THE EFFECT OF DRTA STRATEGY ON THE STUDENTS' READING COMPREHENSION OF WISNUWARDHANA UNIVERSITY OF MALANG, INDONESIA

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Abstract:
The purposes of this study are (1) to examine differences in the ability of students who are taught by using DRTA strategy with students who are taught by SQ3R strategy in understanding the text, (2) to examine the effect of DRTA strategy on the ability of students in understanding the content of the reading. The design of this study was two pertest group post-test design. In this study, the experimental group and the control group were measured before and after receiving treatment. The Data analysis by using t-test showed that (1) the results of the data analysis for posttest of DRTA and SQ3R strategy was 3.559 with a significance level of 0.001 (0.001<0.05), it can be concluded that there was significant difference between the result of post-test of DRTA strategy with the results of post-test of SQ3R strategy, (2) the results of the pretest and posttest analysis of DRTA strategy was 0.338 (0.038<0.05), it means that there was the influence of DRTA strategy on the students' reading comprehension.

Keywords: DRTA strategy, reading comprehension

1. Introduction

Reading is an activity that requires the reader's ability to remember, translate, and interpret writing into meaning that can be understood. So in its context, reading is to obtain the correct and appropriate meaning (Zuchdi, 2008: 19). Irfindila (2016), reading is a complex activity or skill carried out by someone to understand the contents and get a piece of information on the text. According to Alek and Achmad (2010: 75); Aizid (2011: 22); Dalman (2013: 2), said that reading is an activity or cognitive process that seeks to find various information contained in writing. Reading is a person's activity to obtain information through text that not only involves vision but also cognitive intelligence as well as good reading strategies and skills.

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Reading is one of the English language skills that must be possessed by students so that they can understand texts easily. If they can understand English texts well, then they will indirectly gain various knowledge through the media of English texts that they read. Therefore, the ability to understand texts is one of the skills that must be built on students so that they adapt and compete in the era of increasingly sophisticated technology today. In other words, the English course aims not only to develop communication, writing and listening skills but also to produce students able to understand English texts well. In order to achieve these goals, reading skills are needed for each student.

Reading skills has a considerable influence on the acquisition of knowledge or information through written media. Reading skills are also a measure of the success of English subjects because having reading skills can make it easier for students to understand the contents of reading. Thus, they can answer all questions related to the text and can issue opinions or write summaries about the contents of the text.

Reading skills is one of the keys to student’s progress. However, in reality, there are still many students who do not enjoy what they read because they do not understand what is read so that the ability to understand reading is reduced because reading is considered a tedious activity. Based on this phenomenon, reading activities must be followed by an understanding of what is read. Reading comprehension is the ability to understand the meaning of written material and includes awareness of strategies leading to understanding (Subadiyono, 2014).

Sufficient reading comprehension will make it easier for students to get information from various written sources. Understanding reading content is the main goal of reading activities. Therefore, a good understanding of the content of reading is very necessary for students because most of the knowledge learned is in written material. The results of reading activities in the form of reading comprehension are determined by the method used.

The ability to understand reading is considered as one of the important skills in English subjects so that the ability to understand reading (reading comprehension) can be used as an important element to assess students’ English competence. However, in the learning process of reading comprehension, there are still many students who get difficulties. Some contributing factors are, (1) students do not have enough vocabulary, (2) the use of reading strategies that are less appropriate. This means that mastery of vocabulary with a reading strategy is related to one another.

Mastering vocabulary can indeed be one of the absolute requirements for understanding an English text. In other words, students who are weak in their vocabulary will face serious problems with reading comprehension. But mastery of vocabulary alone cannot help students understand a text. Therefore, it still needs to be taught skills and strategies in understanding a text (Rapp et.al, 2007). So, in order to students can interpret text requires the involvement of word recognition skills, connecting new information with background knowledge, applying strategies for
reading comprehension skills such as searching for the main thoughts of a text, building relationships, asking questions, make conclusions and predict (meaning and study skills).

