THE EFFECT OF SERT (SELF-EXPLANATION READING TECHNIQUE) UPON STUDENTS READING COMPETENCY: AN EXPERIMENTAL STUDY CONDUCTED ON THE STUDENT OF MANAGEMENT PROGRAM IN UNDIKNAS UNIVERSITY IN 2016/2017

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ABSTRACT

This study aimed at analyzing whether or not there was a significant difference in the students' reading competency taught through SERT and Conventional Reading Technique. The population of this study was the students of management program in Undiknas University. This study uses the null hypothesis, so there is no significant difference between the two groups of students taught through the SERT and Conventional Reading Techniques. To obtain research objectives, Post-Test Only Control Group Design is applied as a research design. Both classes are randomly selected as samples. Data obtained from the post-test were analyzed using Descriptive and Inferential Statistics Analysis. In the descriptive analysis, it was found that the average score of the experimental group was 8.19 while the mean score of the control group was 7.26, which means that the experimental group performed better than the control group. In the inferential statistical analysis, the difference in students taught through the SERT and Conventional Reading Techniques proved significant in the 5 percent (0.5) alpha significance level in which the observed t value (5.758) was higher than the critical value t (1.96); thus the null hypothesis is rejected. Based on the findings, it is concluded that H0 (Null Hypothesis) stating that the SERT (Reading Engineering Self-Explanation) = Conventional Reading Technique is rejected and Ha (Alternative Hypothesis) stating that the SERT (Self-Explanatory Reading Technique)? Conventional Reading Techniques are accepted, in which students with SERT treatment are better than Conventional Reading Techniques.

The Key Terms: Reading competency, SERT, Conventional Reading Technique

A. INTRODUCTION

Reading is an important skill in our daily lives because it gives many advantages for us. Vividly, through reading activity we can obtain plenty of information which can expand our horizon, stimulate our critical thinking, and organize our thought and feelings. In relation to the importance of reading in our lives, Eskey (1986) viewed that reading was as the way in which we made sense of the world.

What can be interpreted from Eskey's opinion is that by developing reading skill, we can access plenty of information and knowledge which will assist us in understanding the world. Shoebottom in Yadnyani (2005) also stated that reading was extremely an important skill for the students. Through reading, they learned much of what they needed to know for their different school subject. It also pointed out that the researchers have found that there is a strong correlation between reading skill and academic success. In this case, the success of the learning process is influenced by reading habits. It helps students to develop their critical thinking and expand their knowledge and ultimately it affects the success of their academic achievement.

Naturally, when reading takes place, cognitive process will involve in it; reading activity is a cognitive process to comprehend the written form of linguistics. It is the process of taking and understanding some form of information or ideas stored. Weir and Urquhart (1998) considered that

reading process was a cognitive activity which did not only involve the ability to understand the text but also how to move beyond the text to make critical and cognitive links with the readers' own experience.

Further, Leipzig (2001) regarded that reading was a multifaceted process involving words' recognition, comprehension, fluency and motivation. Obviously, reading is an activity of understanding the stored information in a text which involves readers' ability in fluency, words' recognition, comprehension and motivation for reading.

In relation to the cognitive process, reading involves two processes, such as "identification" and "interpretation" (Simanjuntak in Susanti, 2003) Identification refers to the ability of the readers to accurately identify or determine what the text says. Through this ability, the readers can recognize the visual or graphic reflection on the text.

On the other hand, the interpretation, which emerges after identification, relates to the activity of the reader to understand or retract the meaning of the text of reading which results in a new structure of knowledge. In accordance with the fact that reading is an important skill, then, reading teaching especially in Indonesia evolves over time.

Reading skill is introduced started from elementary school until college with printed material as the source. Almost every level of school: Elementary, Junior and Senior High School have their own objectives as the guidance in achieving the success in reading itself. In SMU for example, the objectives of reading have been stated clearly in School Based Curriculum that;

"Siswa mampu membaca teks yang berbentuk memorandum, spoof, naratif dan hortatory exposisi dengan ketrampilan sebagai berikut: menemukan informasi umum dan khusus yang tersurat dan tersirat, menemukan pikiran utama yang tersirat, dan menafsirkan makna kata sesuai dengan konteks dan menafsirkan makna textual reference.

