THE EFFECTIVENESS OF ANALYTIC TEAMS TECHNIQUE TO TEACH READING COMPREHENSION VIEWED FROM STUDENTS INTELLIGENCE

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ABSTRACT

This research is aimed at finding out whether: (1) Analytic Teams is more effective than Grammar Translation to teach reading to the eighth grade students of MTsN Ponorogo in the academic year of 2011/2012; (2) the eighth grade students of MTsN Ponorogo who have high intelligence have better reading comprehension than those who have low intelligence and (3) there is an interaction effect between teaching technique and students' intelligence on the students' reading comprehension. The method which was applied in this research was experimental study. The research was conducted at MTsN Ponorogo in the academic year of 2011/2012. The population of this research was the eighth grade students of MTsN Ponorogo. Two samples were taken by using analytic team technique. The class VIIIA was used as the experimental class and class VIIIB as the control class. Each of the class consists of 22 students. The experiment group was treated by using Analytic Team, while the control group was treated by using grammar translation. The data analysis shows the following finding: (1) Analytic Team is more effective than Grammar Translation to teach reading for the eighth grade students of MTsN Ponorogo in the academic year of 2011/2012; (2) the students who have high intelligence have better reading achievement than the achievement of those who have low intelligence; and (3) there is an interaction between teaching technique and student's intelligence to teach reading at the eighth grade students of MTsN Ponorogo.

Keyword: Teaching technique, reading Comprehension, Intelligence

INTRODUCTION

English teaching and learning is aimed at mastering the four language skills/ Namely listening, speaking, reading and writing. One of the language skills is reading. Jeremy Harmer (1998:70) states that, reading is an incredibly active occupation. It means that reading is way to know, to feel and to understand. Reading is an active and interactive activity to reproduce the word mentally and vocally and understand the content of reading text. Reading to get the right information is not easy for many students especially for the eighth grader. That is why, an English teacher should be more active in teaching reading.

In this case, to make the students achieve in reading comprehension, the writer applies analytic team technique on the consideration that it can improve the students’ reading comprehension and encourage students’ active in teaching and learning process. The success of teaching English especially reading is also influenced by students’ personality factors, one of them is student’s intelligence. Carol Bainbridge states that, intelligence is the ability to learn about, learn from, understand, and interact with
one’s environment. So, intelligence clearly has a powerful genetic component. A stimulating environment, parental encouragement, good schooling, specific reasoning skills, continued practice, and so on, certainly help the students become more intelligent.

Considering that background, the writer formulates the problems of this study as follows:

1. Is Analytic Teams technique more effective than Grammar Translation Method to teach Reading for eighth grade students of MTsN Ponorogo in the academic year of 2011/2012?
2. Do the students having high intelligence have better reading comprehension than those having low intelligence?
3. Is there any interaction between teaching techniques and intelligence in teaching reading for the Eighth grade students of MTsN Ponorogo in the academic year of 2011/2012?

This research is aimed at finding out the influences of the teaching strategies and students’ intelligence on the students’ reading comprehension. In detail, this research has the objective too find out whether:

1. Analytic Teams technique is more effective than grammar translation technique to teach reading for the Eighth grade students of MTsN Ponorogo in the Academic year of 2011/2012.
2. The students having high intelligence have better reading comprehension than those having low intelligence.
3. There is an interaction between teaching techniques and intelligence in teaching reading for the Eighth grade students of MTsN Ponorogo in the Academic year of 2011/2012.

The discussion of the nature of reading, in general, cannot be separated from different ways of defining the term of reading. Widdowson in Urquhart, (1998: 17). Reading is the process of receiving and interpreting information encoded in language form via the medium of print. Moreover, Urquhart (1998: 14) states that reading means dealing with language message in written or printed form. Further, Reading is the ability to draw meaning from the printed page and interpret this information appropriately (Grabe and Stoller, 2002: 9).

It means that reading is used to look for the meaning and information from the text. Another definition is stated by (Vacca, & Gove, 1991: 57) reading is a means of communicating information between the writer and the reader. The reader tries to understand ideas that the writer has put in print. Reading is a process of understanding written language (Rumelhart, 1985: 57). Reading also provides opportunities to study language: vocabulary, grammar, punctuation, and the way we construct sentence, paragraphs, and text.
There are many reasons why reading is important for the teacher to teach the students. Many students want to be able to read texts in English. It can help them to improve their knowledge and give them additional skill for their careers in the future. The teacher can use reading texts as a media to teach vocabulary, grammar, punctuation, the way to construct sentence, paragraphs etc. Moreover, Rivers (1981) supports that reading is the most important activity in any language class, not only as a source of information, but also as a means of consolidating and extending one’s idea and knowledge of language. Further, Rosenshine says that reading comprehension commonly entails seven skills. They are: recognizing the words in the context, identifying main ideas, recognizing the sequence, decoding details, drawing inferences, recognizing cause and effect and comparing and converting. Being able to state the main idea of what has been read is one the most important comprehension skill (Rosenshine in Dupuis and Askov, 1982: 186). Being able to state the main idea of what has been read is one of the most important comprehension skills.

