Abstract
This research is aimed at investigating the effectiveness of Directed Reading Thinking strategy on students’ comprehension of academic reading. In order to be successful in reading comprehension, learners should actively process what they have read and it can be gained by certain practice and strategy. One of the strategy to be used is Directed Reading Thinking Activity which guide the students in making prediction before they read and confirming and refuting the prediction after reading the text. Using DRTA strategy, the students will be trained to be active and thoughtful readers. This research used pre experimental research design with one group pretest posttest design. The result of the hypothesis testing using paired sample t-test showed the significant value 0.002 is lower than level of significance 0.05. It means H0 is rejected and it can be stated that there is a significant different on the students’ reading comprehension after being taught using DRTA strategy. Thus, it can be concluded that DRTA strategy was effective to teach reading comprehension.

Keywords: DRTA strategy; reading comprehension; pre experimental

Abstrak
Penelitian bertujuan untuk menginvestigasi keefektifan Direct Reading Thinking Activity (DRTA) strategi pada pemahaman membaca siswa pada academic reading. Agar dapat memiliki pemahaman yang baik saat membaca, siswa harus secara aktif terlibat dalam memproses apa yang telah mereka baca dan hal tersebut bisa didapat dengan latihan dan juga strategi tertentu. Salah satu strategi yang bisa digunakan adalah DRTA strategi yang akan membantu siswa dalam membuat prediksi sebelum mereka membaca, dan mengkonfirmasi ataupun menolak prediksi yang mereka buat setelah membaca teks yang diberikan. Dengan menggunakan strategi DRTA siswa akan terlatih untuk menjadi pembaca yang aktif dan berpikir kritis. Penelitian ini menggunakan pre eksperimental dengan one group pretest posttest desain. Hasil yang didapat dari uji hipotesis menggunakan paired sample t-test menunjukkan bahwa nilai signifikasi 0.002 lebih kecil dari tingkat signifikansi 0.05 (0.002<0.05). Artinya, H0 ditolak dan bisa dikonfirmasi bahwa ada perbedaan yang signifikan pada pemahaman membaca siswa setelah diajar menggunakan DRTA strategi. Oleh karena itu, bisa disimpulkan bahwa DRTA strategi merupakan strategi yang efektif untuk mengajar membaca.

Kata Kunci: DRTA strategi; pemahaman membaca; pre eksperimental
INTRODUCTION

In learning a language, there are four skills to be mastered, that is, listening, speaking, reading and writing. Listening and reading are usually called as the passive skills while speaking and writing are usually called as the active skills. However, the four skills should be integrated in order to build a good communication. In English as second language learning or even English as foreign language learning, reading helps students to develop other language skills and language component.

As an interactive process, reading involves the bottom-up and top-down skills for the learners (Lems et al., 2010). Bottom-up relates to the mastery of the word-level skills while the top-down skills relates to the analytical skills need for the comprehension. However, for the second or foreign language learners the two skills in reading may be very difficult since they do not have enough English literacy. To understand the text read, learners should master the English vocabulary. Thus, vocabulary is one of the factor in reading comprehension.

Further, the purposes of teaching reading to second or foreign language learners can be comprehension, enjoyment speed reading or accurate pronunciation. Comprehension can be divided into three levels, namely sentence level, paragraph level and whole-text-level. Comprehension on reading, further, can be divided into some levels, that is, literal, inferential and evaluational plus environmental. Moreover, the comprehension level have different classification. Thus, teacher of reading should construct comprehension questions based on the level of comprehension.

Yet, the teachers’ belief and attitude in teaching reading influence what they do in class and what they want their students to do (Nunan, 1991) Therefore, it is very important to have a certain strategy in teaching reading. It cannot be denied that reading and learning to read are two different things. When we read, it means that we already the literacy in that language while learning to read means that we are still learning the language.