Solving problems in reading comprehension can basically be done through effective reading strategies and in accordance with the subject characteristics and dimensions of students’ development. Therefore, the problem to be investigated in this research is related to reading comprehension by implementing a strategy that is relevant or in accordance with the reading strategy.

The reading strategy which is thought to be able to overcome the students' problems in reading comprehension is DRTA (DirectiReadingiThinking Activity) strategy because this strategy not only demands the accuracy of the strategy but also demands the cognitive involvement of the reader. The DRTA Strategy focuses on student involvement with the reading material. According to Jainiyah and Subagio (2015), the DRTA strategy is directed towards achieving a general goal, namely, the lecture observes children as they read in order to diagnose difficulties and offers help when students have difficulty interacting with reading material.

According to Abidin (2012: 80) the DRTA (Direct Reading Thinking Activity) strategy is carried out in several stages of learning as follows: (1) Pre-Reading Stage; This activity is carried out by students before reading, namely: (a) the lecture introduces the reading, by conveying some information about the content of the reading, (b) the students make predictions on the reading they will read. If students are not yet capable the lecturers must provide stimulus to make predictions. A lecturer expects many predictions made by students so that groups will disagree, (2) Reading Stage; the form of activities at this stage are: (a) students read silently discourse to make predictions. At this stage the lecturer must be able to guide students to carry out reading activities to find the meaning of reading, pay attention to students' reading behavior, and help students who find difficulty understanding the meaning of words by giving word illustrations, not directly mentioning the meaning of the word, (b) testing predictions, at this stage students are required to check the predictions they have made. If the predictions made by students are wrong, students must be able to show the location of the error and be able to make a new description of the actual content of the discourse; (3) Post-Read Phase. This activity demands students' thinking activity. Some activities undertaken by students are retesting stories, retelling stories, drawing a picture, diagram, or reading concept map.

There are several research results that proved that the DRTA strategy can improve reading comprehension. The results of Jainiyah and Subagiyo’s research (2015), showed that DRTA strategies can improve students’ ability to understand texts. In each cycle of the study showed an increase in the level of reading comprehension. The first cycle is 76% and the second cycle is 87.5%. It is supported by the results of research by Al Odwan (2011); Novendiana, et. al (2016), showed that the use of DRTA strategy can improve students’ reading comprehension. Students who were taught using the DRTA strategy were better able to understand texts compared to students who were taught with other reading strategies.
Maftuh’s research (2017), showed that the use of DTRA strategy in learning reading comprehension can build students’ reading skills which include: (1) students could identify the main ideas of reading; (2) students could find specific information from the text; (3) students could identify the purpose of reading; (4) students could make conclusions from reading. Slightly different from the study of Erliana (2017), showed that the DRTA strategy could not only improve reading comprehension but could also increase student motivation. In addition to the DRTA strategy that is considered effective for improving reading comprehension is the SQ3R strategy (survey, question, read, recite, review), this strategy was used as a comparison of the DRTA strategy. In other words, the experimental group was taught using the DRTA strategy. While the control group was taught using the SQ3R strategy.

SQ3R is a reading strategy that presents step by step in detail about what must be completed and completed by the reader while reading. The letter S on SQ3R is Survey. This is done at the beginning and should take no more than five minutes (Robinson, 1970). According to Robinson (1970), the reader must begin to “survey” or explore through title and the main heading of the reading to make ideas about the main points of the material. It is also suggested that the reader should read the conclusions of the paragraph at the end of the reading if there is one (Robinson, 1970). Robinson said that by “surveying” the text before reading, the reader will understand more of the main ideas. It allows the reader to organize what he is reading. The second letter is Q (question). This questioning step starts with turning the headings in the text into questions. Questions created by the reader can help the reading process that causes the reader to find answers to these questions. Robinson said that it will arouse curiosity and increase understanding. The next step is “Reading” (R-1). In the reading activity to find answers to questions made from the editorial of the reading. Robinson (1970), the reading portion of SQ3R as “an active search for answers. The second letter R (R-2) shows “Reciting” (retelling). The purpose of the “Reciting” step is to determine the answer to the question that has been made. The lecture asks to discuss the answers to the questions that have been arranged in groups. On this occasion is trained to answer questions without looking at the text or notes that have been made. The last step of the SQ3R strategy is “Review” (R-3). When finished taking notes, the reader must read through the notes, after that the lecture asks each group to present the results of the group discussion along with answers to questions in Students’ Worksheet.