4. In line with the theories and elaboration of reading, it can be stated that reading comprehension is a process of getting meaning of strange lexical items (synonym and antonym), finding reference, identifying main point, finding explicitly and implicitly stated information.

A good reading competence requires many components. The students have to have some indicators that can indicate their reading competence such as: Word meaning, main idea, comprehending the explicit and implicit, and reference of the word. A person may read for many purposes, and the purpose helps to understand more what is read by people. If he is reading for pleasure or reading for pure recreation and enjoyment, he may read either quickly or slowly based on the way he likes or feels. But if reads for studying or setting information such as news, science, or same line, which are part of his study or assignment he does it very slowly and carefully. According to Anderson there are seven aims of reading. Reading for details and fact, reading for main ideas, reading for sequence or organization, reading for inference, reading for classifying reading for evaluating and reading for comparing of contest.

To make the students enjoy and interested in teaching learning process the teacher must be able to choose the technique to teach. One of the techniques which can be used to teach reading is analytic team technique. This technique is useful for helping students understand the different activities that constitute a critical analysis. It can be particularly effective when the teacher assigns roles that exist within the norms of the
discipline. The most challenging aspect in preparing for this technique is selecting an assignment that is complex enough to yield a useful analysis when divided into component tasks. If the task is not sufficiently complex, one or more of the individual team members will be bored or unable to participate. Elizabeth F. (2005: 194) states that to select an assignment requires use of a complex analytical process and break the process down into component part or roles. Although there are a variety of roles from which to choose, depending upon the specific analytic process and learning goals. It means that analytic team technique is used to analyze text to focusing in learning goals (the goal can be generic structure, and content or the meaning of the text).

Beside, grammar translation technique was used for the purpose of helping students read and appreciate foreign language literature. It was also hoped that, through the study of the grammar of the target language, students would become more familiar with the grammar of their native language better. Finally, it was thought that foreign language learning would help students grow intellectually; it was recognize that students would probably never use the target language, but the mental exercise of learning it would be beneficial anyway, (Diane Larsen Freeman, 2000: 11). From that statement it means that grammar translation technique hopefully can improve the grammar in order that has better in their native language and make students grow intellectually.

RESEARCH METHODOLOGY

Related to this study, the writer used experimental study because the aim of this study is revealing the effect of teaching and students’ intelligence toward the students’ reading comprehension. It involved three variables. The first is independent variable. In this study, the independent variable is teaching techniques. The second variable is dependent variable. The dependent variable in this study is reading comprehension. The third variable is a secondary independent variable or attributive variable. It is intelligence.

The population of this study is the eighth grade students of MTsN Ponorogo in the academic year of 2011/2012. The total number of the population in this research is 248 students who are divided into 8 classes.

In this study, the writer only takes two classes were VIII A and VIIIB. VIII A was the experimental class and VIIIB was the control class.

The sample in this study was chosen randomly from the population of cluster which is usually called cluster random sampling. It means that all the members of cluster must be included in the sample.
RESULT AND DISCUSSION

