Strategies Training in the Teaching of Reading Comprehension for EFL Learners in Indonesia

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Abstract
This study investigated the effect of reading strategies training on the students’ literal and inferential reading comprehension. The training involved three concrete strategies: predicting, text mapping, and summarizing. To achieve the purpose of this study, a quasi experimental design was selected with the experimental group being given reading strategies training and the control group being treated in a ‘business as usual’ mode. The subjects were students of two classes in a vocational senior high school in East Java, Indonesia (N=71). The students’ scores in the mid-semester teacher made test of English were used as the covariate to control possible initial differences between the two groups. Moreover, a test of reading comprehension was developed to measure the effect of the treatment. The analysis of covariance (ANCOVA) yielded that the experimental group outperformed the control group in both literal and inferential reading comprehension levels. Implications of this finding for classroom teaching are then discussed.

Keywords: metacognition, reading strategies, reading comprehension

1. Introduction
Following the mushroom of research in learning strategies in 1990s, research in the area of reading strategies began to attract attention of researchers. Block (1986) defines reading strategies as actions of how readers conceive a task, what textual cues they attend to, how they make sense of what they read, and what they do when they do not understand. Moreover, Anastasiou and Griva (2009) define reading strategies as “specific, deliberate, goal-directed mental processes or behaviours, which control and modify the reader’s efforts to decode a text, understand words and construct the meaning of a text” (pp. 283-284). Thus, the strategies can be both observable and unobservable.

In fact, the research on reading strategies may be classified into three categories. In the first group are studies using descriptive design, which are intended to identify strategies that learners employ in reading. Janzen (1996) mentions that reading strategies range from simple fix-up strategies such as simply rereading difficult segments and guessing the meaning of an unknown word from context, to more comprehensive strategies such as summarizing and relating what is being read to the reader’s background knowledge. Sheorey and Mokhtari (2001) came up with a classification of reading strategies into three categories: cognitive, metacognitive, and support strategies. While cognitive strategies are in the form of deliberate actions the readers take to enhance text comprehension when reading such as utilizing prior knowledge and adjusting reading rate, metacognitive strategies take the form of advanced planning and comprehension monitoring, such as setting purpose for reading and previewing text. Meanwhile, support strategies are tools the readers take to aid comprehension, such as taking notes, and using references when reading.

Findings of studies indicate that Japanese learners of English are found to use cognitive strategies more often than metacognitive and support strategies (Shikano, n.d.). Gender and learning context have been found to affect reading strategy preferences as female Columbian learners of English use reading strategies significantly more highly than their male counterparts (Poole, 2009) and Indian learners of ESL reported using metacognitive and
support strategies significantly more than did Iranian learners of EFL when reading English textbooks (Karbalaei, 2010).

The second category covers studies using correlation design, which are intended to measure the magnitude relationship between the use of reading strategies and reading performance as assessed in terms of reading speed (Anastasiou & Griva, 2009) and reading comprehension achievement (Estacio, 2013; Zare & Othman, 2013). The findings, however, are not conclusive as many of the studies find a positive and significant correlation (Zare & Othman, 2013). Yet, other studies fail to uncover the significant correlation (Estacio, 2013). Moreover, the teachers’ awareness of their reading strategies reflects their mode of instruction of reading comprehension (Dobler, 2009).

To further investigate the role of reading strategies, experimental studies were carried out to see the effectiveness of strategies training. Within this category of research, two subcategories are revealed. Within the first group are studies using the increase in the students’ strategy use awareness as the dependent variable and they indicate the significance of the training (Bentahar, 2012; Henter, 2012; Hong-Nam & Leavell, 2011). Within the second group are studies using the increase in the students’ comprehension and understanding as the dependent variable (Cubukcu, 2008; Dreyer & Nel, 2003; Pakhiti, 2003; Song, 1998) and they indicate that strategies training is effective to improve comprehension in reading. These findings suggest that reading strategies trainings are fundamental to the development of reading comprehension skill in academic settings (Grabe, 2009).

Nonetheless, a number of research projects with experimental design fail to prove the significance of reading strategies trainings. Janzen (2003), for example, found that the strategic reading instruction that he developed did not bring about successful instruction to the third grade Navajo students as the students with reading strategies intervention did not have better reading proficiency than the students with more traditional teaching of reading. Similarly, among Saudi Arabian and South Korean ESL learners in the United States Bentahar (2012) found that trainings of planning, monitoring, and evaluation strategies of reading did not result in the improvement of reading comprehension skill when tested in the form of wh-questions.

