAR on reading comprehension. Conducted at the eighth grade students of MTs Birrul Walidain NW Rensing in the school year of 2012-2013, this study used posttest only control group design. The sample used was obtained by cluster random sampling technique. The total number of sample was 66 students, divided into three groups; NHT,QAR and conventional technique groups. The study involved 6 sessions of treatment and at the end of the treatments, a reading comprehension posttest was conducted . The data were analyzed by using descriptive statistics and inferential statistics, namely One way Anova and T-Scheffe. The study found that first, there is a significant difference in reading comprehension among students who are treated using NHT, QAR and those treated using the conventional reading technique. Second, there is a significant difference in reading comprehension between students who are treated using NHT technique and those treated using the conventional reading technique. Third, there is a significant difference in reading comprehension between students who are treated using QAR technique and those treated using the conventional reading technique. Fourth, there is no significant difference in reading comprehension between students who are treated using NHT and those treated using QAR technique. In conclusion NHT is likely higher in effectiveness than the other techniques in improving the reading comprehension.

Key words: Numbered Head Together, Question Answer Relationship Techniques, Conventional Reading Technique and reading comprehension

INTRODUCTION

English as an international language has an important role in this modern world. English functions both to absorb and exchange information, science, and technology in international communication. Due to the fact that English plays an important role in this globalization era, the Indonesian government has decided to include English as one of the compulsory subjects in the national curriculum from the junior high school up to university.

The main objective of teaching English in Indonesia based on the 2006 Standard of Content published by the Department of National Education is to prepare students to be able to communicate in various oral and written forms to achieve a certain functional literacy level. Meanwhile, the primary objective of teaching reading in English is as one of language skill is to understand the meaning of functional texts and short essay in the form of procedure, descriptive,

recount, narrative, and report. (Depdiknas 2007)

Reading is a very important part of our lives. Reading enables people to find out information from a variety of texts, written or printed There are several reasons why reading skill is important (Davis Diane & Glenn at www.learn-toread-prince-george.com). First, reading is important because it develops the mind. It means that understanding the written word is one way the mind grows in its ability. Teaching students to read, helps them to develop their language skills. It also helps them learn to listen. Lack of listening skills can result in major misunderstandings which can not helps students to focus on what someone else communicating. Second, reading is a vital means in finding a good job. There are reports and memos which must be read and responded. Poor reading skills increase the amount of time it takes to absorb and react in the workplace. A person is limited in what they can accomplish without good reading and comprehension skills. Third, in line with this reading is also important to the student to explore themselves to new things. It means that through reading the students can explore themselves to new information, new ways to solve a problem, and new ways to achieve one thing because exploration starts from reading and understanding.

In spite of the fact that reading is an important activity in the classroom, we cannot deny that reading is still real problems for students. They assume that the reading texts are difficult. So, the result of students' reading test is still unsatisfactory.

This also occured at MTs Birrul Walidain NW Rensing where most of the students still faced difficulty dealing with English reading texts. They could not understand the text well. They also got difficulties in finding out the main ideas and supporting ideas, inferring cause and effect relationship, and inferring referents of pronouns and adverbs. Based on the result of the reading test, the students' reading achievement was not satisfactory because the students of MTs Birrul Walidain NW Rensing still obtained low score in the reading skill.

On the basis of the researcher's experience as an English teacher at MTs Birrul Walidain NW Rensing and the result of a preliminary observation conducted by the researcher at the school, the researcher found a number of problems the students' concerning reading comprehension in MTs Birrul Walidain NW Rensing which might be caused by the following problems. First, the teacher has a monotonous teaching style. The fact is that the teaching of reading is mainly done monotonously by question and answer and sometimes follows model the procedures common in the Grammar Translation Method or can be said still using the conventional reading technique

Second, students have low motivation in learning English. Since the teachers employed the teaching and learning activities with invaried and unchallenging techniques. In other words, there is no apparent variation in the activities, so most of the students are unmotivated and not interested to learn English.

Third, students have a low ability in reading. The students' reading skill is still far from what is expected. The fact is that it is difficult for the students to understand English texts and to find the information in the texts. This condition prove that the inability of most of the students to answer comprehension questions i.e. literal questions and especially inferential questions correctly.