Besides, the students are also expected to become fluent readers, comprehend what they read, apply and communicate their knowledge and skills in a new context, and have a strong motivation to read (Carrel and Eisterhold, 1987). Many efforts have been done either by the government or the experts in education field to improve the way in teaching reading and the students' ability in reading competency, for example, by changing and modifying the curriculum, proposing and applying many kinds of reading techniques, selecting authentic material used in reading, etc., unfortunately, poor reading skill still occurs for alarming number of the students who learn foreign language, especially English.

The SERT has the advantage of helping students improve their ability to understand a text. The benefits of SERT are more important for teaching processes that do not involve students' background knowledge

Besides, the writers of the reading text often use a variety of different words to express the same meaning; it makes the written texts become more and more difficult (Bowen, Madsen &Hilferty, 1985). It causes EFL students always use dictionary when they read it. When they find an unfamiliar word, they look it up and write down the first translation of it below the English word.

They do not consider whether the translation is appropriate to the context or not. They read by replacing all English words with their mother tongue or their second language. Many of them do not pay attention to the meaning, even if the meaning of the sentence they make does not make sense, they may not think something is wrong. When they are asked to explain the main idea of a passage, some students cannot explain it but they can translate it (Takashi, 1984).

Referring to that phenomenon, it has been acknowledged that reading is so complex, difficult, frustrating and even exhausting. In the other side, it is concurred that reading

could be challenging and exciting for the students. Therefore, the lecturers are challenged to apply various kinds of techniques in teaching reading in order to meet and fulfill the reading indicators and make teaching reading interesting.
There are many experimental studies conducted by some researchers about various kinds of innovative reading techniques which can be applied in the classroom. Collaborative Strategic Reading, for instance, proposed by Klingner& Vaughn (1996), which involves four steps; those are preview, click and clunk, get the gist, and wrap up. Valerie DeFrance in CandraDewi (2003) also proposed another reading technique namely SQ3R, which stands for Survey, Question, Read, Recite and Review.

Furthermore, Neal & Langer in Yadnyani (2003) contributed his idea by proposing a reading technique well-known as MIT (Mediated Instruction of Text). These techniques have shown their positive effect in teaching reading and brought significant influence toward the students' reading competency. Besides the technique mentioned, SERT as one of reading techniques might also bring such significant influence toward the students' reading competency.

There are numbers of researches which have taken a note about this technique. Mc.Namara. et.al (2004) was a researcher who proposed this technique. SERT stands for Self-Explanation Reading Technique. In 2004, he applied this technique in Memphis University for college students and it had shown its effectiveness in improving students' reading competency in science text. SERT was also applied in High School by O' Reilly and McNamara and again it showed a positive effect toward the students' achievement.

The SERT has the advantage of helping students improve their ability to understand a text. The benefits of SERT are more important for teaching processes that do not involve students' background knowledge. SERT involves four steps; they are making predictions, comprehension monitoring, paraphrasing and elaboration. The first step is making prediction.

The students, in this step, will predict the content of the text by looking the title, picture, graph, and other things which could be used to make a prediction. The second one is comprehension monitoring; here, the students will read the whole text and try to comprehend it. The third is paraphrasing; it essentially helps students remember the basic ideas in the text by changing it into more familiar words.

Student background knowledge is required in this step. Then, the next one is elaboration. They will describe the information obtained from the text with the information they already know. Elaboration basically ensures that the information in the text is related to the information they already know.

However, a research for the application of SERT for High School especially for EFL students has not been done yet. Through the present study, the writer is interested in investigating the effect of SERT toward the EFL students' reading competency by comparing SERT with the Conventional Reading Technique applied by most lecturers.

In another word, the main purpose of this study is to investigate whether there are significant differences in the reading competencies of students taught through the SERT and Conventional Reading Techniques of students grade eleven in Management Program in academic year 2016/2017.