Hypotheses Testing

Table 1. Summary of mean scores

<table>
<thead>
<tr>
<th>Technique of Teaching</th>
<th>Intelligence</th>
<th>Analytic Team</th>
<th>Grammar Translation</th>
<th>Total</th>
<th>Rows</th>
</tr>
</thead>
<tbody>
<tr>
<td>High ( (B_1) )</td>
<td>42</td>
<td>41</td>
<td>37</td>
<td>35</td>
<td>( \sum = 437 )</td>
</tr>
<tr>
<td></td>
<td>43</td>
<td>37</td>
<td>40</td>
<td>35</td>
<td>( \bar{X} = 39.7273 )</td>
</tr>
<tr>
<td></td>
<td>40</td>
<td>40</td>
<td>37</td>
<td>35</td>
<td>( \bar{X} = 39.7273 )</td>
</tr>
<tr>
<td></td>
<td>37</td>
<td>35</td>
<td>38</td>
<td>33</td>
<td>( \bar{X} = 38.2727 )</td>
</tr>
<tr>
<td></td>
<td>41</td>
<td>37</td>
<td>36</td>
<td>39</td>
<td>( \bar{X} = 39.0909 )</td>
</tr>
<tr>
<td></td>
<td>40</td>
<td>34</td>
<td>36</td>
<td>38</td>
<td>( \bar{X} = 38.4091 )</td>
</tr>
<tr>
<td></td>
<td>39</td>
<td>36</td>
<td>40</td>
<td>35</td>
<td>( \bar{X} = 38.4091 )</td>
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<td></td>
<td>41</td>
<td>38</td>
<td>40</td>
<td>35</td>
<td>( \bar{X} = 38.4091 )</td>
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<td></td>
<td>40</td>
<td>40</td>
<td>37</td>
<td>35</td>
<td>( \bar{X} = 38.4091 )</td>
</tr>
<tr>
<td>Low ( (B_2) )</td>
<td>40</td>
<td>40</td>
<td>37</td>
<td>38</td>
<td>( \sum = 401 )</td>
</tr>
<tr>
<td></td>
<td>38</td>
<td>38</td>
<td>36</td>
<td>34</td>
<td>( \bar{X} = 36.4545 )</td>
</tr>
<tr>
<td></td>
<td>40</td>
<td>36</td>
<td>35</td>
<td>35</td>
<td>( \bar{X} = 36.4545 )</td>
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<td>( \bar{X} = 36.4545 )</td>
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<td></td>
<td>38</td>
<td>37</td>
<td>32</td>
<td>31</td>
<td>( \bar{X} = 37.25 )</td>
</tr>
<tr>
<td></td>
<td>33</td>
<td>34</td>
<td>33</td>
<td>34</td>
<td>( \bar{X} = 37.25 )</td>
</tr>
</tbody>
</table>

Based on the table above, it can be concluded that:

1. Because \( F_o \) between columns (5.3518) is higher than \( F_t \) (2.84) at the level of significance \( \alpha = 0.05 \), the difference between columns is significant. Therefore, the null hypothesis (\( H_o \)) stating that there is no significant difference in reading comprehension between the students who are taught by using analytic team and students who are taught by using grammar translation method is rejected. It can be concluded that the technique used differs significantly from one another in their effect on their performance of the subjects in the experiment. Because the students’ mean of \( C_1 \) (38.0909) is higher than the students’ mean of \( C_2 \) (36.4091), the students who are taught by using analytic team technique are better in reading comprehension than those who are
taught by using grammar translation method.

2. Because $F_o$ between rows (7.9163) is higher than $F_t$ (2.84) the level of significance $\alpha = 0.05$ the difference between row is significant. Therefore, the null hypothesis ($H_0$) stating that there is no significant difference in reading comprehension between the students who have low intelligence and students who have high intelligence is rejected. It can be concluded that the difference between the achievement of those subject having high intelligence and those having low intelligence is significant. The students’ mean of $r_1$ (38.2727) is higher than the students’ mean of $r_2$ (36.2273) so, the students who have high level of intelligence have better reading comprehension than those who have low intelligence.

3. Because $F_o$ interaction (2.8499) is higher than $F_t$ (2.84), at the level of significance $\alpha = 0.05$. Therefore, The null hypothesis ($H_o$) stating that there is interaction between teaching technique and students’ intelligence in reading comprehension is rejected. It means that the effect of teaching methods used on the achievement depends on the subjects’ degree or level of intelligence.

<table>
<thead>
<tr>
<th>Between Group X1-</th>
<th>X2</th>
<th>$q_o$</th>
<th>$q_{0.05}$</th>
<th>Significance</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>A1</td>
<td>A2</td>
<td>1.68</td>
<td>3.</td>
<td>2.9</td>
<td>Significantly A1 &gt; A2</td>
</tr>
<tr>
<td>B1</td>
<td>B2</td>
<td>2.04</td>
<td>3.</td>
<td>2.9</td>
<td>Significantly B1&gt;B2</td>
</tr>
</tbody>
</table>

| A1 | A2 | 2.90 | 3.1 | A1 > A2 |
| B1 | B1 | 91   | 1   | nt  |
| A1 | A2 | 0.45 | 0   | nt  |

| B2 | B2 | 45   | 63  | 1   | nt  |

a. Comparing two means between columns ($A_1 \cdot A_2$). $q_o$ is 3.27. The value of $q$ for $\alpha =0.05$ and $n=22$ is 2.92. Because $q_o$ (3.27) is higher than $q_t$ (2.92), analytic team differs significantly from grammar translation. The mean score of students who are taught by using analytic team technique (38.0909) is higher than who are taught by using grammar translation method (36.4091). So, analytic team technique is more effective than grammar translation method for teaching reading.

