Comparison of the Learning Effectiveness on the Teaching of Reading Comprehension

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Abstract

This research was conducted to compare the effectiveness of a teaching technique in reading comprehension on students’ achievement in English course at university level. The main purposes of the study were to examine the difference between the freshmen’s academic achievement in reading comprehension taught by a new teaching technique and by conventional one, and to examine which teaching technique was more effective to improve the students’ reading comprehension achievement. This research adopted a quasi-experimental, non-randomized control group pretest-posttest design.

Major and minor instruments were administered to students of faculty of Fisheries and Marine Science at Brawijaya University, one of famous universities in Indonesia. The collected data were arranged into table and analyzed by using T-test. The analyzed data were interpreted into findings of the study, and conclusions were drawn from these findings.

The results revealed that there was a statistically significant difference in the students’ reading comprehension achievement. In conclusion, the new teaching technique was more effective than the conventional one.

Key words: quasi experimental, teaching technique, student’s achievement, reading comprehension

INTRODUCTION

The ability to read in English is usually considered as an important skill especially in countries where English is learnt as a foreign language. Similarly, in Indonesia people learn English as a means of gaining access to information rather than acquiring it as a means of
oral communication. Related to this, Indonesian education present system puts reading as one of skills to be taught in the teaching of English especially at tertiary level.

In the university level, the teaching of English is divided into two, namely for the English Department and the Non-English Department. English is taught as general English in the English department, yet the teaching of English for non-English department uses English for Academic Purposes (EAP), which is the branch of English for Specific Purposes (ESP) (Robinson, 1991: 100). Unlike English courses for general purposes, EAP is different in the way the course is designed. General English stresses language proficiency; while an EAP course, language is taught through content (Astika, 1999: 31; Kol, 2002: 63). Thus, in the non-English department language proficiency discussed is based on the content of reading materials.

In the Non-English Department, EAP is a compulsory course, and it is taught at the beginning of the study year to prepare the students with ability to understand functional texts in English language (Robinson, 1991; Sulisty, 2008). Robinson (1991: 102) mentioned that a popular basis for the design of EAP courses is a range of topics and texts from several disciplines or the general current concern as EAP is taught at the first or second semester. In addition to this, to enhance the students’ study skill, the integration of English language and academic content is first developed (Martinez, 2002: 79); therefore, a primary skill to teach is reading.

Related to the teaching of reading for the Non-English Department, a lot of studies show that the teaching and learning process is not managed well. This condition has been taking place for almost thirty years (Sulistyo, 2008: 2). Furthermore, the problem arises when students try to understand English texts. Hamra (1996, cited in Hamra and Satriana, 2010: 29) indicates that the ability of Indonesian students to read English texts is very low. Considering the facts above, the researcher identifies some factors causing afore-mentioned problem. First, the students did not try to become familiar with the general content of the material. They merely read silently to answer the questions. This might be the reason why the lecturer admitted that they are unmotivated to read. Secondly, they were not accustomed to predict before reading. They read the text as instructed by the teacher. Thirdly, students were not accustomed to make reports after reading the text as the summary of what they had learned.
The last, majority of the students were not actively involved in the discussion during the teaching and learning process. They frequently waited for the teacher's explanation.

By considering the explanation and description above and going further than the theoretical justifications, a suitable teaching technique is required. The technique should guarantee the effective teaching which makes the students become self-directed and comprises activities to make the students learn the reading materials content. A new teaching technique is urgency to replace the conventional one.

As affirmed previously, the present study is aimed at investigating the effectiveness of a new teaching technique compare to the conventional one in teaching reading comprehension.

**REVIEW OF RELATED LITERATURE**

**The Teaching of Reading Comprehension in EAP**

Teaching reading in the Non-English Department strongly depends on the majors. In this research, the study will be focused on Fisheries and Marine Science Faculty of Brawijaya University. This faculty belongs to science studies. As the writing style of most science studies textbook is expository (Daines, 1982: 9), the reading materials which are presented are expository texts. An expository text is a prose in which an author presents information to a reader. A good expository text is explanatory in that the author provides the necessary explanation to enable readers to understand the information being presented (Herber and Herber, 1993: 59).