In the context of second and foreign language learning, the reading lesson usually brings us to learn to read in the language learned, in this context English. However, Wallace (1998) as quoted by (Nunan, 1991) stated that learning to read and learning to speak is different. When learn to speak, we learn to communicate orally. Thus, there will be stronger motivation rather than learn to communicate through reading and writing. Because of that, teacher of reading should motivate as well as direct the students to enjoyment of reading by asking the students to participate actively in the reading class.

One of the strategies that can be used by the teacher of reading in order to involve the students to participate actively is Directed Reading Thinking Activity or DRTA strategy. DRTA is a strategy where the students should make prediction on the content of the text based on the guided questions from the
teacher and prove their prediction in the text they read (Panjaitan & Siagian, 2020). Further, DRTA will help students to comprehend a text by activating their background knowledge related to the text. Moreover, this strategy can be used in the three stages of reading, pre-reading, while-reading and post-reading (Hasanah et al., 2016). DRTA strategy can be used to monitor the students’ comprehension before, while and after reading a text.

Considering that DRTA strategy can be used to involve the student to actively participate in the reading class, the researcher wants to investigate the effect of DRTA strategy on students' comprehension in academic reading.

REVIEW OR RELATED LITERATURE

A. READING SKILLS

Reading is a passive or receptive skill. However, it is also an important skill to master, especially for the English language learners (Park, 2018). Further, reading enables learners to comprehend various kinds of text and acquires cultural and norm from reading. Although many language learners think that reading is less important than speaking skill, reading skill will help us to improve our literary on the language learned. It is important for language acquisition (Harmer, 2007). Thus, it can be believed that the more we read, the more knowledge we get.

In line with the previous statement, reading skill can be mastered by continuous practice, development and refinement. Reading also a process in getting information in written text. Therefore, in a reading lesson, the goal can be achieved better when it is connected with the writing skill (Brown, 2000). Further, it will be very best developed by associating with listening, speaking and writing.

Meanwhile, reading skill itself can be divided into three. First is scanning. It is a skill in reading to find particular information from the text (Harmer, 2007). Second is skimming. This skill is used to get the general idea from the text. The last is reading for detailed comprehension. This is the skill in looking for detailed information including the particular language use.

B. READING COMPREHENSION

According to (Mikulecky & Jeffries, 2007), reading comprehension is not only a matter of recognizing and understanding words. True comprehension is also about connecting ideas in the text you read. Good reads can make inferences of what they have read. That is what so called reading comprehension.
Further, reading comprehension is usually divided into three namely sentence level, paragraph level and whole-text level. The techniques for comprehending usually determined by the level of comprehension of literal, inferential, evaluational and environmental. Of all the comprehension level, it is need certain strategies to build comprehension. Therefore, skilled readers comprehend more than the less skilled readers.

Students need to actively process what they have read in order to be successful in reading comprehension (Willis, 2008). Yet, that process need the students to have the automatic reading skill, enough vocabulary mastery, and related background knowledge. Thus, a certain practice on reading should be done by the students including assessing and connecting students’ background knowledge and the text read.

C. DIRECTED READING THINKING ACTIVITY (DRTA) STRATEGY

As one strategy to teach reading comprehension, Directed Reading Thinking Activity (DRTA) is used to guide students in making prediction before they read the text and confirming or refuting their prediction by reading the text (Lubis, 2018). This strategy will encourages students to be active and thoughtful readers. Further, this strategy can be used by the teacher to build the students’ prior knowledge by asking some questions related to the text read. Thus, students can have some background knowledge of the text being read from the questions from the teacher (Novendiana et al., 2016).

DRTA strategy involves some steps such as:

1. Directed: Teachers guide the students to make prediction of the text by scanning the title, chapter headings, illustration and other explanatory materials. Here, the teachers give open ended questions as the guidance.
2. Reading: Teachers as the students to read the text carefully and process comprehension of the text.
3. Thinking: Teachers ask the students to go back to their first prediction and think whether they can confirm or refute their prediction.

