

## THE EFFECTIVENESS OF STUDENTS' READING COMPREHENSION ACHIEVEMENT OF NARRATIVE THROUGH SCHEMA ACTIVATION

Vera Welianti, Muhammad Sukirlan, Sudirman  
[verawelliyanti@gmail.com](mailto:verawelliyanti@gmail.com)

### ABSTRACT

Tujuan penelitian ini adalah untuk mengetahui apakah *schema activation strategy* dapat meningkatkan kemampuan membaca siswa pada naratif teks secara signifikan. Penelitian ini menerapkan *one group pretest-posttest design*. Pada penelitian ini hasil datanya diolah dengan menggunakan Pengukuran Perulangan t-test. Hasil dari penelitian ini menunjukkan bahwa adanya peningkatan yang signifikan pada kemampuan membaca siswa setelah diajarkan dengan menggunakan shema activation strategy. Skor rata-rata siswa pada sebelum test yaitu 55.7 sedangkan pada saat setelah test yaitu 63.5. Peningkatan skor rata-rata dari sebeleum tes ke setelah tes adalah 7.9. Dengan menggunakan t-test, dihasilkan t-ratio 7.369 dan t-table 2.052. Karna t-ratio lebih tinggi dari t-table, ini menunjukkan bahwa peningkatannya adalah signifikan.

The objective of the research was to find out if the schema activation strategy can increase the students' reading comprehension of narrative text significantly. The research was conducted through one group pretest-posttest design. The data were analyzed by using Repeated Measures t-test. The result of the analysis indicates that there is a significant improvement of students' reading comprehension achievement after being taught through schema activation strategy. The average score of pre-test is 55.7 while the average score of post-test is 63.5. The increase of the average score from pretest to posttest is 7.9. By using t-test, it was found that t-ratio is 7.369 and t-table is 2.052. Since t-ratio is higher than t-table, it proved that the increase is significant.

*Key words: narrative text, reading comprehension, schemata*

## **INTRODUCTION**

Narrative is the way that humans communicate information chronologically and this type of text is usually used by the student to learn English more easily and more interestingly. Narrative is written in order to gain a readers' interest by entertaining them. By reading narrative text, they can engage themselves in fictitious experience and the purpose of reading narrative which is for entertaining could not be reached if one's reading ability is poor.

The difficulties that students get in comprehending reading text especially narrative text shows that the students do not know which strategies is suitable for their reading. Therefore, the teacher should find an appropriate strategy in order to improve their reading skill and reading comprehension achievement. One of strategy that is appropriate to improve students' reading skill and reading comprehension achievement is Schema Activation Strategy. Understanding the role of schema in the reading process provides deep perception why students may fail to comprehend text material. When students are familiar with the topic of the text they are reading (i.e. possess content schema), aware of the discourse level and structural make-up of the genre of the text (i.e. possess formal schema), and skillful in the decoding features needed to recognize words and recognize how they fit together in a sentence (i.e. possess language schema), they are in a better position to comprehend their reading assignment.

This study is conducted to find out whether or not schema activation strategy can improve students' achievement in reading comprehension of narrative text. Therefore, the researcher expected that teaching narrative text through schema activation strategy

could overcome the difficulty in reading comprehension. The researcher focused on the students' difficulties in comprehending the reading text. As the solution to overcome their difficulties, the researcher was interested in investigating students' reading achievement by using of Schema Activation Strategy.

Snow (2002:11) defines reading comprehension as the process of simultaneously extracting and constructing meaning through interaction and involvement with written text. It means that the reader is able to comprehend the ideas of the text being read if he/she knows the message of the text. To make the students feel enjoyable and pleasure in learning reading, teachers must select interesting reading text to teach reading. Anderson (1997 : 8) states that narrative is a piece of text tells a story and, in doing so, entertains or informs the reader or listener. Narrative can entertain, inform, advise and educate students. It is memorable, full of meaning, stimulating emotion and fantasy. The purpose of narrative text is to amuse or to entertain the readers with actual or imaginary experiences in difference ways. Narrative always deals with some problems which lead to the climax and then turn into a solution to the problem.