Many research results also show that the SQ3R Strategy can affect the ability to understand student reading. For example, the research of Adila and Weganofa (2018); Wahjuningsih and Istianah (2016); Habeeb & Abbas (2018), indicated that the SQ3R strategy had an influence on students' reading comprehension. Research by Asiri and Momani (2017), indicated that by implementing the SQ3R strategy in learning students could make conclusions by using their own words after completing studying several texts.

Based on the problem of students’ reading comprehension and the effectiveness of the DRTA and SQ3R strategy, so the objectives of this study are: (1) to examine the
difference between the DRTA (Direct Reading Thinking Activity) and SQ3R strategy on students’ reading comprehension?, (2) to examine the effect of influence DRTA (Direct Reading Thinking Activity) strategy on students’ reading comprehension

2. Method

2.1 Research Design
The research design is the plan and structure of the investigation arranged so that the researcher obtains an answer to research questions (Kerlinger, 1986). This study used quasi-experimental because it was not possible to control all relevant variables, except for some of these variables (Syuryabrata, 2006).

The research design used was the two group pretest post-test design (Sugiyono, 2013). In this study, the experimental group was measured before and after being treated using the DRTA reading strategy and the control group was treated with the SQ3R strategy. measurement of research results is carried out before (pretest) and after treatment (posttest). The research design is as follows:

\[
\begin{array}{ccc}
O_1 & X & O_2 \\ \\
O_3 & & O_4 \\
\end{array}
\]

Explanation:
- \(O_1\) = pretest for the experimental group
- \(O_2\) = post-test for the experimental group
- \(O_3\) = pretest for the control group
- \(O_4\) = posttest for the control group
- \(X\) = treatment for the form of DRTA strategy implementation

To ensure that the experimental design will obtain valid research results and to minimize the influence of various factors from outside the research variable, it was controlled by several control variables or some external factors that were thought to influence the research results. Some control variables which were controlled were (1) ability, (2) scope of learning material, (3) learning resources, (4) learning media, (5) learning time, 6) test instruments, and (7) allocation of test time.

2.2 The Subjects of Study
The research subjects were the second-semester students of the Mathematics Education study program at Wisnuwardhana University in the 2018/2019 academic year were 40 people. With the following division: the experimental group was 20 people and the control group was 20 people. The determination of the sample was done by using cluster random sampling techniques. This sampling technique was done by selecting 3 classes from all classes at random. Then choose 2 randomly to determine the experimental group and the control group. So Class A was selected as an experimental group or treated with
a DRTA reading strategy and Class B was chosen as a control group that was treated with an SQ3R reading strategy (Survey, Read, Recite, Review)

2.3 Study Treatments
The treatment in this experiment was in the form of a learning design that implemented a DRTA strategy consisting of three stages, namely: (1) Pre-Reading Stage; at this stage: (a) the researcher introduced the reading, by conveying some information about the content of the reading, (b) the students made a prediction of the reading that will be read; (2) Reading Stage; the form of activities at this stage were: (a) students read silently discourse to make predictions. (b) examining predictions, at this stage students were required to check the predictions they had made. If the predictions made by students were wrong, the students must be able to show the location of the error and be able to make a new description of the actual content of the discourse; (3) Post-Read stage. This activity demanded the students' thinking activity. Some of the activities undertaken by students were to reexamine the contents of the reading or retelling the contents of the reading.

The learning design process was carried out by arranging learning procedures that implemented reading strategies. There were two treatment groups, one group was taught with DRTA strategy and the other group was taught with SQ3R strategy. The syntaxes of learning, learning scenarios, and student worksheets in each group were different. Each group used the allocation of time and gets the same material in learning.