The improvement of teaching and learning process for reading skill for EAP needs to be taught to enhance the students’ involvement in the teaching and learning process. The factors that can give significant contributions toward the improvement of the students’ active participation on reading should be searched. In connection with learning to read in EAP and based on the questionnaires distributed in the preliminary study, mostly, the lecturers employ a teacher-centered strategy, where the lecturer dominated the class instruction. The lecturer explains, discusses, and talks a lot that overshadow the students’ participation in the learning process. Besides, the lecturer often ask a student or two in the class to read the text or the
lecturer read the text themselves, translate word by word or sentence by sentence prior to having students answer the questions in the text.

**Macro and Micro Skills in Reading Comprehension**

Related to this, reading as one of language skills besides listening, writing, and speaking is a macro skill, which means reading is perceived from an abstract perspective. As a macro skill, reading can be made more operational further into its micro reading skills that involves specific abilities that are directly observable (Sulistyo and Rachmajanti, 2008: 18). Micro reading skills are wide-ranging. There are two experts who specify micro reading skills especially for academic purposes. They are experts from University of Cambridge Local Examination Syndicate (UNCLE) and Education Testing Service (ETS).

However, due to the suitability of the Non-English Department students as the subjects, micro skills that are specified by ETS are preferable. According to Sulistyo and Rachmajanti (2008: 20), micro-skills for reading are understanding topic, main idea, supporting ideas/details, organization of the text, implied details, word meaning, pronoun reference, and the writer’s tone of writing.

Thus, in EAP, reading is the basic classroom activity to develop the Non-English Department students’ study skill. The suitable reading materials are in the form of topics and texts from several disciplines or the general current concern. The classroom discussion should cover the micro reading skills for academic purposes.

The classroom discussion includes the top-down or psycholinguistic approaches and bottom-up or decoding approaches. The development of interactive models which brought together concepts of bottom-up and top-down process work in combination in reading (Hood et al., 1996: 16-23; Brown, 2001: 298-299 and Hudson, 2007: 32-34). These approaches are relevant to the teaching of reading for EAP which involves active participation of the students.

Students’ active participation or active learning is more to the student-centered. Though the term active learning has never been precisely defined in educational literature, Eison (1991: 40) as cited in Facilitator Guide on Active Learning in University (2009: 46)
mentions some general characteristics are commonly associated with the use of strategies promoting active learning in the classroom. First, students are involved in the classroom activities more than listening. Second, emphasis is placed on transmitting information and more on developing students’ skills. Third, students are engaged in activities of reading, discussing, and writing. Fourth, greater emphasis is placed on students’ exploration of their own attitudes and values. Active learning is important because it promotes independent, critical, and creative thinking. It promotes collaboration. It increases student investment, motivation, and performance (Facilitator Guide on Active Learning in University, 2009: 47).

The improvement of teaching and learning process for reading skill for EAP needs to be taught to enhance the students’ involvement in the teaching and learning process. The factors that can give significant contributions toward the improvement of the students’ active participation on reading should be searched.

Conventional Teaching Technique: Directed Reading Activity (DRA)

In connection with learning to read in EAP, mostly, the lecturers employ a teacher-centered strategy, where the lecturer dominated the class instruction. The lecturer explains, discusses, and talks a lot that overshadow the students’ participation in the learning process. Besides, the lecturer often ask a student or two in the class to read the text or the lecturer read the text themselves, translate word by word or sentence by sentence prior to having students answer the questions in the text.

Stauffer (1969, cited in Ruddell, 2005: 128) mentions that the DRA has been criticized as being too focused on teacher’s talk and not focused enough on students’ thinking. Moreover, Herber (1978, cited in Ruddell, 2005: 128) adds that it is too closely connected with direct reading instruction rather than emphasizing content learning.

