The Effect of Test Techniques on the Students’ Reading Achievement

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Abstract

Many argue that either multiple choice items or short-answer questions have their own strength and weaknesses. However, the research of identifying the effect of both test techniques on certain language skills, particularly reading, is still limited. Therefore, this study is important to be conducted. Specifically, the objectives of this study were 1) to identify the reading achievement of the students who were assessed English reading using multiple choice items format, 2) to identify the reading achievement of the students who were assessed English reading using short-answer items format and 3) to know whether there was a significant difference between students’ reading achievement who were assessed English reading using multiple choice items format and those who were assessed English reading using short-answer items format. This study utilized a true experimental design with a purposive sampling assignment involving twenty respondents for experiment group and the same number of respondents for control group. The respondents of experiment group consisting of students whose their reading achievement was assessed using multiple choice items (determined as variable x) while the respondents of control group comprised students whose their reading achievement was assessed using short-answer items (determined as variable y). The instruments used were taken from reading section for the TOEFL. The data were then analyzed quantitatively. The result indicated that the students’ reading achievement who were assessed using multiple choice item was much better than those who were assessed using short-answer item. It was seen from the mean score of variable x (7.03) which was higher than variable y (4.6). This difference was proven to be quite significant after seeing at the t-counted (3.74) which was higher than the t-table (1.68).

INTRODUCTION

Up to the present time, there have been a great number of academic researches on the field of language testing carried out by experts and even surprisingly, its focus has been primarily in the area of teaching English as a foreign language (Alderson, 1998). This is believed to be originated from the perspective that English is the most widely learned and internationally used language in the world. Therefore, researchers find it essential to make studies on such issues for the sake of obtaining detailed information and better comprehension of what is involved in the process of teaching English and students’ development in learning it.

To support the previously mentioned statement, it is indicated that tests are absolutely required to be implemented in order to provide teachers with notification on their students’ learning achievement or in the other hand to measure their language performance or ability after having completed a program in a language course. In conclusion, it is really important particularly for English teachers to realize the necessity for constructing and giving a test (Johnson, 2001; Hughes, 2003; Brown, 2004).

When talking about English language tests, there are several common techniques that most English teachers always try to apply. Two of which are multiple choice items and short-answer items (Brown, 2001; Hughes, 2003; Brown; 2004; Harmer, 2007). Both of the techniques, however, possess their own advantages and disadvantages so that it is
really wise for teachers not to hold high one test technique over another.

Currie and Chiramanee (2010) observed the effect of the multiple choice item formats on the measurement of students’ knowledge of language structure. The result of their study indicated that arranging test questions in the format of multiple choice items cannot a hundred percent reflect the real ability of students’ language structure. In line with this, Burton, et al (1991) and Hughes (2003) say that once students are required to choose options presented on the list of alternatives rather than constructing a response themselves, they cannot perform their ability in producing original ideas. Even worse than that, through multiple choice items format, students would obtain high opportunity to simply guess or predict the answer without thinking first. Multiple choice items could also facilitate the possibility for cheating.

Another fact that is obtained from the surrounding also shows that the test technique made by teachers—which is frequently in the format of multiple choice—has been proven to be ineffective and inaccurate in measuring the real English competence of students (Musthafa, 2008). Unfortunately, English teachers have a really high enthusiasm in still using such test technique for the reason of practicality. This, as Musthafa states, will be able to further contribute on the discouragement of the development on students’ critical thinking in learning language.

Reading, as one of the English language skills, has become an obligatory part that students need to practice out of the three. Grabe (1983) defines reading as the ability to process meaning from the printed page and interpret that information in an appropriate way. Reflecting to the essential definition of reading itself, the technique of the test that is going to be given to students has of course to be able to describe and measure the ability of students to make interpretation on the text being examined. Thus it will be appropriate to highly represent the true or real reading competence of the students.

Meanwhile Hidayat (2001) indicates that in measuring students reading ability, short-answer items could be the most representative test technique. He further says that by having such test technique for the reading test, teachers would be able to observe either the students’ ability in absorbing information from the text being read or their ability in paraphrasing idea from the text. It can be seen that there are more advantages of having short-answer items as a tool of measuring students’ reading skill instead of composing questions in the form of multiple choice format.