The point to note in the above-mentioned research is that the effectiveness of the reading strategies training has been documented from the context of first language readings or second/foreign language readings of university students, most of whom are already at the intermediate and advanced proficiency level. Thus, more evidence is required from foreign language learners with elementary proficiency level. Orbea and Villabeitia (2010) said that the teaching of reading strategies to less competent readers is worth investigating with a hypothesis that poor readers will get benefit from trainings of how competent readers deal with reading tasks. It is at this point that the present study was carried out.

The training techniques were modified from the procedure developed by Brown and Palincsar (1984), which involved three concrete reading strategies training: predicting, text mapping, and summarizing. Making predictions is more than just guessing what is going to happen next. Predicting helps students become actively involved in reading and helps to keep their interest level high. According to Duffy (2003), predicting is the strategy most relied upon as the students begin reading, so as that good readers anticipate meaning. They do this by predicting what they think is going to happen in the selection and by revising their prediction as they read. Then, text mapping is a method by which text is laid out, or mapped, to emphasize key words, phrases and concepts within documents using outlining, hyperlinking and text formatting features found in most word processors. It can decrease study time, work as an effective teaching tool and increase reading comprehension, thereby shortening the learning curve of a subject. Carnine, Silbert, and Kameenui (1997) stated that behaviours such as summarizing, paraphrasing, retelling, self-questioning, predicting and verifying, reading aloud, and rereading or reading on to clarify meaning are typically referred to as meta-comprehension strategies. In addition they mentioned that summarizing not only allows the students to identify the key ideas from a passage, but also reduces the information in the passage to key ideas that the students can remember. Casazza (1993) says that good readers are able to distinguish the most important ideas in a passage and summarizing them according to an appropriate organizational pattern. Furthermore, she said that teaching students to summarize increase their comprehension of report text.

This article reports a study of reading strategies training to the tenth grade students of a vocational high school in Indonesia. More specifically, this study is aimed at investigating the effectiveness of reading strategies training on students’ literal and inferential reading comprehension skill. Literal comprehension skill is the ability to understand information that is stated explicitly in the text; thus, when students read for literal meaning, they are concerned merely with surface messages. Meanwhile, inferential comprehension skill refers to the ability to go beyond what is stated directly, to understand what the writer means by probing for deeper meanings (Karlin,
2. Research Method

2.1 Research Subjects and Instrument

The research was quasi-experimental and two classes of grade ten students of office administration department of a public vocational school in Mojokerto, East Java, Indonesia were used as the subjects of the study. Thirty six students of Class A were treated as the experimental group receiving reading strategies training, and thirty five students of Class B as the control group taught reading comprehension skill using a conventional technique. They studied English as a compulsory school subject in the context of English as a foreign language and had been learning it formally for four years, twice of 90 minutes a week. As stipulated in the curriculum, the target of its teaching is to develop the students’ ability to communicate in both spoken and written English. The teaching of grammar and vocabulary was integrated into the teaching of the language skills.

As there was no randomization in the selection of the subjects, data from teacher-made test of mid-semester program were used to control any possible initial differences between the two groups. In addition, a multiple-choice test of literal and inferential reading comprehension was developed to measure the students’ reading skill after the treatment. The test contained 50 items, consisting of 30 items of literal comprehension and 20 items of inferential comprehension. Prior to its use, the test was tried out to measure the quality in terms of difficulty level, discriminating power, and effectiveness of distracters. An analysis of its internal consistency measure of reliability using Kuder-Richardson 20 found an index of 0.74, indicating that the data collected from it was highly reliable for research purposes (Ary, Jacob, & Razavieh, 2002).

2.2 Teaching Procedures

The teaching learning process was carried out in twelve sessions and each session lasted in 90 minutes. One reading text was discussed in one meeting so that twelve reading passages, each of which was about 300 words long, were used for the instructional material. The types of text being used were descriptive texts, procedure texts, and reports.

For the experimental group, prior to the training, the teacher and the class had general discussion about the strategic learning and strategic reading. The teacher explained that the students would have reading strategies training, including predicting, text mapping, and summarizing. A discussions of why learning and practicing effective strategies is important was also carried out. Through this discussion, the subjects were informed of the following points: first, strategies help them improve reading comprehension; second, strategies also help them enhance efficiency in reading; finally, they will be reading in the way that expert readers do. In addition, the teacher clearly and explicitly explained the specific procedure of the reading strategies training technique and its benefit.