New Teaching Technique: Know, Want to learn, Learned, and to learn More (KWLM)

KWLM (K, W, L, and M stand for Know, Want to learn, Learned, and to learn More) technique is adapted from the KWL teaching technique. The KWL technique, was firstly developed by Dona Ogle in 1986, is used to guide students through text (Conner, 2006: 1; Ruddel, 2005: 242). However, Wuryanto (2008: 2) argues, that the exercise can be expanded beyond KWL. H, stands for “how” can be added to learn more. This H can be
done by posing new questions about the topic. It includes other sources of information, including organization, experts, tutors, websites, or librarians. Different from Wuryanto, Ruddell (2005: 242) proposes KWL Plus that is a combination of the original KWL with mapping. Therefore, in this study, the researcher adds M to the former technique, KWL for varying the task as follow up activities and assessment. “M” stands for “more”, which implies to learn more.

This technique assists lecturers in helping students to comprehend reading texts through the charts that include columns for each activity on activating students’ prior knowledge, expressing students’ curiosity, explaining information gotten and extending information on the topic.

Vacca and Vacca (1999: 232) describe the KWLM technique as a meaning-making technique that engages students in active text learning. In addition, Ruddell (2005: 243) mentions that KWLM technique is clearly designed to assist students throughout the learning event (before, during, and after reading). Sasson (2008: 1) states that this technique helps students keep interested as they think about what they want to know and what they have learned. It assists the students to build meaning from what they read and help them examine their progress toward their goals. Based on Vacca and Vacca (1999: 232) and Wuryanto (2008: 1), the technique is aimed to become an exercise for a class discussion, a group discussion, or individual work that can direct the students in reading and understanding a text.

Thus, the KWLM technique brings some benefits. First, it encourages students to read actively though the learning events individually or in a group. Second, it promotes students’ motivation to read since it elicits students’ background knowledge of the topic of the text, sets a purpose for reading, allows students to assess their comprehension of the text, helps the students to monitor their comprehension, and provides an opportunity for students to expand ideas beyond the text.

The KWLM technique has beneficial impacts towards the learning process in comprehending written text. This technique is believed to make the students be active and motivated learners, for it allows them to obtain extended reading materials and continue to read more written materials.
Besides, the KLWM technique is believed to greatly influence reading comprehension and learning. It provides a framework for learning that allows readers to seek and select information that is relevant to their purpose of reading. It helps readers organize text information by integrating new information into previous knowledge through retaining and remembering what they read. It helps students elaborate information. Vacca and Vacca (1999: 16) emphasize these activities as engaging a cognitive process that involves deeper level of insights, judgment, and evaluation.

Previous Studies

Related to the teaching of reading for the Non-English Department, a lot of studies show that the teaching and learning process is not managed well. This condition has been taking place for almost thirty years (Sulistyo, 2008: 2). Moreover, the problem arises when students try to understand English texts. Hamra (1996, cited in Hamra and Satriana, 2010: 29) indicates that the ability of Indonesian students to read English texts is very low.

This condition is strengthened by the questionnaire distributed to twenty lecturers in the preliminary study. The data are selected from eligible lecturers with some criteria, i.e. English lecturers who have been teaching in tertiary level for the Non-English Department for 1 to 20 years. Five of them are graduates of State University of Malang. Fifteen of them are studying in Graduate Program in English Language Teaching, State University of Malang. They are teaching in nine different universities. One is teaching in Bali, another is teaching in Jember, and the other eighteen are teaching in five different universities in Malang.

From the questionnaire, some information on teaching reading problems are elicited as follows. The facts show that forty four percent of the lecturers feel that their students are reluctant to read English text. This happens because eighteen percent of the lecturers claim that reading materials are too difficult for them. Twenty two percent of the lecturers say that they teach mostly with similar techniques. And sixteen percent of the lecturers mention that a big class is another problem in teaching reading.
After the respondents are asked about the teaching technique used, the result shows that sixty percent of the lecturers appear to use directed reading activity (DRA) technique. Twenty percent of the lecturers use integrated way of teaching with speaking or writing. Eight percent of them use lecturing method, and the rest twelve percent of the lecturers use games. The similarity among the teaching techniques used is they are teacher-centered.