Unfortunately, the two approaches introduced by Currie and Chiramanee (2010) where they examined the effect of multiple choice item format on the students comprehension of language structure and also Hidayat (2001) where he observed the function of short-answer items in showing students’ reading comprehension are still rather weak. There still exist several weaknesses. Though the two studies mentioned here are quite informative, several important questions remain unrevealed.

Being inspired by this phenomenon, this study was conducted. This present study was designed to investigate the effect of two types of test techniques—which were multiple choice and short-answer items--towards the students’ English reading achievement. Specifically, the objectives of this study were 1) to identify the reading achievement of the students who were assessed English reading using multiple choice items format, 2) to identify the reading achievement of the students who were assessed English reading using short-answer items format and 3) to know whether there was a significant
difference between students’ reading achievement who were assessed English reading using multiple choice items format and those who were assessed English reading using short-answer items format.

It is then expected that the results of this study would give advantages and contribution for teachers, particularly, of English as a foreign language so that they would have tight consideration in determining what suitable techniques they are about to apply in assessing their students’ English reading ability. It could also become a tool to reflect the English teachers’ capability in composing the reading test. Further, the result of this study is expected to be able to provide beneficial knowledge, information and reference for the next researchers in doing a research in the same field.

RESEARCH METHODOLOGY

This study utilized a true experimental design with a purposive sampling assignment involving twenty respondents for experiment group and the same number of respondents for control group. The respondents of experiment group consisting of students whose their reading achievement was assessed using multiple choice items (determined as variable x) while the respondents of control group comprised students whose their reading achievement was assessed using short-answer items (determined as variable y).

The whole respondents—regardless of their gender and age difference—were selected from the seventh semester students of English department, Ibn Khaldun University Bogor. The purposive sampling itself was done by identifying at their scores in reading course that they had obtained from the first, second, third up to the fourth semester. Most of them were native sundanese speakers.

The instrument employed in this study was derived from a reading section for the TOEFL. It comprised fifty questions for the whole. The decision of using this was because TOEFL has been internationally recognized as one of the standardized tests of English language. Moreover it also deals with academic setting. This was also found to suit with the need of seventh semester students who were actually about to have a TOEFL test before they had to go to school doing the PLP (students’ teaching practice).

The reading section chosen to be given to both groups was originated from one source. However, the questions given to the control group were changed into the format of short-answer items while the questions distributed to the experiment group remained still in multiple choice items format. They were obliged to be able to finish doing the test in sixty minutes.

In analyzing the data obtained, the formula of pearson product moment and t-test were employed to identify whether or not there was significant difference between two variables being observed. Meanwhile to know the surface level of the difference between the two variables being compared, the formula of central tendency—which included mean, median, and mode—was used (Hatch and Farhady, 1982).

FINDINGS AND DISCUSSIONS

There were three research questions that had to be answered in this study. They were 1) How was the reading achievement of the students who were assessed English reading using multiple choice items format? 2) How was the reading achievement of the students who were assessed English reading using short-answer items format? and 3) Was there a significant difference between students’ reading achievement who were assessed English reading using multiple choice items format and those who were assessed English reading using short-answer items format?. Therefore,
the discussion of the findings would be divided into three sections as follows:

**Section 1: Research Question 1**

In line with the statement of practicality—either of its easiness to mark or the time spent—of the multiple choice items format (Harmer, 2007), the findings of the research also showed that from the whole 20 respondents involved in the experiment group (variable x), 100% of them could finish answering all of the questions on the time limitation given to them. This empirical evidence certainly supported the notion that the use of multiple choice items in reading test was quite practical.

From another result of the finding could be seen that the majority of the respondents of the experiment group (variable x) obtained adequate high scores ranging from 6 to 9.6 with the percentage of 85% from 100% and the number of respondent that obtained low scores was only 15%. The detail could be seen on the table below.