Fourth, reading materials are selected inappropriately. The teachers present the reading materials taken from one textbook and never use other sources.

Fifth, the students were lack of vocabulary. Generally, the students do not know the meaning of the words in the reading text. They need long time to understand the text.

The observation above seems to indicate that the teachers' strategy in teaching reading is still using conventional. In which the strategy the teachers employ is basically teacher-centered, that is, they dominate the class instruction. The teachers explain, discuss, and talk a lot that overshadow the students' participation in the learning process. Besides, the method usually utilized by the teachers is somewhat conventional, like the Grammar Translation Method. This method is not completely bad: however, if the method is used unrelentingly in all English classroom activities, it may result in a fairly insufficient outcome. Using this method, the teachers often only look at the instruction in the textbook, ask a student or two in the class to read the text or the teachers read the text themselves, translate word by word or sentence by sentence prior to having students answer the questions that follow the text.

Considering the phenomenon above, there is an urgent need to implement a strategy or technique that can help solve these problems. Besides, there is also an urgent need to apply a technique that can involve the teachers and students so that the teachers are not too dominant in the class and students can be involved in cooperative and interesting activities so that they do not have to do the same activities in all English instruction. By engaging students in interesting and cooperative activities, students will likely be more interested and motivated in reading as Brown (2001, 300) highlights that the "love" of reading has propelled many a learner to successful acquisition of reading skills.

In relation to innovative techniques of teaching reading the researcher considered two particular techniques namely Numbered Heads Together (henceforth NHT) and Question Answer Relationship (henceforth QAR). NHT is one of the cooperative techniques designed by Kagan back in 1993 to involve more students in the review of materials covered a lesson and in to check their understanding of a lesson's content (Arends, 2004). It is a simple four-step technique that can be utilized repeatedly with a variety of curriculum materials and be applied to almost all subject areas, to every grade level, and to any places in a lesson (Olsen & Kagan in Yeh, 2004).

While Question Answer Relationship technique refers to a series of instructional activities that help students figure out how to go about answering questions based on a given text and understand different levels of questioning and the relationship between questions and answers (English online).

Furthermore, Roe et al. (1995:107) avow that "QAR focuses on the processes for generating answers to questions and on the relationship between questions and answers. Students are encouraged to think of sources for answers to questions." Vacca and Vacca (1999:60) add that QAR strategy allows students to understand their thinking processes and develop their metacognitive abilities.

To investigate how effectiveness two techniques in other word to examine the effect of two techniques on reading comprehension of the students after treated with those techniques, the study was conducted of the eighth grade of MTs Birrul Walidain NW Rensing in the school year of 2012/2013

The statement problems of the study, first, is there any significant difference in reading comprehension among students who are treated using NHT,QAR and those treated using the conventional reading technique ? Second, is there any significant difference in reading comprehension between students who are treated using NHT technique and those treated using conventional reading technique ?. Third, is there any significant difference in reading comprehension between students who are treated using QAR technique and those treated using conventional reading technique ?. Fourth, is there any significant difference in reading comprehension between students who are treated using NHT and those treated using QAR technique ?

THEORETICAL FOUNDATION Reading Comprehension

People define reading based on their viewpoints. It means that reading is defined according to one's perception. For those who read something for pleasure, magazines, newspapers, tabloids, for instance, will define reading differently with those who read something for more information and knowledge. This fact indicates that the view difference truly exists among readers. Despite the difference, reading generally is defined as grasping meaning from or bringing meaning to the text.

Generally, reading is an activity to get information from a text. When we read, we must understand the implicit and explicit meaning from the text. In short, reading simply means the ability to understand a text. However reading means more than that. According to Braunger and Lewis (2001:3) reading is as a complex, interactive process, using basic skills and advanced strategies to make meaning. It is obvious that in reading activities, we make a communication with the writer by activating our prior knowledge and paraphrasing or drawing conclusion the writer's ideas into our own so that it will help us understand what the writer meant.

Comprehension is the ultimate goal of reading and is necessary if one wishes to learn from textbooks and manuals, enjoy great literature, or simply follow directions in a cook book. Comprehension refers to an activity of associating or connecting a reader's ideas or thoughts with what an author states in the text. It other words, reader's ideas and experiences are indeed crucial to relate what they read from the text.