Considering the facts above, the researcher identifies some factors causing aforementioned problem. First, the students did not try to become familiar with the general content of the material. They merely read silently to answer the questions. This might be the reason why the lecturer admitted that they are unmotivated to read. Secondly, they were not accustomed to predict before reading. They read the text as instructed by the teacher. Thirdly, students were not accustomed to make reports after reading the text as the summary of what they had learned. The last, majority of the students were not actively involved in the discussion during the teaching and learning process. They frequently waited for the teacher’s explanation.

The issue the researcher is at present concerned with appears to be related to some similar previous studies. Philip (2010) conducted a study which can be concluded that the teaching of reading using KWL is effective to improve students’ reading ability as it can help them to comprehend the reading text.

This study is confirmed by Priyono (2010) that the students’ reading ability and their participation during the implementation of KWL is gradually improved. They suggest that the future researchers are expected to conduct a study with different students’ condition. Both of the similar previous studies used KWL, and in this study, it is extended to KWLM. The two previous studies implemented the teaching technique to senior high school, but in this present study, the research was conducted in tertiary level, especially for Non-English Department students. The previous studies investigated the effectiveness of KWL technique compared to direct method. However, the present study is going to investigate the effectiveness of the KWLM technique compared to the conventional teaching technique, namely DRA. Similar to those previous studies, the present study used expository texts.
Based on the above-mentioned description, the researcher intends to study the KWLM technique by investigating its effectiveness compared to the teaching of reading using conventional teaching reading activities (DRA).

By considering the explanation and description above and going further than the theoretical justifications, a suitable teaching technique is required. The technique should guarantee the effective teaching which makes the students become self-directed and comprises activities to make the students learn the reading materials content. The comparison on the effectiveness of the teaching technique is required. It is intended to give an idea which might be applied in the Non-English Department classes.

RESEARCH METHODOLOGY

The present study was aimed at investigating the effect of the treatment on the experimental group, which was exposed to the proposed technique, namely the KWLM technique as compared to that of the control group utilizing the conventional teaching technique, on the students’ achievement in reading comprehension.

This study adopted a quasi-experimental design non-randomized control group pretest-posttest design. According to Ary, et al., (2006: 284), a scientific investigation in which the researcher manipulates one or more independent variables, controls any other relevant variables, and observes the effect of the manipulations on the dependent variables is experimental research. Nonrandomized groups here are already existed classes. Pretest and posttest helped in determining whether any difference exists or not (Ary, et.al., 2006: 341). This is to see whether the treatment has an impact on the students displayed by comparing the result of the pretest and posttest.

There were 12 meetings available to do this research because of many reasons; this technique was applied to discuss five patterns of expository texts, namely, cause effect, descriptive, problem solution, sequence, and comparative. The result of the study was a conclusion that the use of the KWLM technique in teaching and learning reading might benefit students in improving their ability in comprehending expository texts. The KWLM technique was tried out before to other students majoring in Management under the Faculty of Economics and Business in Brawijaya University academic year 2011-2012. The KWLM
technique was taught to the experimental group. The treatment was carried out from 24 September 2011 to 15 November 2011.

**Population**

The population of the research was the first semester students from Fisheries and Marine Science faculty of Brawijaya University, one of the famous universities in Indonesia. In academic year 2011/2012, there were eleven classes consisting 50-55 students for offering A to K. The students who were attending the English course were from different study programs but under the same faculty.

In Fisheries and Marine Science faculty, English served as English for Academic Purposes not General English that was aimed at developing students’ English language skills specific to the subject contents or field of study with emphasis on the communicative language use in academic contexts. The topic areas covered reading, speaking, and writing with some necessary linguistic explanations needed to support the skills development. It was offered in the first semester with 2 credits. As English for Academic Purposes, the activity of learning was focused on reading. This department was chosen due to the accessibility of the subjects, for the researcher has been teaching in this department.

**Sample**

To do the experiment, two of eleven offerings were chosen as the sample and are put as experimental and control groups. The chosen classes were the classes that was assigned to the researcher. In the present research, the simple sampling in the research was taken. By tossing the coin, B class was chosen as the experimental group, while D class as the control group. All students were taken as the target population of the study with no randomization.