B. THEORETICAL REVIEW

Frame Theory and Schema Theory As what has been stated in the previous explanation, background knowledge is worth noting in reading comprehension.

It is based on Frame Theory, showing that human memory consists of a set of situations or stereotypical frames, built from experience. This is used to understand new experiences or new information is achieved. "Frames" which consist of

existing-information constructed out from the experience significantly gives effect when reading a text to which new information presented (Davis &Winek, 1989). It is also based on Schema Theory.

It is a normalization of the role of background knowledge (schema) in language comprehension suggesting that the knowledge carried in the readers' head is organized into interrelated patterns, which involves all readers' previous experiences or information. This knowledge enables the readers to make prediction about new information. Furthermore, Widdowson in Betarina (2005) provided a reinterpretation of Schema Theory from the perfective of discourse comprehension.

He argued that there were two dimensions or levels to any given discourse namely a systemic level and a schematic level. The systemic level includes the readers' linguistic knowledge, while, the schematic level relates to background content knowledge. To understand a particular passage of discourse, readers try to match their schematic knowledge with their authors.

Davis &Winek (1989) also stated, "To read and learn effectively, the readers need to integrate new material into their existing knowledge, build new understandings, and adjust existing conceptions and beliefs as needed. " This view means being able to understand the text effectively and meaningfully, the reader must bring their background knowledge into the text and build a new understanding of the text's content.

Another proponent of this theory is Jean Piaget claimed the readers understood new things and event encountered by matching them with their store of mental frameworks (schemata). In this case, the readers have to involve their mental frameworks related to the topics presented in the text to be understood. Mental frameworks are the amount of readers' background knowledge.

Top-Down Theory Process accounts of reading take the readers instead of the text as a point of departure. They are sometimes termed 'top-down', basically that they give greater emphasis to the kinds of basic knowledge and values which the readers bring to reading. The nature of this knowledge can be characterized as a "schema" or mental model allowing the readers to relate new text-based knowledge to existing world knowledge.

It is also supported by Adams and Bruck (1995) in Nunan (1993: 80) suggested that top-down processing has an important role in reading. Readers better focus on the meaning of what they read rather than painstakingly searching for every meaning of the word. Here, the movement of the reading process will start from the largest unit down to the lowest unit.

The process in the readers' cognitive will be begun by reviewing their previous experience having relation to the topic of the text and making prediction. Hence, this process is continued by selecting the key point describing the content of the text and looking for its meaning. This sort will be much better rather than seeking every single meaning of the words in which it is really time consuming.

It is obvious that during this process the students' background knowledge is required. Further, Cambourne (1979) in Nunan (1993: 81) provided that the following diagrammatic representation of the way top-down processing works in relation to reading.

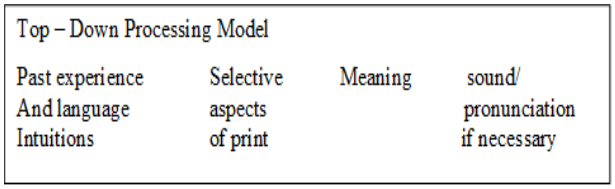

Diagram 2.1 What can be understood from What can be understood from is that when readers start to read a piece of challenging text, they should use their background knowledge of existing topics, both linguistic and textual knowledge in order to understand them.

C. RESEARCH METHODOLOGY

As stated earlier, researchers intend to investigate whether there is a significant difference in the students' reading competencies among students taught through the SERT and Conventional Reading Techniques.

After getting permission from to the rector, the researcher made an agreement to the English lecturer, hence, the researcher implemented the techniques. Both classes were given the following procedures: Try out test. Try out test was conducted before the items were used in homogeneity and post – tests. The items are in the form of multiple choices and true/false and they were selected from English book for Management Program and other additional books/sources. The answers of the try-out test were checked and scored manually according to the key answers of the test.

The correct answer was scored 1 and wrong one was scored 0. The criteria used to select the items was based on the validity and reliability of each item. The try-out had been applied for the students' class in Management Program who was considered has the similar ability with the samples. It was seen from mean score in the last semester. Normality Test. In this study, the researcher used Kolmogorov – Smirnov to measure the normality of the samples.