Based on the explanation above it can be concluded that reading comprehension is the process of understanding the message in the text which needs the activations of readers' experience as the reader's backgroud knowledge.

Numbered Heads Together Technique

Numbered Heads Together is an approach developed by Spencer Kagan (1993) to involve more students in the review of materials covered in a lesson and to check their understanding of a lesson's content (Arends, 2004).

Numbered Heads Together is one of the techniques or structures that was

originally derived from Russ Frank. The structure was then refined and named by Kagan back in 2002. As a cooperative learning technique, Numbered Heads Together is designed to involve more students in reviewing materials covered in lesson and in checking а their understanding of a lesson's content (Arends, 2004). It is a simple technique that can be utilized repeatedly with a variety of curriculum materials and be applied to almost all subject areas, to every grade level, and in any places in a lesson (Olsen & Kagan as quoted by Yeh, 2004).

Numbered Heads Together requires students to interact among the group members to get the answer. In addition, it also requires students in each group to be engaged in positive interdependence, individual and group accountability, which motivates them to enhance one another's learning.

Question Answer Relationship (QAR)

Question Answer Relationship (QAR) developed by Taffy Rapahel is an after reading strategy used to improve students' reading comprehension. QAR is a useful tool in encouraging students to actively read texts and comprehend the categories of questions based on the source of information essential for the answer. QAR, is a reading comprehension strategy developed to "clarify how students approach the tasks of reading texts and answering questions" (Raphael 1986).

"No comprehension activity has a longer or more pervasive tradition than asking students questions about their reading, whether this occurs before, during, or after reading" (Duke and Pearson in Coe and Glass, 2005). In line with this activity, students are required to comprehend different levels of questions based on the texts they read and they occasionally find difficulties in comprehending them. Often students respond to questions with either a literal answer or by stating that "it" is not in the texts. Consequently, the teacher shall facilitate them with an appropriate strategy. The strategy propose to overcome the problems of students in reading

comprehension subject is QAR. It stands for Question-Answer Relationship.

RESEARCH METHODS

The research used posttest only. means that a posttest is conducted after In the present study this design involved three groups which received diferrent experimental treatments. The impact of the treatment was identified through the administration of a posttest.

This research was carried out at the eighth grade of MTs Birrul Walidain NW Rensing in the school year of 2012/2013 and it was conducted in two months in the even semester, the activities were started from treatment up collecting data. The data were the score of the students reading comprehension.

The population of this study was the eighth grade of MTs Birrul Walidain NW Rensing in the school year 2012/2013. There were three classes with total 66 students.

The sample of the study was taken by cluster random sampling. The simple random sampling was done in some steps. First step the result of students' score on the first semester were used to know whether the experimental and control groups were gomogeneous, the homogoneity test used Bartlett's test. The result of Bartlett's test showed the groups were homogeneous. Second step the total sample were 66 students, they were divided into three groups ; NHT,QAR and Conventional Reading Technique. Third step was dividing 22 students to the NHT class, 22 students to the QAR class and 22 students to the Conventional Reading Technique. Four step to determine the experimental and control groups, the researcher drawn a lottery with the result as follow label A for NHT class. B for QAR class and C for Conventional Reading Technique class. Five step was assigning NHT class and QAR class to the experimental group, while the Conventional Reading Technique class to the control aroup.

The data were gained in this research, first, was described using uni

variant anlaysis with the aid of diagram. Then for the first hypothesis analysis using one way variant analysis or Anova and the second up to fourth hypothesis analysis using T-Scheffe.

FINDING AND DISCUSSION Finding

Data of reading comprehension of the students who were taught by using NHT had range score 66 - 80; with n=22, minimum score = 66, maximum score = 80, range 14, means 70.82, and standard deviation = 3.246. Data of reading comprehension of the students who were taught by using QAR had range score 54 -80; with n=22, minimum score = 54, maximum score = 80, range = 26, means =70.10 , and standar deviation=6.308. Data of reading comprehension of the students who were taught by using Conventional Reading Technique had range score 42 - 78; with n=22, minimum score = 42, maximum score = 78, range = 36, means = 60.91, and standar deviation=8.159.