Based on the steps of DRTA strategy above, it can be concluded that DRTA strategy will make the students to keep thinking while reading the text so that they can see whether their prediction can be confirmed or not. Further, the students can also share difficulties in reading the text by having DRTA strategy.
D. STATE OF THE ART

Some research on DRTA strategy and reading comprehension have been made. One of them is conducted by (Novendiana et al., 2016). This research was conducted to see whether there is a significant of the DRTA strategy. The result showed that there was a difference on reading comprehension of experimental and control class. The second research was conducted by (Lubis, 2018). This research was aimed to see the effect of DRTA strategy and learning style on students’ achievement in reading comprehension. The result showed that there is effect of DRTA strategy on reading comprehension. Further, it can be concluded that the extrovert learning style have higher achievement than the introvert learning style. However, there is no interaction between DRTA strategy and learning style when they are combined. Another research on DRTA strategy was conducted by (Kurniaman & Noviana, n.d.). This research was aimed to find out the implementation of DRTA strategy in reading comprehension skills. The result showed that DRTA strategy has sufficient indicator to be used to teach reading comprehension.

However, different from the two researches mentioned above, this research will be conducted to see the effectiveness of DRTA strategy on students’ comprehension of academic reading. Academic reading is something different. Reading in academic context is different from reading for pleasure. Certain knowledge on topic of the academic context should be known.

RESEARCH METHOD

This research is conducted to investigate the effectiveness of DRTA strategy on the students’ comprehension of academic reading. Due to the objective of the research, a pre experimental research is used as the design of the research. Pre experimental is appropriate to find out the effectiveness of a new technique (Ary et al., 2010). Thus, it is appropriate as the research design. Moreover, since the research is conducted in school setting in which the group or the class has been established from the beginning of the semester, it is not accessible for the researcher to choose the sample randomly. Therefore, (Ross and Morisson, 1996) stated that pre experimental can be used.

Further, this research uses one-group pretest posttest research design that can be illustrated as follow:

<table>
<thead>
<tr>
<th>Pretest</th>
<th>Treatment</th>
<th>Posttest</th>
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</thead>
<tbody>
<tr>
<td>Reading comprehension test</td>
<td>DRTA strategy</td>
<td>Reading comprehension test</td>
</tr>
</tbody>
</table>
This design involves three steps: pretest, giving treatment and posttest (Ary et al., 2010). Further, the effectiveness of the DRTA strategy can be seen by comparing the result of the pretest and posttest.

This research is conducted in English Department Faculty of Social and Humanities Universitas Bhinneka PGRI. Thus, the population of the research is the students of English Department in academic year 2021/2022. While the sample of the research is the second semester students who are officially registered on Academic Reading and Writing course. There are 30 students who are taken as the sample of the research. Usually, in pre experimental, the sample was taken purposively since it is not feasible to conduct a random sampling because the class has been established from the beginning of the semester. Thus, the sample was taken purposively as stated by (Sugiyono, 2015).

This research is started by choosing the sample of this study who then become the experimental group. After the experimental group has been established, the next thing to be done was preparing the research instrument as well as the procedure in giving treatment. Further, the research began by administering pretest to know students prior ability in reading comprehension. After a pretest is administered, the treatment begin. In this study, the researcher become a full researcher who prepare the material as well as teach the class using DRTA strategy. Therefore, it is possible for the researcher to conduct a research for almost one semester or it depends on the need of this research. After given treatment, later, the research administered a posttest. Posttest is done to know the effect of the treatment of DRTA strategy on students’ comprehension of academic reading. Further, the effect of DRTA strategy on students’ comprehension of academic reading is tested by comparing the result of pretest and posttest.

One group pretest-posttest of pre experimental research has been chosen as the design of this research. Thus, the instruments to collect data of this research consists of pretest and posttest of reading comprehension.