In finding the normality, SPSS 16.0 was used in computing the data. If $p < 0.05$, the data distribution is not normal If $p > 0.05$, the data distribution is normal Homogeneity-test. Homogeneity test was administered before the treatment was given. The purpose of conducting homogeneity test was to check the homogeneity of the samples.

Once the sample condition is equal, then, the process continues. The items in the homogeneity test were selected based on the experiments performed. This is meant to investigate whether the items are really appropriate for the students. Student scores were analyzed using SPSS 16.0.

If the significant value is more than 0.05, that means the sample is homogeneous, but if the significant value is less than 0.05, that means the sample is not homogeneous. The application of Techniques. After the researchers obtained the normality and homogeneity test results and showed that the samples were normal and homogeneous distributed, the researchers applied the SERT as the treatment for the experimental group and Conventional Reading Technique as the treatment for the control group.

The treatments were conducted five-times with the intention knowing how the treatments affected the students' reading ability. Post-Test. Post-tests are used to measure the achievement of experimental groups taught through the SERT and control groups taught through Conventional Reading Techniques. The test is done at the end of treatment.

It was done to find out whether there was a significant difference in the students' reading competency between the two groups of students taught through different techniques; SERT and Conventional Reading Technique. The result of the post-test was analyzed by using t-test. The multiple choice and true/false were chosen in both homogeneity test and posttest since, they have some advantages.

The most obvious advantage is that assessment can be very reliable (Hughes, 1989). In relation to the practicality of the test, the system of choice and right / wrong judgments can also be fast and economical in which the correct answer is given a score of 1 whereas the wrong one is given a value of 0. Data Collection.

The data that need to be obtained in this research is the students' achievement test which is collected by giving reading achievement test. Data is taken at the end of treatment. Instrumentation. Instrumentation refers to the entire process of data collection in research inquiry, while, the instrument is a means used to collect data.

There were two kinds of instruments used in this study namely, reading achievement test

(post-test) and teaching scenario.

D. FINDING DISCUSSION

The Results of Homogeneity Test. Homogeneity is required to make sure that the samples have same ability or homogenous. The purpose of conducting homogeneity test is to diagnose whether or not both samples used are homogenous. Therefore, homogeneity test was administered for both samples; student of management class A and B. The students' score, then they were analyzed through SPSS 16.0 with the requirements if a significant value greater than 0.05 means that the sample is homogeneous, otherwise if a significant value of less than 0.05 means the sample is not homogeneous.

The interpretation of the test in homogeneity of variance on homogeneity test, it showed that the probability value Based on Mean was 0.798, while, the probably value Based on Median was 0.894. The probably value Based on Median and with adjusted df was 0.894 and the probability value Based on trimmed mean was 0.804. Considering to the results of Levene's statistics, it can be seen that all probability value > 0.05. In conclusion, the samples of the data have homogenous variance.

The Result of Normality Test. Besides homogeneity test, the researcher also conducted normality test. The purpose of normality test is to diagnose that the samples have same ability. The result of normality test analyzed through SPSS 16.The interpretation of output test of normality described through Kolmogorov –Smirnov.

The Kolmogorov-Smirnov statistic score score on homogeneity test was 0.139 for the experimental group with probability (sig) 0.105 and 0.141 for the control group with probability (sig) 0.092. The data can be said to be normal if the probability value (sig)> 0.05 (more than 0.05). Because the value of the experimental group and control group> 0.05, so the data based on Kolmogorov -Smirnov normally distributed.

The Kolmogorov -Smirnov statistic score score in the post-test was 0.117 for the experimental group with probability (sig) 0.200 and 0.128 for the control group with probability (sig) 0.186. Because the value of the experimental group is 0.200> 0.05 and the control group is 0.186> 0.05, so the data based on Kolmogorov -Smirnov is normally distributed. Results of Facility Value and Discrimination Index.