Discussion

The result of first finding on the significant difference of reading comprehension among students who were taught by NHT, QAR and Conventional Reading Techniques, it can be known from the result of one way ANOVA showed that F_{ob} was 14.614, it was higher than F_{cv} (1:22:0.05 and 0.01) was (4.30 and 7.94), here $F_{ob} > F_{cv}$. So the null hypothesis (Ho) which stated that there was no significant difference in reading comprehension among the three group of students who were treated differently using NHT Technique, QAR and Conventional Reading Techniques was rejected. In the other hand alternative hypothesis (Ha) which stated there was a significant difference in reading comprehension among the three group of students who were treated differently using NHT and Technique. QAR Conventional Reading Techniques was accepted. Where the mean score of NHT group (A1) was

70.82, the mean score of QAR group (A2) was 70.10, and the mean score of Conventional Reading Technique group (A3) was 60.91

There are some advantages of Numbered Heads Together (NHT) technique

(http://jurnal.unimed.ac.id/index.php/ellu/art icle/), namely: 1) Easy to use, 2) Students must work together to assist everyone to know and understands, 3) Students responses can reveal misunderstandings and an opportunity for error connection, 4) More students participate because they do not have to perform in front of the whole class, 5) All students show their effort, 6) Lead discussion to serious, 7) Students who are smart can teach the less intelligent students.

Karen (2010) (Online) the benefits of Numbered Head Together are : 1. all students are actively thinking of answer 2. students gain knowledge from their peer's ideas 3. students work together cooperatively 4. students feel confident enough to offer an answer when called upon 5. improves the dynamics of the class.

In QAR students are specifically directed toward increasing metacognition, they are asked to discuss their own thinking by providing ratoonale and source for their answer to question (Dell 'Olio and Dong, 2007). QAR also provides students oppotunities to improve or develop higherlevel thinking processes. As students use various source for exploring question asnwer relationship, they begin to infer, synthesize, make application and cultivate shopisticated ways of thinking.

While in the conventional reading technique, the students did the task individually and the task should be collected in the end of the class. The conventional does not give students to share their ideas and creativity because there is no creativity so the stodents have lack of vocabulary and braveness to explore their capability. Based on the observation during the teaching and learning process, for the poor students it made them more unmotivated to read the text and try to understand the meaning of the whole of the text. They thought that the learning process was not so important, they preferred looking their friends' work to get the good score. The students focused on the the final result which was the good score not on the process.

By considering the three reading techniques used in this research, the NHT technique is likely better among others because NHT is more atractive and students are motivated because students have the help of teammates they are more motivated to share with the class; students who otherwise would not share, do. While there are many facets to self-motivation, one is to build confidence to persist in the face of difficulty. Students build that confidence through Numbered Heads Together Technique because they have the support of their teammates. Students learn to ask for help when they need it, rather giving up and sinking into helplessness, in the process developing one of the skills of self-motivation. Motivation is one of the aspects of emotional quotient that Numbered Heads Together can foster in addition to selfawareness, self control, empathy, and relationship skills. By having them so the students can enhance their reading comprehension.

The interview with the students who were treated using NHT indicated that the activities were ineteresting because they can move around the class work together and share their ideas. This activity could increase their motivation to read. They felt free and were not burdened by a lot of questions that should be collected. The clever students could help their friends how to fill out the map and retell the meaning of sentences.

While in the conventional reading technique the students didi the task individually and the task should be collected at the end of the class. Based on the observataion during the teaching and learning process, for the poor students,it made them more unmotivated to read the text and try to understand the meaning of the whole text. They thougt that the process of learning was not important, therefore they preferred borrowing their friends work to good good mark. They were not motivated to do something to get personal satisfaction but their orientation were product which was good mark.

The second finding on the significant difference of reading comprehension between students who were taught by NHT and Conventional Reading Techniques, it could be known from the result of T-Scheffe showed that, the F_{ob} was 9.15, it was higher than F_{cv} (1:22:0.05 and 0.01) was (4.30 and 7.94), here $F_{ob} > F_{cv}$. So the null hypothesis (Ho) which stated that there was no significant reading comprehension difference in between the students who were treated differently using NHT and Conventional Reading Techniques was rejected. In the other hand alternative hypothesis (Ha) which stated there was a significant difference in reading comprehension between the students who were treated differently using NHT and Conventional Reading Techniques was accepted. Where the mean score of NHT was 70.82 likely higher than Conventional Reading Techniques was 60.90.