1. Pretest

Reading comprehension prior the treatment should be measured by conducting a pretest. The pretest of the reading comprehension will consist of 20 questions.

2. Posttest

The posttest in this research is conducted after the treatment. There are also 20 question of reading comprehension to be answered by the students.

The primary data in this research were taken from the pretest and posttest score of the reading comprehension test. A pretest is done before the students experiencing DRTA strategy in reading class. While the posttest is done after the students experiencing the use of DRTA strategy. Both pretest and posttest are followed by the students who are officially registered in Academic Reading and Writing class.
In short, the method of the data collection is by administering pretest and posttest of reading comprehension.

After getting the data from pretest and posttest, the next steps to be done were conducting descriptive analysis on the results of the pretest and posttest including the mean score, minimum score and maximum score gained by the students. Further, the data were tested using classical assumption analysis of normality test to know whether the data were parametric or non-parametric. And finally, hypothesis testing was conducted to test the hypothesis. It may use paired sample t-test if it is parametric statistics (Cronk, 2008) or Wilcoxon test if it is non-parametric statistics.

FINDINGS AND DISCUSSION

This research presents the research findings and verification of the hypothesis of the research. The primary data is used as the decision making whether or not the Directed Reading Thinking Activity was effective to teach students the reading comprehension. The scores obtained from the pretest and posttest were then be explained using descriptive statistics and further were used to test the hypothesis.

1. The result of the Pretest of Reading Comprehension

Pretest of Students’ Reading Comprehension was administered before the treatment of Direct Reading Thinking Activity (DRTA) strategy were used to teach the students. In the pretest, the students should answer ten questions related to the passage read. The results of the pretest then were analyzed using scoring rubric of reading comprehension. The summary of the pretest result can be seen in Table 2.

<table>
<thead>
<tr>
<th>Table 2. Summary of the Pretest</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Descriptive Statistics</strong></td>
</tr>
<tr>
<td>N</td>
</tr>
<tr>
<td>Pretest</td>
</tr>
<tr>
<td>Valid N (listwise)</td>
</tr>
</tbody>
</table>

From table 2, it can be seen that from 30 students, the maximum score obtained by the students was 90 while the minimum score obtained was 45. The mean score of the pretest was 64.

2. The Result of the Posttest of Reading Comprehension

Posttest of student’ reading comprehension was done after the students experienced the treatment of DRTA strategy for 4 meetings. The posttest was in the same level as the pretest and there are twenty
questions to be answered by the students. The ten questions were the comprehension questions of the passage read. The results, further, were analyzed using scoring rubric of reading comprehension. The summary of the posttest can be seen in Table 3.

Table 3. Summary of the Posttest

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Posttest</td>
<td>30</td>
<td>55</td>
<td>95</td>
<td>75.33</td>
<td>10.981</td>
</tr>
<tr>
<td>Valid N (listwise)</td>
<td>30</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

From the table, it can be seen that from 30 students, the maximum score obtained by the students was 95 while the minimum score was 55. The mean score of the posttest was 75.33.

3. The Mean Difference of the Pretest and Posttest of Reading Comprehension

To know about the difference on the students’ pretest and posttest, table 4 present the mean differences between pretest and posttest of reading comprehension.

Table 4. The Mean Differences

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>N</th>
<th>Std. Deviation</th>
<th>Std. Error</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pair 1 Pretest</td>
<td>64.00</td>
<td>30</td>
<td>11.095</td>
<td>2.026</td>
</tr>
<tr>
<td>Posttest</td>
<td>75.33</td>
<td>30</td>
<td>10.981</td>
<td>2.005</td>
</tr>
</tbody>
</table>

From the table 4, it can be seen that there is a slight difference on the students’ reading comprehension. However, it can be seen that the posttest score showed an increase of the mean score. The posttest score was 11.33 points higher than the pretest score. Yet, to know whether there is significant difference on the students’ pretest and posttest, a statistical analysis to test the hypothesis should be done.