Readers rely on their prior knowledge and world experience when trying to comprehend a text. It is this organized knowledge that is accessed during reading that is referred to as schema (plural schemata). Schema theory describes the process by which readers combine their own background knowledge with the information in a text to comprehend the text. The readers use of their schema when they can relate what they already know about a topic to the facts and ideas appearing in a text. Schema theorists have advanced our understanding of reading comprehension by describing how prior knowledge can enhance a reader's interaction with the text. Accordingly,

comprehension occurs when a reader is able to use prior knowledge and experience to interpret an author's message (Bransford, 2004; Norris and Phillips, 1987).

Cook (1997: 86) states that Schema theory deals with the reading process, where readers are expected to combine their previous experiences with the text they are reading. According to researchers' opinion, Schema theory is an active strategy coding technique necessary for facilitating the recall of knowledge. As new knowledge is perceived, it is coded into either pre-existing schema or organized into a new script. In essence schemata are organized mental structures that aid the reader's ability to understand and associate with what is being presented to them.

According to Shahan and Lomax (1986), Schema activation strategy is very likely, a technique usually associated with the pre-reading phase, also occurs in the while reading and the post reading phases. In schema activation, the students will be taught reading comprehension through pictures. The students have positive effect to accept the lesson, because schema activation strategy use their prior knowledge, so they will remember what they learn. The researcher believes that schema activation strategy is an appropriate strategy for teaching reading comprehension. Schema Activation Strategy requires the readers to be actively involved in the teaching and learning processes based on the previous knowledge that the students have to construct their own understanding. In Schema Activation Strategy, the students are asked to construct their own sense of meaning from new experience based on prior knowledge and are motivated to make connections between knowledge that they get and its application to the real world, so the student experience, not just know, the knowledge.

Therefore, the researcher assumes that after doing this process with the information contained in the text, automatically the students will have better understanding of the text, and as the result, the researcher assumes that Schema Activation Strategy can be an effective strategy in teaching reading in order to improve the students' achievement in reading comprehension of narrative text.

## **RESEARCH METHOD**

This research investigates whether there is a significant increase of students' reading comprehension in narrative texts after being taught through Schema Activation Strategy. The design of this research is *one group pretest posttest design*. The researcher taught narrative reading text to experimental class by using schema activation strategy. This research used one class as experimental class. Pretest, three treatments and posttest were then administered to this class. The design of the research is described as follows:

**T1      X      T2**

Where:

T1 : Pretest (it was conducted before treatments)

X : Treatment (it was independent variable conducted three times by using Schema Activation Strategy)

T2 : Posttest (it was dependent variable conducted after treatments).

(Setiyadi, 2006:131)

The population of this research was the first grade students of SMAN 1 Seputih Agung at academic year 2012/2013. There were 7 classes of first year students and they were all of equal level. It consisted of 29-32 students for each class. The sample was one class as experimental class, which was selected by using simple random sampling. The class was selected randomly by using lottery. The experimental class had both pretest and posttest and three treatments.

The instrument is used to collect data in order to answer the research question. The instrument of the research was reading test using narrative text. The reading test consists of two kinds, pretest and posttest. In scoring the students' result of the test, Arikunto's formula (1989:271) was used. The ideal highest score is 100. The scores of the pretest and posttest were calculated by using this formula:

$$S = \frac{R}{N} \times 100\%$$

Where :

- S : The score of the test
- R : The total of the right answers
- N : The total items

(Arikunto's formula, 1989:271)

The purpose of try out is to know whether the test is good or not, some criteria should be considered. The criteria of a good test are: Validity, Reliability, Level of Difficulty, and Discrimination Power. The data is analyzed in order to see whether the students' reading comprehension achievement is increase or not.