Numbered Heads Together is an effective technique that holds each students accountable for learning the material by placed in groups and each person is given a number. It means when the students work together in a group by given numbering, this strategy ensures that each member knows the answer to problems or questions asked by the teacher and they can formulate the ideas in produce a question easier

While Bawn (2010) stated that "Numbered Heads Together was more effective than traditional methods in raising social studies achievement for third grade low to middle income students". The activities conducted in the Conventional Reading Techniques group were reading the texts, discussing difficult and new words for the students, translation and answering the questions related to the text. Those activities, based on the result of the analysis, could not give significant impact achievement to the of reading comprehension of the eighth grade students of MTs Birrul Walidain NW

Rensing. Therefore, the Conventional Reading Techniques was less helpful conducted in teaching reading of the eighth grade students of MTs Birrul Walidain NW Rensing.

Based on the the interview with some of the students about the Conventional Reading Techniques, the technique was boring. They felt very tired to write the translation of the text and answering a lot of questions. The activity was done individually made them feel that reading was boring. So, they were reluctant to read the text.

The observation was done during the teaching learning process; it was found the students who sat at the line were talking and less attention to their teacher. When the teacher explained the text and asked their comprehension about the text they preferred waiting for the answer of the students cleverest in the class. Conventional reading technique was still monotonous in a way that teacher become the busiest and almost dominant person in the classroom. In the other words, the NHT technique was likely better than conventional reading technique in improving the students' reading comprehension.

The third finding on the significant difference of reading comprehension between students who were taught by QAR and Conventional Reading Techniques groups, it can be known from the result of T-Scheffe showed that the F_{ob} was 8.43, it was higher than F_{cv} (1:22:0.05 and 0.01) was (4.30 and 7.94), here $F_{ob} >$ F_{cv} So the null hypothesis (Ho)which stated that there was no significant difference in reading comprehension between the students who were treated differently using QAR and Conventional Reading Techniques was rejected. In the other hand alternative hypothesis (Ha) which stated there was a significant reading comprehension difference in between the students who were treated differently using QAR and Conventional Reading Techniques was accepted. Where the mean score of QAR was 70.10 likely hiaher than Conventional Reading technique was 60.91

From the result of data analysis, it found QAR technique to be more helpful. QAR gives them the freedom to develop their ideas and give chance to the students to answer the question based on the types/model of the questions.

Raphael (1986) in Readence (Online) stated that QAR as a procedure for enhancing students' ability to answer comprehension questions by giving them a systematic means for analyzing task demands of different question probes. Stemming from her concern that students are frequently asked questions in school but receive little or no guidance in knowing how to answer them through QAR instruction, teachers are better able to improve instruction around reading comprehension by developing appropriate questions. These questions can be categorized and modeled to guide the students through the strategy and provide immediate feedback. This strategy does not only improve poor readers' comprehension skills, but also allows students to review, incorporate essential information from the text, and create and answer questions. Most importantly, students understand that the text does not provide all the answers, therefore giving consideration to their own experiences and background knowledge. By implementing and appropriately modeling this strategy, students are provided with the steps required in actively reading and comprehending a variety of materials independently.

The interview with the students found that they were eager to think out their mind. Through this activity, they found that reading was not passive activity; sitting, translating and answering made questions. Reading could be attractive by various question. They motivated to reading the text because they could work together with friend and shared the information.

The fourth finding on the significant difference on reading comprehension between students who were taught by NHT and who were treated with QAR groups , it can be known from the result of T-Scheffe showed that the F_{ob} was 0.72 , it was lower

than F_{cv} (1:22:0.05 and 0.01) was (4.30 and 7.94), here $F_{ob} < F_{cv.}$ So the null hypothesis (Ho) which stated that there was a significant interactional effect in reading comprehension between the students who were treated differently using NHT and QAR Techniques was accepted. In the other hand alternative hypothesis (Ha) which stated there was no a significant difference in reading comprehension between the students who were treated differently using NHT and QAR Techniques was rejected. Where the mean score of NHT was better than QAR. The group of NHT got 70.82 and the group of QAR got 70.10

Number Heads Together (NHT) Technique is one of teaching techniques that derived from a cooperative learning. This strategy is beneficial for reviewing and integrating subject matter. Students with special needs often benefit, especially, when this strategy is used. After a direct instruction of the material has been given, of course, the group supports each member and provides opportunities for practice, rehearsal, and discussion of content material.