Next, the teacher conducted pre-reading activities in order to activate students’ background knowledge related to the topic and content of the reading passage. The teacher gain information from students by asking them some related questions about the type of the text. Previously, the teacher introduced the topic of the passage in the preview session.

After the teacher told the students about the text to be discussed, the teacher modelled the following reading strategies; first, the teacher asked the students to make predictions of the content of text based on the title; second, they wrote their prediction (the list of their ideas) on paper and whiteboard; third, the teacher asked them to read the text silently and checked their predictions; then, the teacher asked them to identify the text elements (topic sentence, main idea, and supporting details); then, the teacher asked them to make text mapping of the main ideas and supporting details, here they could use colour pencils to clear their mapping; finally, the teacher asked them to write text summary based on their text map. As the last teaching learning process, the teacher asked the students to discuss the text together and share their summaries. Finally, to assess the students’ understanding of the text, the teacher gave some written comprehension questions. The teacher also encouraged students to use the strategies outside the classroom so that the training could be transferred to other reading tasks.

Meanwhile, the control group was treated using ‘business as usual’ way. In this case, first, the teacher distributed the reading passage to be discussed. Second, the teacher asked the students to locate difficult words and grammatical constructions in the text. They were allowed to look up their dictionaries to find the appropriate meaning of the difficult words. The teacher explained the unfamiliar words as well the difficult sentence constructions. Translating phrases, clauses, and sentences into Bahasa Indonesia was done to help students understand the passage. At the end of the each session, comprehension questions were also provided and discussed to measure the students’ understanding of the text.
2.3 Data Analysis

The primary data were obtained from two sets of test. The first one was the teacher-made test, administered in the mid-semester examination period prior to training sessions, while the second one was the researcher-made test, administered at the end of the training sessions. The data from the teacher-made test were used to control any possible initial differences between the two groups of students since no random assignment was administered. The second test, moreover, was used to measure the effectiveness of reading strategies training compared to the traditional teaching of reading.

Thus, the two sets of data were analyzed using a statistical technique called Analysis of Covariance (ANCOVA). Pallant (2005) mentions that ANCOVA is a handy statistical analysis to be used when the researcher cannot assign subjects randomly into groups. As such, he has to use the existing groups instead, such as classes of students. The analysis was computerized using SPSS 20 for Window’s program.

3. Findings and Discussion

3.1 Findings

The descriptive statistics of the data obtained from the teacher-made test of English administered prior to the experiment are presented in Table 1. As the table shows, the mean of experimental group, the group with reading strategies training is 63.89 (s.d.=7.775), while that of the control group, the group with conventional technique is 61.46 (s.d.=10.057). The fact that the experimental group has slightly higher mean score with lower standard deviation than the control group indicates that the students in the former group are a little bit smarter and are more homogeneous than those in the latter group. As a result, the range of data (the difference between the highest and lowest scores) in the experimental group is less than that in the control group since they are 28 in the former group and 50 in the latter group. These initial differences are frequent in experimental research without randomization; therefore Analysis of Covariance (ANCOVA) was then used, instead of t-test, for the final data analysis.

Furthermore, Tables 2 and 3 contain the descriptive statistics of the students’ scores in the post-test, with the data of students’ literal comprehension and inferential comprehension being analysed separately. The table shows that the students in the experimental groups outperformed their counterparts in the control group in both literal and inferential comprehension levels. While the mean score of the literal comprehension of the experimental group was 88.33 (s.d.=8.99), that of the control group was 81.81 (s.d.=7.64). This suggests that statistically the experimental group has higher literal comprehension skill. Moreover, the difference in the values of standard deviation indicates that the literal comprehension scores of students in the experimental group are more variedly scattered ranging from 70 to 100. Likewise, the former group of students were also found to have higher inferential comprehension skill than the latter group, with mean values 62.92 (s.d.=4.21) for the experimental group and 56.71 (s.d.=9.47) for the control group. However, the data from the latter group have higher measures of variability than the former group as indicated in the values of standard deviation.