b. Comparing two means between rows ($B_1 \cdot B_2$). $q_o$ is 3.98 the value of $q$ for $\alpha =0.05$ and $n=22$ is 2.92. Because $q_o$ (3.98) is higher than $q_t$ (2.92), the students who have high intelligence are significantly different in reading from the students who have low intelligence. The mean score of students having high intelligence (38.2727) is higher than the students who having low intelligence (36.2273). So the students who have high level of intelligence have better reading comprehension than the students who have low intelligence.

c. Comparing the means between cells ($A_1 \cdot B_1$ and $A_2 \cdot B_1$). $q_o$ is 4. The value of $q$ for $\alpha =0.05$ and $n=22$ is 2.92. Because $q_o$...
(4) is higher than \( q \) (3.11), analytic team differs significantly from grammar translation for teaching reading for students having high intelligence. The mean score of students having high intelligence who are taught by using analytic team (39.7273) is higher than those who are taught by using grammar translation method (36.8182), so analytic team technique is more effective than grammar translation method for teaching reading for students having high intelligence.

d. Comparing two means between cells \((A_1B_2\text{ and } A_2B_2)\) \( q \) is 0.63. The value of \( q \) for \( \alpha=0.05 \) and \( n=22 \) is 3.11. Because \( q_o \) (0.63) is lower than \( q \) (3.11), grammar translation method does not differ significantly from analytic team to teach reading for students who have low intelligence. The mean score of students having low intelligence who are taught by using analytic team technique (36.4545) and the mean score of students having low intelligence who are taught by using grammar translation method (36). So the effectiveness of both techniques does not differ from one another.

By considering the data analysis above, there are some conclusions that can be draw. Analytic team is better applied in junior high school because the students are not the lower level students indeed they are intermediate level students. In this level, the students start to learn how to convey their opinion, analyze the text, and cooperate with their friends. One teaching method that is appropriate to fulfill the students' needs is analytic teams. This method help the students built their social and human relation and makes the students as the center in learning process. This method lets the students more active in analyzing, finding and facing the problem of the text, so they can gain the knowledge by themselves. An analytic team is used to select an assignment requires use of a complex analytical process and break the process down into component part of roles (Elizabeth F. 2005: 194). In the teams they discuss what they learn with their friends while checking the answer each other. If they cannot solve the problem in the teams, they can ask the teacher for helping.

On the contrary, grammar translation method used by the teacher is less effective to improve the students' reading skill because it does not make the students motivated to involve in teaching and learning process. Prator and Celce-Murcia in Brown (1979: 3), state that there are some major characteristic of grammar translation method, namely:

1. Classes taught in the mother tongue, with little active use of target language.
2. Much of vocabulary is taught in the form of list of isolated words.
3. Long, elaborate explanation of the intricacies of grammar given.
4. Grammar provide the rules for putting words together and
instruction often focuses on the form and inflection of words.

5. Reading of difficult classical text is begun early.

6. Little attention is paid to the content of text, which are treated as exercises in grammatical analysis.

7. Often the only drills are exercises in translating disconnected sentences from the target language into the mother tongue.

8. Little or no attention is given to pronunciation.

Grammar translation method make the learners to be passive students because in this method intended to teach the students memorize the list of grammatical rules and vocabulary and produce perfect translation of the text being read. Indeed, this method does not promote the student's critical thinking and problem solving. That is why analytic team is more effective than grammar translation method to teach reading.

The students who have high level of intelligence will be encourage in teaching and learning process if the teaching gives an opportunity to involve in it. They will pay much attention to the teacher's instruction and have better attitude in following teaching and learning process. They will do all activities in the class actively and correctly. They will have interest to solve the problems. The situation of the class is more productive and enthusiastic. The class is more alive and the students become the center of teaching and learning process. They are not easy to give up and bored when they find the problem, like do not understand some vocabularies, sentence, and instruction in the text. They will try to check dictionary, ask their friends or ask the teacher. The process done in this teaching method can easily be followed by the students having high intelligence because it is suitable with their characteristic. There is substantial correlation between intelligence and reading ability. Carve (2009: 279) states that intelligence is often considered as a major factor causing high and low reading achievement. It means that the students who have high intelligence will have high ability in understanding a reading text than the students who have low intelligence. Thus, an analytic team is more effective than grammar translation to teach reading to the students having high intelligence.