2.4 Instrument of Study
2.4.1 Instrument Type
The instruments used in this study were grouped into two types, namely: an instrument to measure reading comprehension, the instrument was a test. Test instruments consist of 2 types, namely instrument for pretest and posttest. The pretest was used to measure the initial ability that students had before they got treatment. While the posttest instrument was an instrument used to measure learning outcomes (reading comprehension). However, before the instrument was used, the validity and reliability tests were carried out first for the level of reliability.

2.5 The Data Analysis Technique
To analyze the data obtained and to test the hypothesis, the researcher uses a t-test for two data that is used as a comparison of statistical tests. The t-test yields the t-test value used to prove the hypothesis. Hypothesis testing was done to determine the differences and the effect of DRTA strategies on students' reading comprehension. To test the hypothesis in this study used the Analysis of Variance (ANOVA) technique. ANOVA factorial patterns were analyzed by using Statistical Package for Social Science (SPSS) 20.0 for Windows computer software. The decision used to state the differences and the influence of independent variables on the dependent variable was based on the significance level $\alpha = 0.05$ (error level of 5%) or 95% confidence level.
3. Results

3.1 Results of Data Analysis of DRTA and SQ3R Pretest Strategy
Before each group (DRTA and SQ3R groups) received treatment the two groups were given a pretest to find out the level of difference in their ability to understand English texts because if there were significant differences, then the two groups could not be used as a comparison. To find out the extent of the difference in the results of the pretest from each group, data analysis was done using a t-test. As for the results of the pretest, the value can be shown in the following table.

Table 1: The Different Test Analysis Results of the Pretest of the DRTA and SQ3R Groups

<table>
<thead>
<tr>
<th>Variables</th>
<th>Mean of pretest score</th>
<th>$t_{count}$</th>
<th>Sig</th>
<th>Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>DRTA</td>
<td>61.66</td>
<td>1.218</td>
<td>0.227</td>
<td>insignificant</td>
</tr>
<tr>
<td>SQ3R</td>
<td>60.32</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 1 above can be explained that the average value of the results of the different pretest tests on groups treated with the DRTA reading strategy 61.66. Meanwhile, the average value of students taught with the SQ3R strategy is 60.32. Then the average value of the pretest was analyzed by t-test so that the result was a $t_{count}$ equals 1.218 with a significance level equals 0.227 or 22.7%. Because the significance level $>$ 0.05%, it can be concluded that there is no difference in the results of the pretest between the DRTA strategy group and the SQ3R strategy group.

3.2 Hypothesis Testing
a. Posttest Data Analysis on DRTA and SQ3R Strategy
After the two groups were given treatment (group A was taught with DRTA strategy and group B was treated with the SQ3R strategy), a post-test was conducted to determine the level of difference between the two reading strategies. The results of the posttest showed that there was a difference in the ability of students to understand English reading texts. The level of difference between the DRTA (Direct Reading Thinking Activity) strategy and the SQ3R (Survey, Question, Read, Recite, Review) strategy is shown in the following table.

Table 2: Different Test Results for Posttest between the DRTA strategy and the SQ3R strategy

<table>
<thead>
<tr>
<th>Variables</th>
<th>Mean score</th>
<th>$t_{count}$</th>
<th>Sig</th>
<th>Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>DRTA</td>
<td>82.86</td>
<td>3.559</td>
<td>0.001</td>
<td>significant</td>
</tr>
<tr>
<td>SQ3R</td>
<td>79.16</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The different test results in the table above showed that the results of the different tests on the posttest between the group of students taught using the DRTA reading strategy and a group of students taught with the SQ3R strategy showed significant differences.
The average posttest value of the DRTA strategy was 82.86 and the posttest value of the SQ3R strategy was 79.16. Then the analysis showed the value of $t_{\text{count}}$ was 3.559 with a significance level was 0.001. Because the significance value was $<$0.005%, it can be concluded that there was a difference in posttest results between the DRTA group strategy and the SQ3R group strategy.

b. Pretest and Posttest Analysis of DRTA (Direct Reading Thinking Activity) Strategy