**Experiment (Treatment)**

KWLM (K, W, L, and M stand for Know, Want to learn, Learned, and to learn More) technique is adapted from the KWL teaching technique. The KWL technique, was firstly developed by Dona Ogle in 1986, is used to guide students through text (Conner, 2006: 1; Ruddel, 2005: 242). However, Wuryanto (2008: 2) argues, that the exercise can be expanded beyond KWL. H, stands for “how” can be added to learn more. This H can be done by posing new questions about the topic. It includes other sources of information, including organization, experts, tutors, websites, or librarians. Different from Wuryanto,
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**Conventional Technique**

According to Daines (1982: 179), this teaching technique is called Directed Reading Activity (DRA). Regarding to Daines’s (1982: 179-180) explanations, DRA has five steps, namely, (1) preparation for reading is done by relating students’ previous learning and past experiences to the topic of the passage and teaching key words that carry the concept; (2) Purpose for reading is done by providing guidance in how and why to read a specific selection; (3) silent reading is done by asking the students to read the passage silently; (4) follow-up activities are done by having a class discussion so that the students have opportunity to clarify and extend ideas upon the passage; (5) expansion activities are done to extend the students understanding by doing individual or group project. However, some teachers usually ask the students to answer the comprehension questions individually or in groups and later, ask them to have group presentation (Shih, 1999: 20).
Stauffer (1969, cited in Ruddell, 2005: 128) mentions that the DRA has been criticized as being too focused on teacher’s talk and not focused enough on students’ thinking. Moreover, Herber (1978, cited in Ruddell, 2005: 128) adds that it is too closely connected with direct reading instruction rather than emphasizing content learning.

The Technique for Collecting the Data

The data of this research, in this case the students’ reading comprehension score of the experimental group and control group were obtained from the pretest and posttest. The pretest was administered to both experimental and control group to check on the equivalence of the experimental and control group before the experiment.

Pretest for the experimental group was conducted on 24 September 2011, 50 students were assigned to the test. Pretest for the control group was conducted at 23 September 2011, 50 students of control group were tested. While the posttest for the experimental and control groups were carried out at 15 November 2011.

Questionnaire on student’s motivation was given after the pretest to both of the experimental and control groups. Meanwhile, questionnaire on student’s attitude were given after the posttest to the experimental group only. In the following meeting, on 29 November 2011 the students were asked to fill in the student opinion.

Observations were conducted on every treatment time. Observation sheet was used during observation time. The major and minor data were then analyzed.

Technique for Analyzing the Data

Since there were two different kinds of data- major and minor, so they were treated and analyzed in different ways.

Major Data

The pre-test for experimental and control group was conducted on Friday, 23 September 2011 and Saturday, 24 September 2011. It was conducted at 08.00-09.40 and 08.50-10.30. All 100 students in the attendance list took the test (from two classes). Table 1 presents scores summary.
Table 1: Summary of the Pretest Scores

<table>
<thead>
<tr>
<th></th>
<th>Experimental Group</th>
<th>Control Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of students</td>
<td>50</td>
<td>50</td>
</tr>
<tr>
<td>Highest score</td>
<td>83.33</td>
<td>80</td>
</tr>
<tr>
<td>Frequency of the highest score</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Lowest score</td>
<td>30</td>
<td>36.67</td>
</tr>
<tr>
<td>Frequency of the lowest score</td>
<td>1</td>
<td>7</td>
</tr>
<tr>
<td>Mean score</td>
<td>59.13</td>
<td>55.13</td>
</tr>
<tr>
<td>Standard deviation</td>
<td>12.30</td>
<td>12.90</td>
</tr>
</tbody>
</table>

To check the experimental and control groups’ equivalence before the experiment, the homogeneity of variances between the experimental and control group was tested using Levene’s test. The significant value was .537 and it was higher than .05. This indicated that the difference between variances was not significant. Based on the result, it was concluded that the variances between the experimental and control group were homogeneous. Because the variances do not differ significantly, the assumption of homogeneity of variances was not violated and \( t \)-test can be conducted.