NHT is a flexible technique that can be used at a variety of levels. The teacher may start with factual information questions, and as students become more familiar with the strategy, ask questions that require analysis or synthesis of information. Student groups can be given statements such as, "School uniforms help to keep students focused on academics." Students' task is to come to consensus on whether they agree or disagree, giving an explanation of their reasoning.

After the students respond the other groups show their agreement or disagreement by showing a thumb up or thumb down, and then explain their reasoning. Or, if the answer needs clarifying students are encourage to ask other student to expand on the answer. Group learning methods encourage students to take greater responsibility for their own learning and to learn from one another, as well as from the instructor (Terenzini & Pascarella, 1994 in 'www.teachervision.fen.com.). Cooperative

learning has shown its strength, which is, to increase student acvievement, race relations, acceptance of special needs students, and self-esteem (Slavin,1995 in www.teachervision.fen.com)

Comprehension question can be posed to groups, and each person is given a number. The teacher poses a question and students "put their heads together to find out the answers. The teacher calls a specific number to respond as spokesperson for the group. By having students' work together in a group, this strategy ensures that each member knows the answer to problems or questions that are asked by the teacher.

Taffy Raphael developed QAR as a tool for clarifying how students can approach the task of reading texts and answering questions. It helps them realize the need to consider both information in the text and information from their own background knowledge. Without QAR instruction students often over rely on text information or background knowledge.

While (Dell 'Olio and Dong, 2007) QAR has many benefits for students and teachers. This model helps students explicitly understand the relationship between question and answer, as well as the source that can be used to answer questions. Armed with this knowlwdge, students can more strategically read text for meaning and ultimately increase their reading comprehension. Also QAR provides students and teachers with a common and understandable language for exploring and talking about a text and what they are learning from experience of reading it.

QAR is useful as a student tool in providing a basis for three comprehension strategies: locating information, determining text structures and how they convey information, and determining when an inference would be required. (Raphael,1986)

Questions asked before reading are usually *On My Own* QARs. They are designed to access relevant prior knowledge. In creating questions asked during reading it is important to balance text based and inference questions. Search and Locate QARs should dominate and should build to the Author and Me QARs. Finally, after reading questions are primarily Author and Me and On My Own QARs. Please remember that too many *Right There* QARs may indicate and overemphasis on literal, detail questions.

It initially helps children understand that information from both texts and their knowledge base and experiences are important to consider when answering questions. It helps students search for key words and phrases to locate the appropriate information for answering questions. Finally, QARs help students recognize whether or not information is present in the text and, if not, that it is necessary to read "between or beyond the lines" to answer the question.

The interview with the students about the value of NHT and QAR showed that NHT and QAR helped them to be better readers. Almost of the students who were interviewed said that the learning process was attractive and challenging to follow; give support to all students in consideration of challenging questions or problems ; the instruction was clear and easy to understand. The step of learning gave chance to them to increase individually accountability.

In conclusion, NHT and QAR could motivate the students to study seriously in the classroom. Beside that NHT and QAR gave students a chance to share their ideas by their own self and all the students were ready because the teacher would ask them randomly. NHT and QAR were used for experimental groups improve the students' reading comprehension, because both technique were cooperative learning and had same objective in enhancing the students' reading comprehension So there was no a significant interactional effect in reading comprehension between students who were treated using NHT and QAR.

NHT and QAR techniques are both cooperative learning which push the students to make inovation in reading comprehension beside that the two techniques can motivate the students in teaching learning process.

CONCLUSSION

- 1) There was a significant difference in reading comprehension among the three groups of the students who were treated using NHT, QAR and those who were treated using Conventional Reading Techniques. The average score of the group students' reading comprehension taught by using NHT $(X_{A1}) = 70.82$ was likely higher than those taught by using QAR $(X_{A2}) =$ 70.10 and those taught by using Conventional Reading Techniques $(X_{A3}) = 60.91$
- 2) There was a significant difference in reading comprehension between the students who were treated using NHT and those who were treated using Conventional Reading Techniques. The average score of the group students' reading comprehension taught by using NHT (X_{A1})= 70.82 was likely higher than those taught by using Conventional Reading Techniques (X_{A3}) = 60.91
- 3) There was a significant difference in reading comprehension between the students who were treated using QAR and those who were treated using Conventional Reading Techniques. The average score of the group students' reading comprehension taught by using QAR (X_{A2}) = 70.1 was likely higher than those taught by using Conventional Reading Techniques (X_{A3}) = 60.91
- 4) There was no a significant difference in reading comprehension between the students who were treated using NHT and those who were treated using QAR technique.