After collecting the data, the researcher recorded and analyzed them in order to find out whether there is significant increase in students' ability in reading comprehension of narrative text or not after the treatment. The researcher used Matched T-Test to know the level of significance of the treatment effect. The formula is:

$$t = \frac{\bar{X}_1 - \bar{X}_2}{S_{\bar{D}}}$$

$$\text{with } S_{\bar{D}} = \sqrt{\frac{\sum D^2 (1/n) (\sum D)^2}{n-1}}$$

- $\bar{X}_1$  : Mean from pre-test
  - $\bar{X}_2$  : Mean from post- test
  - $S_{\bar{D}}$  : Standard error of differences between means
  - n : Subjects on sample
- (Hatch and Farhady, 1982:114)

The criteria are:

1. If the t-ratio is higher than t-table: H1 is accepted
2. If the t-ratio is lower than t-table: H0 is accepted

## RESULT AND DISCUSSION

### Result

#### a. Result of Tryout test

From the result of tryout test, 30 items which met the criteria of a good test were administered in pre-test and post-test. The researcher changed the numbers of arrangement of the items in pre-test, rearranged the texts and also put the choices randomly in order to use the items in post-test. This is an attempt to make sure that the increase of students' reading achievement is not because they got the same test in pretest but because of the treatments.

#### b. Result of Pre-test

The total score of the pre-test in the experimental class is 1559. The mean score of the pretest was 55.7; the highest was 87; the lowest score was 40; the median was 53 and the mode 53. The distribution of the students' score of pre-test can be seen in the table below:

**Table Distribution of the Students' Scores of the Pretest**

No.	Students' Scores	Number of Students	Percentage
1.	$\geq 60$	21	75%
2.	$\leq 60$	7	25%
<b>Total</b>		28	100%

The table shows that there are 7 students (25%) score  $\leq 60$  and 21 students (75%) score  $\geq 60$ . It can be inferred that there are only a few number of students have adequate reading comprehension of narrative text achievement.

c. Result of Post-Test

The total score of the post-test in the experimental class is 1779. The mean of post-test is 63.5; the highest score is 90; the lowest score is 47; the median is 60 and the mode is 57.

**Table Distribution of the Students` Scores of the Posttest**

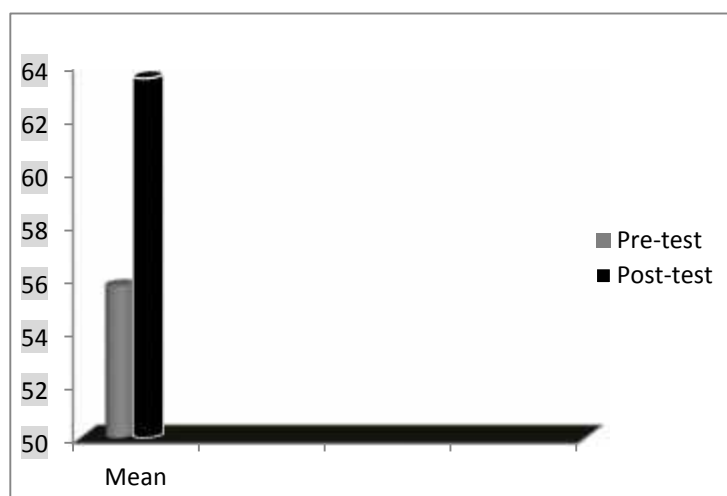
No.	Students' Scores	Number of Students	Percentage
1.	≤ 60	13	46%
2.	≥ 60	15	54%
<b>Total</b>		28	100%

The table shows that there are 13 students (46%) score  $\leq 60$  and 15 students (54%) score  $\geq 60$ . It means that student's reading comprehension of narrative text has improved, so it could be said that schema activation strategy can be used to increase students' score.

The result of pre-test and posttest in the experimental class implied that schema activation strategy can increase the students' reading comprehension of narrative text achievement significantly. This can be seen from the total score of the pre-test reaching 1559 and the posttest reaching 1779. The mean score of the pretest was 55.7 and the post test was 63.5. There is the gain 7.9. It can be seen from the following paragraph and table.