4. The Fulfilment of Statistical Assumption of Normality Test

Before conducted hypothesis testing, statistical assumption needed to be fulfilled. Here, normality test was administered to know whether the data is normal. If the data was normal, parametric statistics can be used. If the data was not normal, non-parametric statistics should be used to test the hypothesis. Table 5 shows the result of normality test.

Table 5. Normality Test

Tests of Normality
Table 5 above shows the normality test of Kolmogorov-Smirnov and Shapiro-Wilk. The result of the normality test shows that the significant value obtained was higher than the level of significance 0.05. Thus, it can be concluded that the data was normal and the parametric statistics can be used to the hypothesis.

5. Hypothesis Testing

The parametric statistics of paired sample t-test was used to the hypothesis (Cronk, 2008). Here, the hypothesis was formulated as follows:

$H_a$: There is a significant difference on students’ reading comprehension before and after being taught using DRTA strategy.

$H_0$: There is no significant difference on students’ reading comprehension before and after being taught using DRTA strategy.

The paired sample t-test was conducted using IBM SPSS 26.0. The result of the hypothesis testing can be seen in table 6.

<table>
<thead>
<tr>
<th>Paired Samples Test</th>
<th>Paired Differences</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>Std. Deviation</td>
</tr>
</tbody>
</table>

From table 6 above, it can be seen that significant value obtained was 0.002. Since it is lower than the level of significance (0.002<0.05), it can be stated that the null hypothesis is rejected. Thus, it can be
concluded that there is a significant difference on students’ reading comprehension before being taught using DRTA strategy.

Discussion

This research was aimed at investigating the effectiveness of Direct Reading Thinking Activity (DRTA) strategy on students’ reading comprehension. The result of the pretest and posttest showed that the posttest score was 11.3 higher than the pretest. Further, the result of the hypothesis testing using paired sample t-test showed that null hypothesis is rejected and therefore the alternative hypothesis is accepted. The mean score of the posttest was higher than the mean score of the pretest (75.33 > 64.00). Further, the significant value obtained is lower than the level of significance (0.002 < 0.05). Thus, it can be concluded that there is a significant difference on students’ reading comprehension after being taught using DRTA strategy.

The result of this research was actually supported by some research of (Lubis, 2018; Megawati, 2019; Nerim, 2020; Novendiana et al., 2016; Panjaitan & Siagian, 2020; Setiartin, 2018). Those research also found that DRTA strategy was effective to teach reading. DRTA strategy affected how the students comprehend the reading text. Further, DRTA strategy was an appropriate strategy to be used to teach reading since it can be used to stimulate students’ critical thinking before reading a text and confirm what they have thought and the text read (Lubis, 2018). Students can predict the content of the text and confirm whether their prediction was right. If the prediction and the text was difference, they can revise what they have thought.

As it can be seen that DRTA strategy stimulate students’ critical thinking toward a text to be read (Nerim, 2020) and further, the teacher can build students’ prior knowledge by asking some questions related to the text. Thus, DRTA strategy is good strategy to activate students’ critical thinking. Some steps in DRTA strategy can be seen activating students’ critical thinking:

1. Teacher direct the students to read the title and predict the content.
2. Students confirm their prediction by reading the first paragraph.
3. Teacher asks another question to be found in the body paragraph.
4. Teacher asks the students to predict the conclusion of the text.
5. Students confirm their prediction about the entire text and discuss with other students.
CONCLUSION

To conclude, the findings of this research showed that there is a significant difference on students’ reading comprehension after being taught using DRTA strategy. DRTA strategy was effective to be used in reading comprehension since the students can predict the content of the text and further confirm whether their prediction is right. Thus, DRTA strategy is suggested to be used in teaching reading.

Further, some suggestions are to be offered. First, it is suggested for the teacher to use DRTA strategy in reading class to activate students’ critical thinking. Second, it is suggested for the future researcher to conduct a research on the same field but in different context.

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