The result of Facility Value and Discrimination Index. Facility value of an item will show whether or not the particular item used in the test is easy or difficult. An item is regarded as valid when its facility value is more than 0.3 and less than 0.7, if the facility value is less than 0.3, it means that the item should be dropped. It also happens when the facility value exceeds 0.7. Index discrimination is an item that indicates the extent to which items differentiate students, separating high levels and low levels of students.

The discrimination index will show the ability of the students when doing the test whether the good students tend to do well on the item and the poor students to do badly on it or not.

The Result of Test Reliability. There are some techniques used to measure reliability of a test in this study, the researcher used SPSS 16.0 to check the reliability of the test. To determine the reliability of the test, the ranging coefficient of the test tested through SPSS 16.0 must be between 0.51 – 0.70 meaning that the test is average and between 0.71 – 0.91 meaning that the test is highly reliable. The reliability of try-out for pre-test was 0.698; it indicated that the test had average reliability since it was between 0.51 – 0.70 which is the standard of reliable test for research purpose.

The researcher conducted 3 sessions in trying the tests used in the post-test. Various aspects of descriptive analysis are described briefly in the following sections: Means. The average score was earned by dividing the total score by the total number of students taking the test.

From the calculations, it was found that the mean value of the experimental group taught through the SERT was 8.19 and the mean of the control group taught via Conventional Reading Technique was 7.26. Median. The median is the midpoint of the data set that has been ranked in an increasing order.

From the examination, it can be seen that the median of the experimental group is 8.30 and the median of the control group is 7.30. Mode. Mode is the most frequent score in the distribution. In the experimental group, 8.70 often occurs in the distribution. On the other hand, 7.30 is the mode of the control group because it often occurs in the distribution. Distance. The range is the difference between the highest and lowest scores.

For experimental group 9.30 (highest score) reduced by 7.00 (lowest score) yielded 2.30 as range. Conversely, 8.30 was the highest score for the control group and 5.70 was the lowest score. The 8.30 calculation reduced by 5.70 is 2.60. Therefore, 2.60 is the control group range. Standard deviation. Standard deviation is generated by having the square root of the variance.
From the computation, the standard deviation of the experimental group was 0.65 and the control group was 0.66, the researcher also provided a chart which showed the comparison of the mean, median, mode, std. deviation and range of the group taught through SERT and Conventional Reading Technique.

E. CONCLUSION

The findings indicate that there is a significant difference in the students' reading competency among students taught through the SERT and Conventional Reading Techniques of students at Management Program in the academic year 2016/2017. Descriptive statistical results show that the experimental group, taught through the SERT, achieves better scores in reading compared to the control group taught through Conventional Reading Techniques. This is evidenced by the difference in average scores obtained by both groups.

The mean score of the experimental group was 8.19 and the mean score of the control group was 7.26. Inferential analysis of the data also proved that the difference in mean scores between the experimental and control groups was significant at 5 percent (0.05) alpha significance level, where the observed t value (5.758) exceeded t (1.96), thus the null hypothesis of research rejected.

The results show that the experimental group taught through the SERT performs better in reading comprehension than the control group taught through Conventional Reading Techniques. This means that the SERT is better than the Conventional Reading Technique in influencing student achievement in reading. Suggestion. Based on the research, there are several suggestions proposed for the application of prospective techniques as well as further research: Self-Explanation Reading techniques can offer many benefits for either students or for lecturers.

For students to help them understand the deeper texts through an activity called paraphrasing and elaboration that can improve their achievement in reading, it makes students an active learner in participating in classroom activities, and they not only rely on dictionaries when they have trouble in understanding difficult words. For lecturers, this technique can be a prospective technique that can be implemented in the classroom.

Besides its advantage, SERT also has weaknesses. In its implementation, the class sometimes becomes very noisy because this technique requires the students to work in group. In relation with these weaknesses, the lecturer is suggested to be more careful in handling the class and rule might be the best alternative.

The lecturer may give rule for the students; only the students who raise his/her hand can give opinion to the class. Such a rule will make a less – noisy classroom and help the students to concentrate well. More elaborated study on this technique need to be conducted for the development of this

technique on language teaching.

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