**Graph 1. Increase from Pre-Test to Post-Test in Experimental Class**



**Table. Increase from Pretest to Post test**

	<b>The Score of Pre test</b>	<b>The Score of Post test</b>	<b>The Increase</b>
<b>Mean (m)</b>	<b>55.7</b>	<b>63.5</b>	<b>7.9</b>

From the table and the graph above, it can be stated that schema activation strategy can increase students' reading comprehension of narrative text.

The result of computation of the increase of the score in experimental class shows that the increase of students' ability in the experimental class is significant. It can be concluded that schema activation strategy applied in experimental class is effective.

In testing the hypothesis, the researcher used statistical computerization i.e. *repeated measure t-test of SPSS 15.00 for windows* to analyze the increase of students' gain, whether it was significant or not. The hypothesis of this research is that there is significant improvement in students' reading comprehension achievement of narrative text taught through schema activation strategy. The hypothesis was analyzed at

significant level of 0.05 in which the hypothesis is approved if  $Sign < .$  this means that the probability of error in the hypothesis was only 5%.

## **Discussion**

In this discussion, the general process of the research will be reviewed. In the first treatment, Schema Activation Strategy was introduced and how to run procedures in reading comprehension was explained. The procedures began with the students brainstorming about the reading material, and introducing Schema Activation Strategy as one of the useful strategy to help the students in comprehending the text. Since the regular teaching of reading comprehension in SMAN 1 Seputih Agung Lampung Tengah used conventional teaching-learning, the students felt very bored with the process but their enthusiasm was obvious when they were given the explanation about how to implement Schema Activation Strategy in reading. Some questions were asked as the students brainstormed about the material of the text. Such questions were used to enable the students to use their background knowledge in order to make it easier for them to comprehend the test.

Finally, the researcher gave the post-test to know the students' increase after being given the treatments. The post-test was held on Friday, March 8<sup>th</sup> 2013. The result showed that the highest score was 90 and the lowest score was 47 with the average score at 63.5.

## **CONCLUSIONS**

Based on the result of the data analysis and discussion, there was a significant increase on students' reading comprehension achievement of narrative text after being

taught through schema activation strategy. It is proved by the increase of students' mean score in posttest (63.5) that was higher than the mean score in pretest (55.7). The increase from pre-test to post-test is 7.5. Therefore, Schema Activation Strategy is appropriate and effective strategy to be used in increasing students' reading comprehension achievement using narrative text.

## **REFERENCES**

- Anderson, Mark. 1997. *Text Type in English 2*. Australia: Mackmillan.
- Arikunto, S. 1989. *Dasar-dasar Evaluasi Pendidikan*. Jakarta: Bina Aksara.
- Bransford, J. D. 2004. *Schema activation and schema acquisition: Comments on Richard C. Anderson's remarks*. In R. B. Ruddell, & N. J. Unrau (Eds.), *Theoretical models and processes of reading (5th ed.)* (pp. 607-619). Newark, DE: International Reading Association, Inc.
- Cook, G. 1997. *Discourse in 'Language Teaching: A Scheme for Teacher Education'*. Oxford: Oxford University Press.
- Hatch, E and Farhady. 1982. *Research Design and Statistic for Applied Linguistics*. London: New Bury House Production, Inc.
- Norris, S. and Phillips, L. 1987. *Explanations of Reading Comprehension: Schema Theory and Critical Thinking Theory*. *Teacher College Record*, 89, 2, 281-306.
- Setiyadi, Ag.B. 2006. *Metode Penelitian Untuk Pengajaran Bahasa Asing*. Yogyakarta: Graha Ilmu.
- Shahan, T., and Lomax, R. G. 1986. *An Analysis and Comparison of Theoretical Models of the Reading-Writing Relationship*. *Journal of Educational Psychology*, 78, 116-123.
- Snow, Cathrine. 2002. *Reading for Understanding: Toward an R&D Program in Reading Comprehension*. Santa Monica, CA: RAND Corporation