<table>
<thead>
<tr>
<th>Students’ Scores</th>
<th>Total Number of Students</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>9.6</td>
<td>1</td>
<td>5%</td>
</tr>
<tr>
<td>8.4</td>
<td>2</td>
<td>10%</td>
</tr>
<tr>
<td>8</td>
<td>1</td>
<td>5%</td>
</tr>
<tr>
<td>7.8</td>
<td>2</td>
<td>10%</td>
</tr>
<tr>
<td>7.6</td>
<td>6</td>
<td>30%</td>
</tr>
<tr>
<td>6.6</td>
<td>1</td>
<td>5%</td>
</tr>
<tr>
<td>6.4</td>
<td>1</td>
<td>5%</td>
</tr>
<tr>
<td>6.2</td>
<td>2</td>
<td>10%</td>
</tr>
<tr>
<td>6</td>
<td>1</td>
<td>5%</td>
</tr>
<tr>
<td>5</td>
<td>1</td>
<td>5%</td>
</tr>
<tr>
<td>4.6</td>
<td>1</td>
<td>5%</td>
</tr>
<tr>
<td>4</td>
<td>1</td>
<td>5%</td>
</tr>
</tbody>
</table>

Based on the data obtained and presented above, it can be seen that the mode of the variable x was 7.6 as it appeared six times with the percentage of 30% from the whole. Meanwhile the mean score of this variable was 7.03.

To sum up, the surface calculation showed that the English reading achievement of the students who were assessed English reading using multiple choice items format was good.

**Section 2: Research Question 2**

The following table presented the percentage of the students’ reading achievement of variable y, which involved the respondents that were assessed reading using short-answer items format.

<table>
<thead>
<tr>
<th>Students’ Scores</th>
<th>Total Number of Students</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>7.3</td>
<td>1</td>
<td>5%</td>
</tr>
<tr>
<td>7.2</td>
<td>3</td>
<td>15%</td>
</tr>
<tr>
<td>6</td>
<td>2</td>
<td>10%</td>
</tr>
<tr>
<td>5.4</td>
<td>2</td>
<td>10%</td>
</tr>
<tr>
<td>4.8</td>
<td>2</td>
<td>10%</td>
</tr>
<tr>
<td>4.6</td>
<td>1</td>
<td>5%</td>
</tr>
<tr>
<td>4</td>
<td>4</td>
<td>20%</td>
</tr>
<tr>
<td>2.6</td>
<td>3</td>
<td>15%</td>
</tr>
<tr>
<td>2.4</td>
<td>1</td>
<td>5%</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
<td>5%</td>
</tr>
</tbody>
</table>
From the table above, it could be concluded that the number of students who got unsatisfactory scores was higher than those who got good scores. Their percentage reached 70% from the whole 20 students. The mode of this variable was 4 since it appeared 4 times. Meanwhile the mean score was 4.6.

**Section 3: Research Question 3**

The two calculations done in the previous sections showed that in the surface level there was a quite big difference on the two variables being observed. This could be seen from the mean score of variable x which was higher (7.03) than that of the variable y (4.65). Another supporting evidence that could be used to strengthen the analysis could be seen from the percentage of the students who obtained good scores from variable x which was 85% while the bigger percentage obtained by those of the variable y was 70% getting unsatisfactory scores.

To find out the significant difference between variables being observed, the computation of distribution of sampling was done. It eventually resulted the value of the t-counted which was 3.74. Having finished with the identification of this, then the value of the t-table was searched. In the degree of freedom 38 and the level of significance 0.05, the t-table was 1.68. From this, it can be concluded that the difference between variables being compared was quite significant in which the t-counted (3.74) was higher than the t-table (1.68).

**CONCLUSIONS AND SUGGESTIONS**

Based on the findings and discussions previously, it then can be concluded that through the use of multiple choice items format in testing reading to students could result in the possibilities for them to get satisfactory scores. It can be seen from the percentage of the students who got good score that could reach 85% from the whole number of students compared to using short-answer items format which could only had 30% from all.

By comparing the mean scores of both variables, in the surface level it can be summed up that multiple choice items format contributed to the better reading achievement for the students than short-answer items. The difference was proven to be quite significant after seeing at the t-counted (3.74) which was higher than the t-table (1.68).

By considering the findings of the research, it is then highly recommended for teachers to think of what test techniques to be chosen for assessing the students’ reading competence. This is because each test technique possesses its own strength and weakness, either its practicality, validity or any other factors. It is also important for English language teachers to carefully consider both the effectiveness and the effect of both test techniques.

Nevertheless, this study represents only a limited approach to the many situations in which the multiple-choice items format and short-answer items are used and its findings can only at this stage be applied within the limited context in which it was conducted. Further studies would have to be implemented in different language skill areas, with learners at different levels and probably in different educational and cultural contexts.

**REFERENCES**