Table 1. Descriptive statistics of mid-term test scores

<table>
<thead>
<tr>
<th>Group</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Minimum</th>
<th>Maximum</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experimental</td>
<td>63.89</td>
<td>7.78</td>
<td>50</td>
<td>78</td>
<td>36</td>
</tr>
<tr>
<td>Control</td>
<td>61.46</td>
<td>10.06</td>
<td>38</td>
<td>88</td>
<td>35</td>
</tr>
</tbody>
</table>

Table 2. Descriptive statistics of literal comprehension post-test scores

<table>
<thead>
<tr>
<th>Group</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Minimum</th>
<th>Maximum</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Literal Comprehension</td>
<td>Experimental</td>
<td>88.33</td>
<td>8.99</td>
<td>70</td>
<td>100</td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>81.81</td>
<td>7.64</td>
<td>55</td>
<td>70</td>
</tr>
</tbody>
</table>
Table 3. Descriptive statistics of inferential comprehension post-test scores

<table>
<thead>
<tr>
<th>Group</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Minimum</th>
<th>Maximum</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experimental</td>
<td>62.92</td>
<td>4.21</td>
<td>67</td>
<td>97</td>
<td>36</td>
</tr>
<tr>
<td>Control</td>
<td>56.71</td>
<td>9.47</td>
<td>25</td>
<td>70</td>
<td>35</td>
</tr>
</tbody>
</table>

Although descriptively the data indicated that the students in the experimental group had higher scores of both literal and inferential comprehension skills than the control, no conclusion about the effectiveness of the reading strategies training could be made unless the data were analysed using ANCOVA by incorporating the mid-semester test scores as the covariate. The results of the analyses were presented in Tables 4 and 5.

Table 4. The result of ANCOVA for literal comprehension

<table>
<thead>
<tr>
<th>Source</th>
<th>Type III Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corrected Model</td>
<td>803.55\textsuperscript{a}</td>
<td>2</td>
<td>401.77</td>
<td>5.73</td>
<td>.005</td>
</tr>
<tr>
<td>Intercept</td>
<td>8703.08</td>
<td>1</td>
<td>8703.08</td>
<td>124.06</td>
<td>.000</td>
</tr>
<tr>
<td>Covariate</td>
<td>48.26</td>
<td>1</td>
<td>48.26</td>
<td>.69</td>
<td>.410</td>
</tr>
<tr>
<td>Treatment</td>
<td>690.67</td>
<td>1</td>
<td>690.67</td>
<td>9.85</td>
<td>.003</td>
</tr>
<tr>
<td>Error</td>
<td>4770.47</td>
<td>68</td>
<td>70.15</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>519966.67</td>
<td>71</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Corrected Total</td>
<td>5574.02</td>
<td>70</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

\textsuperscript{a} R Squared = .144 (Adjusted R Squared = .119).

Table 5. The result of ANCOVA for inferential comprehension

<table>
<thead>
<tr>
<th>Source</th>
<th>Type III Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corrected Model</td>
<td>820.30\textsuperscript{a}</td>
<td>2</td>
<td>410.15</td>
<td>7.91</td>
<td>.001</td>
</tr>
<tr>
<td>Intercept</td>
<td>3459.24</td>
<td>1</td>
<td>3459.24</td>
<td>66.67</td>
<td>.000</td>
</tr>
<tr>
<td>Covariate</td>
<td>137.61</td>
<td>1</td>
<td>137.61</td>
<td>2.65</td>
<td>.108</td>
</tr>
<tr>
<td>Treatment</td>
<td>589.89</td>
<td>1</td>
<td>589.89</td>
<td>11.37</td>
<td>.001</td>
</tr>
<tr>
<td>Error</td>
<td>3528.29</td>
<td>68</td>
<td>51.89</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>258750.00</td>
<td>71</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Corrected Total</td>
<td>4348.59</td>
<td>70</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

\textsuperscript{a} R Squared = .189 (Adjusted R Squared = .165).

The two tables show that the different treatments given to the experimental group and control group resulted in significantly different reading comprehension skills as indicated in the values of F as well as their significant values. For the literal comprehension, for example, the analysis of the significance of the difference between the experimental group and the control group found an F-value 9.85 (p<.003). Meanwhile, an F-value 11.37 (p<.001) was obtained in the comparison between the experimental group and the control group in terms of their inferential comprehension. Thus, it was concluded that metacognitive reading strategies training produced better reading comprehension on the part of the learners than did the traditional teaching.

3.2 Discussion

The result of this study clearly shows that the teaching approach of Brown and Palincsar (1984), which was effective for first language learners, can successfully be applied to reading classes of Indonesian learners of English as a foreign language. Thus, the result of this study provides support for the educational value of strategy training in EFL students reading class. That is, the students who are taught reading by using reading strategies training technique have significantly higher scores of literal and inferential comprehension than those who are
taught using more traditional one.