Pretest and posttest data analysis by using SPSS. 20.00 aims to determine whether or not there is an influence of the DRTA strategy on students’ ability to understand the content of reading / English text. The results of data analysis by using the t-test can be seen in the following table:

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean Score</th>
<th>N</th>
<th>Correlation</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>DRTA</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pretest</td>
<td>61.66</td>
<td>20</td>
<td>0.338</td>
<td>0.038</td>
</tr>
<tr>
<td>Postest</td>
<td>82.86</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The table above showed that the pretest value of students who were treated with the DRTA strategy was 61.66 and the posttest result was 82.86. The correlation between the DRTA pretest and DRTA post-test was 0.338 and the correlation level is significant 0.038. Because of the level of significant correlation $<$0.05, it can be interpreted that there was a positive and significant relationship between the DRTA pre-test with the DRTA post-test. In other words, there was an effect of the DRTA (Direct Reading Thinking Activity) reading strategy on students’ reading comprehension.

4. Discussion

Before the experimental group and the control group were treated, a pretest was conducted to determine the level of difference from each group with the aim of whether the two groups could be used as research subjects. The analysis of pretest data using the t-test showed that the t-value was 1.218 with a significance level was 0.227 or 22.7%.

Because the significance value was greater than 0.05%, it can be concluded that there was no difference in the results of the pretest between the DRTA group and the SQ3R group. It happened because the two groups had relatively the same level of English proficiency. Even when they did the pre-test, they could complete the test problem with a time difference that was not so much different. However, the ability to understand reading after the two groups (experimental and control) were treated.

After they were treated with a reading strategy (group A with the DRTA strategy and group B treated with SQ3R) there were differences in the results of the post-test. From the results of post-test data analysis showed that there were differences in the average pre-test results of DRTA and SQ3R was 3.701, and at the 95% the significant
confidence level was 95%, the lowest average difference was 1.628 and the highest average difference was 5.775.

It happened because the two strategies had different steps and treatments. In this DRTA strategy, from the beginning, the lecturer played an active role to provide stimulation or for students to make predictions or interpret the contents of the text so that it caused many different predictions between groups. By making predictions in advance, they could interpret the overall contents of the text. It was very helpful for students who had weaknesses in vocabulary. Whereas in the SQ3R group, lecturers provided the freedom to work in groups so that they could freely make predictions from the text. Thus for students who do not have a lot of vocabulary will experience difficulty.

Likewise, the results of the analysis of the pretest and posttest data on the experimental group (Class A) assisted by SPSS showed that there was an influence of the DRTA (Direct Reading Thinking Activity) reading strategy on students' reading comprehension. It was based on the results of the t-test on the DRTA pre-test and DRTA post-test was 0.338 with a significant 0.038. the level significant 0.038 <0.05. It was due to DRTA because all students played an active role to make predictions through the guidance of lecturers. After that, all students jointly evaluated whether the predictions that had been made were true or false. In that method, it created or built their level of creativity. In addition, the lecturer always monitors to provide guidance so that students can find the main ideas from the text. With this treatment, students found it helpful to not only provide convenience for them but could build their learning motivation. Good for students who had weaknesses in vocabulary and those who didn't. in other words, reading comprehension can be determined by how someone uses the reading strategy. As the results of Erliana's research (2017), the DRTA strategy can not only improve reading comprehension but can also increase student motivation.

5. Conclusion

Based on the analysis of the results of the study it could be concluded that: (1) the average value of the experimental group’s posttest was 82.86 and the average posttest score of the control group was 79.16. Then the t-value was 3.559 with a significance level equals 0.001 because the significance value was < 0.05%, it can be concluded that there was reading comprehension between students taught with the DRTA strategy and students taught with the SQ3R strategy, (2) the results of the correlation between the pretest and posttest of the DRTA strategy was 0.338 and the significance correlation level was 0.038 because the significant correlation level was <0.05 it can be concluded that there was an effect of the DRTA (Direct Reading Thinking Activity) strategy on students’ reading comprehension.
References


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