Methods tend to be concerned primarily with students and teacher roles and behavior. In reading process, the teacher also needs to use suitable technique that motivated the students in joining the class. Beside, intelligence should be considered by the teacher so the teaching and learning process will be success. It because of the students who have high intelligence will be easy in accept the material than the student who have low intelligence. The process done in this teaching method can easily be followed by the students having high intelligence.
intelligence because it is suitable with their characteristic. The characteristic of high intelligence students can be divided into four main groups. They are: (1) reasoning power (i.e. understand and learn); (2) emotional attributes (i.e. high concentration ability, seriousness); (3) sense and intuitive (i.e. high level of desire and sincere effort) (4) social skill (i.e. leadership making teams and directing) (editor, 2010). So, the students with high intelligence tend to be curious and to find the knowledge by their own rather than spoon feeding by the teacher. Thus, analytic team technique is effective than grammar translation method to teach reading to the students who have high intelligence.

Meanwhile, for students having low intelligence, the effectiveness of both analytic teams and grammar translation are similar. It is shown by the low scores of the students' achievement. However, in general grammar translation method is effective for the students having low intelligence in learning process. The students with low intelligence are not active and just memorize the list of grammatical rules and vocabulary and produce translation of the text being read. According to Diane Larsen-Freeman (2000: 17), states that grammar translation technique has purpose of learning a foreign language is to be able to read literature written in the target language. To do this, students need to learn about the grammar rules and vocabulary of the target language. Indeed, this method does not promote the student's critical thinking and problem solving. They are passive in joining the class and slower in doing the task. That is why analytic team is effective for students having high intelligence while grammar translation method is effective for students having low intelligence. It is also shown by the result of ANOVA that there is interaction effect between the two variables, the teaching methods and the degree of intelligence. So, it can be concluded that there is interaction between teaching method and students' intelligence for teaching reading.

CONCLUSION, IMPLICATION, AND SUGGESTION
Analytic team technique is more effective than grammar translation method to teach reading. The students who have high intelligence have better reading comprehension than the students who have low intelligence. There is an interaction between teaching methods and student's intelligence to teach reading.

As the result, analytic team is an effective technique to teach reading. It offers possibility for the students to build their social human relationship. Analytic team stimulates the students' to learn and how to convey their opinion, analyze the text, and cooperate with their friends. In analytic team, the students are
motivated to increase the team's score so all the students help and support each other to understand the material or the topic and the students learn and discuss more about the text. The steps that must be followed in teaching reading using analytic team technique are: (1) have the students brainstorm, the teacher gives brainstorming to the students; (2) form students groups of four or five, the teacher asks the students to make a group and one group consists of four or five students; (3) present lesson or assign the reading, the teacher present the lesson and give students assignment; (4) distribute the text that will be discussed, the teacher distributes the text that will be discussed to the students; (5) give team class time for individual members to share their findings and to work together to prepare to present their analysis, the teacher ask the students to analyze the text in individual and share their finding in group then present their analysis in oral or written presentation; (6) as the last step, the teacher gives a brief explanation and giving the conclusion. By following the steps mentioned above, analytic team can be applied well in teaching reading.

Intelligence contributes to the effectiveness of teaching technique in the class. The teacher must know which technique is suitable in the class considering students' ability and intelligence. It is because for the students with high intelligence they will understand the material faster than the students who have low intelligence, whether they do it in group or independently. Therefore, analytic team is appropriate for the students who have high intelligence. The students with low intelligence always need the teacher's help and guide in learning process. Therefore, grammar translation is suitable for them. Consequently, the English teacher should think about the students' intelligence in applying the teaching method in teaching English, especially in teaching reading.

For the teacher of English. The teacher has to know which technique is exactly suitable for the member of class. Referring the result of the study, analytic team is more effective to teach reading. The teacher can use this method to improve the students' reading comprehension.

For the students. Students have to be more active in teaching and learning process in order to improve their reading comprehension. For students who have low intelligence, they must be aware of the importance of active involvement in teaching and learning process and their teacher is not only source in learning, then they have to encourage themselves. Besides, they must try to practice to improve their reading comprehension. Therefore, they will get good achievement in English subject especially in reading.

For the other researcher. There are some weaknesses in this study, which
should be considered by other researcher to conduct better research. And this result of study can become reference for the other researcher who would like to conduct further research at the same subject.

For the writer herself. By considering this study, the writer has to increase her own knowledge on how reading comprehension is taught to the students. She can also conduct further research with different subject.

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