This finding agrees with existing theories of reading comprehension. Schemata theory, for example, usually draws distinction between content and formal schemata. The first type refers to background knowledge about the topic or subject matter of the target text, while the second type refers to background knowledge of the formal, rhetorical organizational structures of different types of text (Carrell & Eisterhold, 1992). A reader’s failure to activate appropriate schemata, content or formal, during reading results in various degrees of non-comprehension.

The application of reading strategies of predicting, text mapping, and summarizing trains the students to activate their content schemata as they will have to utilize their prior knowledge of the text topic in order to be able to create good prediction of the text content. Moreover, text mapping and summarizing training enriches the students’ knowledge of formal schemata because one step in the training session is tracing the rhetorical organizational structure of the text being dealt with. Therefore, the students who underwent text mapping and summarizing training acquired more formal schemata, which then aided their reading comprehension than did the students without text mapping and summarizing training. Consequently, the former group of students gained better reading comprehension skill than the latter group.

Furthermore, text structure theory argues that a reader’s comprehension of a text is in part dependent upon the text itself. Included in the textual factor is the organization of words into phrases, phrases into sentences, sentences into paragraphs, paragraphs into a discourse or a text. Karlin (1984) states that a reader’s ability to see the relationship between one part of a sentence and another, between one sentence and another, contributes to his ability to comprehend the meaning of a sentence or a group of sentences in a paragraph. Cortina, Elder and Gonnet (1989) also contend that the reader’s ability to perceive the organization of a text will result not only in increased comprehension but also in enhanced retention. In the implementation of text mapping and summarizing training, moreover, it is highly required that the students are able to detect the organizational pattern of the text they are reading.

Finally, metacognition theory of reading comprehension concerns with the readers’ awareness of the strategies they use when performing a reading task. The theory says that readers tend to be able to comprehend a text better if they are aware of the strategies they are employing to cope with the task of reading (Carnine et al., 1990). Thus, the students will have good comprehension if they have metacognitive awareness of the use of such strategies as predicting, text mapping, and summarizing. Casazza (1993) also states that good readers are able to distinguish the important ideas in the passage and summarize them into an appropriate organizational pattern.

The finding of the present study also verifies previous research findings. Bean and Steenwyk in Carnine et al. (1990), for example, reported their research on the sixth-grade students. They compared two groups of students, one group got an explicit instruction of how to summarize, while the other group got an advice of how to make summaries. After a certain period of treatment, the two groups were tested and compared. The comparison showed that the students who got explicit instruction of how to summarize outperformed those who did not in both summary writing and reading comprehension. Flood and Lapp (1990) reported a similar finding when they refer to Salisbury’s research on the effectiveness of summarizing training found that the students who were made aware of the important points in the passage and asked to summarize those points had significantly increased their reading comprehension scores. Song (1998) also reported that among Korean university students of English, those who got reading strategy training gained better improvement scores of a reading test than those who did not. On this point, McNamara (2007) concludes that strategy instruction of reading is particularly needed and effective for those students who are struggling most, namely those with less domain knowledge or lower reading skills.

The implication of the finding of the present research toward the teaching of reading comprehension is that reading strategies, such as predicting, text mapping, and summarizing, are worth applying even for students of English as a foreign language with an elementary level of proficiency. Thus, teachers of English should be encouraged to apply these reading strategies in their classes of reading comprehension. Grabe (2009) suggests that reading teachers should incorporate strategy instruction as part of everyday reading instruction and work toward the automatization of strategy use for fluent reading. On this point, Hudson (2011) provides guidelines to make reading strategy instruction effective. They are that 1) the concept and the objective of strategy use should be carefully explained, 2) the use of strategies in reading should be properly modelled, 3) sufficient practice and feedback should be provided, 4) transfer of the trained skills to new reading tasks should be encouraged, and 5) content-based materials should be embedded in instructional activities to provide more authentic purposes of reading instruction.
4. Conclusion

An important goal of reading instruction is to help students to become strategic readers, in the sense that they will be able to use effective reading strategies to gain better comprehension. The present research has revealed that the students’ ability of grasping literal and inferential comprehension from given passages was significantly enhanced through trainings in the use of reading strategies, including predicting, text mapping, and summarizing. The effectiveness of these strategies has been found among Indonesian students of a vocational senior high school learning English as a foreign language. Thus, reading strategies training should be incorporated into regular reading instructions so that the students will acquire effective reading strategies to facilitate good comprehension. In other words, in order to facilitate the reading comprehension of readers such strategies should be incorporated within the normal syllabus and as part of the reading tasks and the teachers should be more attentive to these strategies and try to overtly teach the readers how to apply such tricks in actual process of reading.

References


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