The average score of the group students' reading comprehension taught by using NHT (X_{A1})= 70.82 was likely higher than those taught by using using QAR (X_{A2}) = 70.1

REFERENCES

Arends, Richard I. 2004. *Learning to Teach,* Sixth Edition. New York: McGraw-Hill Company, Inc.

- Bawn (2010) http://jurnal.unimed.ac.id/(downloaded on 20 March 2013)
- Best, John W.1981. *Reasearch in Education*. New Jersey: Prentice Hall, Inc
- Blair-Larsen, Susan M., and Williams, Kathryn A. 1999. *The Balanced Reading Program.* Helping All Students Achieve Success. Delaware: International Reading Association, Inc.
- Braunger, Jane, and Lewis, Jan Patricia. 2001. *Building a Knowledge Base in Reading.* Second Edition. Delaware: International Reading Association, Inc.
- Brown, H. Douglas. 2001. *Teaching by Principles: An Interactive Approach to Language Pedagogy,* Second Edition. New York: Addison Wesley Longman Inc.
- Coe, Vicky Zygouris & Glass, Catherine. 2005. *Modified* QAR, (Online),(http://www.ford.ucf.edu/strat tegies/accessed on September 7th, 2012).
- Davis Diane & Glenn (no year) :*Why is* reading important. (online), <u>http://www.learn-to-read-prince-</u> george.com/why-is-readingimportant.html (accessed on 18 October 2012)
- Depdiknas. 2007. *Panduan Lengkap KTSP* (*Kurikulum Tingkat Satuan Pendidikan*). Yogyakarta:Pustaka Yustisia
- Dell 'Olio,Jeanine M., Donk, Tony. (2007). Model of Teaching: Connecting Students Learning With Standard. USA. Sage Publication.Inc
- Fraenkel, J.R., & Wallen, N.E (1993). *How* to Design And Evaluate Research in Education (Second Edition). New York: McGraw Hill, INC
- Harris, J, Albert. 1947. *How to Increase Reading Ability.* London: Longman, Green and CO.
- Johnson, David W., Johnson, Roger T, and Holubec, Edythe J. 1994. Cooperative Learning the in Association for Classroom. Supervision Curriculum and Development. (Online),

(http://www.ascd.org/portal/site/ Accessed on September 1st 2012).

- Kagan, Spencer. 1989. The Structural Approach to Cooperative Learning. *Education Leadership*, p. 13-15.
- Karen (2010) http://jurnal.unimed.ac.id (downloaded on 20 March 2013)
- Mann.Prem S. 2001. Introductory Statistic.Fourth Edition. New Jersy :John Wiley and Sons.
- Novak, J. (1998) Learning, Creating and Using Knowledge: Concept Maps as Facilitative Tools in Schools and Corporations; Lawrence Erlbaum Associates, Inc; New Jersey, pp 24-25
- Raphael, T. E. (1986). Teaching Question Answer Relationships, revisited. The Reading Teacher, 39(6), 516-522.
- Readence John E. (no year) *Question Answer Relationship (QAR)* (online) www.reading.nde.learningoptions.net /r esourcecenter/newslett. Accessed: February 4th 2013
- Roe, Betty D., Stoodt, Barbara D., and Burns, Paul C. 1995. *The Content Areas.* Fifth Edition. Boston: Houghton Mifflin Company.
- Sugiyono. 2007. Metode Penelitian Kuantitatif Kualitatif dan R & D. Bandung: Alpabeta
- Vacca, Richard T. & Vacca, Jo Anne L. 1999. *Content Area reading*, New York: Adison-Wesley Educational
- Yeh, Ying-Chi. 2004. Students' Perception of Cooperative Learning Methods in One Senior High School EFL Classroom in Taiwan. Thesis. Taipei: Ming Chuan University.