Based on the pretest data analysis to check the homogeneity of the experiment and control group, it was found that the experimental and control group were not significantly different in their reading comprehension achievements prior to the experiment. It indicated that they were equivalent before the treatment. Therefore, the posttest result of the both groups then was analyzed using independent \( t \)-test.

Correspondingly, null hypotheses were set up, namely the KWLM technique could not increase the students reading comprehension’s scores. The result of data analysis from the posttest scores was used as empirical evidence to reject or not reject \( H_0 \). In the absence of enough statistical evidence, \( H_0 \) was not rejected. A level of significance .05 (95% confidence) was the criterion for the acceptance or rejection of the null hypothesis.

Minor Data

After the computation, the results of questionnaire on student’s motivation in the form of percentage were interpreted on the basis of the following criteria:

- 75-100 percent is considered high
- 41-70 percent is considered fair
- 0-40 percent is considered low
The setting up of the criteria above was based on logic, which is, the three categories-high (75-100 percent), fair (41-70 percent), and low (0-40 percent).

However, questionnaire on student’s attitude upon the teaching and learning process was explained per point of sub variable.

The student opinion was interpreted by labeling answers as positive, negative, or not clear attitude towards the KWLM technique. Each category then was counted and percentage was provided to picture how many percent the respondents could show their attitude or opinion. The degree to which the respondents had positive, negative, and not clear position was shown by the percentage.

Observation sheet was counted per meeting by percentage. How many percent the teacher had applied each steps became important to see how well the KWLM technique was applied. By doing so, the percentage could show accurate the teacher performed the KWLM technique.

RESULTS AND DISCUSSIONS

Major Findings

The major data as the main source of the decision whether or not the procedure applied was affective are the pretest and posttest scores that were calculated by means of statistical procedure.

The Result of Posttest of the Experimental and Control Group

The result of the posttest showed that the average scores for the experimental group were higher than that of the average score of the control group. The average score of experimental group was 64.46, and the average score of control group was 58.60. The mean difference between experimental and control groups was 5.86.

Table 2: The Summary of Posttest Score

<table>
<thead>
<tr>
<th></th>
<th>Experimental Group</th>
<th>Control Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of students</td>
<td>50</td>
<td>50</td>
</tr>
<tr>
<td>Highest score</td>
<td>86.67</td>
<td>80</td>
</tr>
<tr>
<td>Frequency of the highest score</td>
<td>1</td>
<td>3</td>
</tr>
</tbody>
</table>

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Ive Emaliana, M.Pd.
Comparison of the Learning Effectiveness on the Teaching of Reading Comprehension 137
In other words, the hypothesis of this study worked. It meant that using the KWLM technique in teaching of reading comprehension in the non-English Departments was significantly more effective than using conventional technique, especially in improving students’ reading comprehension on expository texts.

The Effects of the KWLM technique on Reading Comprehension

It is also important for this study to analyze the strengths of the KWLM technique as the statistical calculation showed that it had effects on students’ ability in reading. The students’ pretest and posttest scores of the experimental class were examined for this purpose.

Table 3: The Effects of the KWLM Technique on Reading Comprehension

<table>
<thead>
<tr>
<th>Aspects</th>
<th>Experimental Group</th>
<th>Control Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pretest Score</td>
<td>59.13</td>
<td>55.13</td>
</tr>
<tr>
<td>Posttest Score</td>
<td>64.46</td>
<td>58.60</td>
</tr>
<tr>
<td>Score increase</td>
<td>5.33%</td>
<td>3.47%</td>
</tr>
</tbody>
</table>

The gain on reading score in experimental group was 5.33 and it was higher than that of in control group, which was 3.47. However, both groups gained the reading score. In short, the better score on the experimental group compared to the control group was not a coincidence. The treatments given were proved in influencing the students’ achievements. Therefore, the KWLM was claimed as the effective technique to improve the students’ reading comprehension, especially in the non-English departments.

Final Data Analysis Using T-Test

The final data of the students’ reading comprehension scores in the posttest were analyzed statistically using t-test (see Appendix 6.6 for more detail on the statistical computation). After analyzing the posttest using t-test, it was derived p-value was 0.021 and t-value was 2.34. The level of significant .05 had error rate (α) 0.025. Therefore, p-value (0.021) < α (0.025) and t-value (2.34) > t_{0.025,98} (2.27), (was read as the value of t is 2.34, was...
higher than the minimum $t$-critical value for the subjects with 98 degree of freedom 2.27.) They meant $H_0$ was rejected. This indicated that the difference between means for the experimental and control group was significant at the .05 level of significant.

Next, the analysis referred back to the mean score of the posttest from both groups. Regarding to the descriptive statistical analysis, the mean score for the experimental group was 64.46 meanwhile the control group was 58.60. In other words, it was found out that the mean score of students’ reading comprehension in experimental group was significantly higher than the score of students’ reading comprehension in control group.

To conclude, the mean score gain on the experimental and control groups were not coincidence, but some factors affected it. However, although the students of both of the groups underwent gain on the mean score, the students on experimental group achieved higher score improvement on their reading comprehension than that on the control group. Therefore, the claim of the KWLM as the effective technique to improve the non-English department students’ reading comprehension was strengthened.

**Minor Findings**

**The Result of Questionnaire on Students’ Initial Language Learning Motivation**

The questionnaire on student’s initial motivation in learning English was supposed to give information dealing with the students’ personal impression on English before the treatment was given.

The experimental and control groups attitude upon external motivation that affected English language learning was different. The internal motivation of experimental group was 77%, while of control group was 71%, meaning that the internal motivation on experimental group was higher that control group. However, both groups had the same level of external motivation that was high.

**The Result of Students’ Attitude towards the Teaching and Learning Process of English in General**

The results of the questionnaire on students’ attitude to the teaching and learning process after the treatment were as follow.
Table 4: The summary of the students’ attitude in General

<table>
<thead>
<tr>
<th>Variables</th>
<th>Respond</th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Attitude towards the lecturer</td>
<td>76%</td>
<td>24%</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>2. Attitude towards the lecturer’s way of teaching</td>
<td>40.67%</td>
<td>51%</td>
<td>4.33%</td>
<td>4%</td>
<td></td>
</tr>
<tr>
<td>3. Attitude towards the classroom atmosphere</td>
<td>56%</td>
<td>44%</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>4. Attitude towards the instructional material used</td>
<td>26%</td>
<td>72%</td>
<td>2%</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>5. Attitude towards the KWLM technique</td>
<td>32.44%</td>
<td>64.89%</td>
<td>2.67%</td>
<td>-</td>
<td></td>
</tr>
</tbody>
</table>

The table showed that students’ attitude in the teaching and learning English in general was very good.

The Result of Students’ Attitude towards the KWLM Technique

The student’s opinion was used to check the students’ attitude towards the KWLM technique as the main focus of investigation.

Table 5: The Summary of Students’ Answers and the Interpretations of the Student’s Opinion

<table>
<thead>
<tr>
<th>No</th>
<th>Topics of the Questions</th>
<th>Students’ Responses</th>
<th>Positive</th>
<th>Negative</th>
<th>Not clear</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>The students’ general impression on the KWLM technique</td>
<td>47</td>
<td>1</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>94%</td>
<td>2%</td>
<td>4%</td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>Good things from the KWLM technique</td>
<td>49</td>
<td>-</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>98%</td>
<td>-</td>
<td>2%</td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>Benefits of learning reading by means of the KWLM technique</td>
<td>50</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>100%</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td>Weaknesses of the KWLM technique</td>
<td>35</td>
<td>15</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>70%</td>
<td>30%</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td>The purpose of using the KWLM technique in learning reading</td>
<td>46</td>
<td>2</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>92%</td>
<td>4%</td>
<td>4%</td>
<td></td>
</tr>
<tr>
<td>6.</td>
<td>The students’ experience in learning reading using the KWLM technique</td>
<td>46</td>
<td>3</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>92%</td>
<td>6%</td>
<td>2%</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>273</td>
<td>21</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>91%</td>
<td>7%</td>
<td>2%</td>
<td></td>
</tr>
</tbody>
</table>

From the table, it showed that the students’ attitude were more to the positive than the negative to the implementation of the KWLM technique.

The Result of the Analysis of the Observation Sheet
As there were ten meetings of the treatment, the comment from the observer was used to reflect the teaching and learning process. The comments were used to measure lecturer’s competence in conducting teaching and learning process.

**Interpretation**

In this study, it was found that there was significant differences between the students’ reading comprehension achievement in the pretest and posttest. The result is in line with what Priyono (2010) found in his research that the use of KWLM technique could improve the students’ reading comprehension and active participation.

However, the students’ better reading comprehension achievement in this study might be caused by learning motivation. According to Dornyei, (2003:7), “greater motivation leads to better attitude and increased motivation to continue using new language.”

Although the finding of this study showed that there were significant difference between the experimental and control groups, the difference was not too high. It might be happened because the limited time used in the treatment. In this research, only twelve meetings (including pretest and posttest) were conducted. However, the KWLM technique is beneficial to use because as it is also suggested by Ruddell (2005: 243) that the KWLM technique was clearly designed to assist students throughout the learning event (before, during, and after reading).

As a reading technique, the KWLM technique consists of four main parts. The first part or, "what students know" can be represented by a ten minute (maximum) brainstorming about a particular subject connected with the reading text. The second part or, "what students want to know" is the what do students want to find out prior to reading the text (Conner, 2006: 2; Sasson, 2008: 2; Wuryanto, 2008: 2). The third part or, "what students learned" can be represented by a ten minute activity to help the students become aware of what they have just learned as they reflect on their reading in a fun and engaging way (Conner, 2006: 2; Sasson, 2008: 2; Wuryanto, 2008: 2). The fourth part or, "students learn more" can be represented by asking the students to answer their questions, as well as list what new information they have learned.
CONCLUSION

Out of the results of the major data analysis, the answers to the previously stated problems can be drawn. In conclusion, the reading comprehension score of students who are taught using the KWLM technique is significantly higher than those who are taught using the conventional technique. Besides, using the KWLM technique can improve the students’ reading comprehension especially to determine topic, main idea, supporting ideas/details, organization of the text, implied details, word meaning, pronoun reference, and the writer’s tone of writing of expository texts.

From the minor data analysis, nevertheless, the effectiveness of the KWLM technique implies that this technique can be used one of the teaching techniques to teach reading in the non-English departments. This point is strengthened by the opinions of the students concerning the use of the KWLM technique which are gathered through the questionnaires as one of the instruments to collect the minor data. According to them, KWLM technique is more enjoyable than the other teaching techniques to learn English because they are far from being boring. In addition, the students claim that they prefer the utility of the KWLM technique due to several reasons.

Thereby, the findings of the research filled in position of adding the new theory that mentioned the KWLM technique was effective to be used in the teaching of reading, especially to the non-English departments.

SUGGESTIONS

The first suggestions is addressed to English lecturer to utilize KWLM technique in teaching reading comprehension for the non-English department students since some of the investigations of using it yield positive result and it has been empirically tested in this research.

Because of the scope of the study, the researcher presents some recommendations for future researchers who want to conduct research on investigating the effectiveness the KWLM technique in tertiary level, but especially to English department students with various topics is recommended. Besides that, it is suggested also to implement the KWLM technique to improve the tertiary level students’ achievement in reading comprehension.
Based on the limitations of the present study, the future researchers are suggested as follows. First, the improvement of students’ mastery on the reading micro-skills in the present study is investigated as a whole, so, the future researchers can elicit the gain per micro-skill. In this study, The Levene’s test on the pretest assures that the research subject is homogeneous. The subjects’ characteristics in terms of learning styles, genders, learning strategies, or learning motivation are not specified. The future researchers are suggested to consider the subject characteristics to be included in developing this present study. Besides, the future researchers might apply split-half when they implement the teaching technique to the experimental and control groups.

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