

## THE EFFECT OF LEARNING CELL TECHNIQUE ON STUDENT'S READING COMPREHENSION

Oleh :

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### Abstract

The research objective was to find the effect significantly of the use of the Learning Cell Technique towards the students' reading comprehension. The research population was the tenth grade students of SMAS PUTERI SION. The researchers applied the experimental research. It was done by applying the experimental group and the controlled group with quantitative approach. The population of the research was 40 students. The students' total scores in the post-test in the experimental was 1,610 and 80.50 was the mean score of the students. It was found out that the total score from the post-test in controlled group was 1,225 and the mean score of the students was 61.25. The data consisted of independent sample of the t-test and it was stated that the t-test was higher than the t-table ( $t\text{-test} = 7.931 > t\text{-table} = 3.319$ ). The significance ( $p$ ) was 0.001. The significance confirmed that 0.001 is lower than 0.005 ( $p < 0,005$ ). This research had conclusion that  $H_1$  was accepted and  $H_0$  was rejected. The research findings were significant because  $p < 0.05$ . From the result as presented above, there is a conclusion that the Learning Cell Technique significantly affected the students' reading comprehension.

Keywords: Effect, Learning Cell Technique, Reading Comprehension

### 1. INTRODUCTION

#### The Background of Study

One of the important skills for all students is reading. It can be stated because the students will have many information from different sources. To complete communication, students need to study reading, writing, speaking and listening because four of them are the four basic of language skills. When students are reading, they can upgrade their knowledge and skills. Reading will be the connection between the reader and the writer's idea. When reading a text, it is not only reading the whole sentences in it, but the readers will get information from it. Reading has a purpose, that is comprehension. The students must have good understanding about texts that they already read before and also must have good understanding to assign the main idea from the text and the students can express the message which the author wants. Beside that, the students have to conclude a gist of some texts and understand the references. Comprehension of the text is the main purpose of reading, means through reading comprehension, students can explore various kinds of existing knowledge in books and also make a sequence about the description of the text and responding to what is written or implied in the text. The students' ability is to find the main idea out from the text. It is the most basic ability that students should have. That is why if the students do not get any

information stated in the text it means they are not reading. If the students do not have knowledge in reading, they cannot achieve the level of comprehension. Automatically the student cannot be a good reader. After understanding the explanation, there is a conclusion that reading comprehension is a basic ability and students must be able to give response to the text contents.

On researcher's observation at SMAS PUTERI SION, many students still have problems in comprehending the text. For instance, the teacher gave a project to the students to find out the main idea from a text. The students were asked to write down the title as the main idea. Most of the students were confused on how to solve the problem given by the teacher. Based on researcher's observation, the students got difficulties in identifying the information from a text that they have read. This is because the teaching learning activity was low and this situation made the students passive during the learning activity. According to the problem mentioned above, the writers try to conduct the learning cell technique which is focused on students' reading comprehension. We need to help the students to make them not to feel difficulties as stated above. With the best technique of learning, it will allow the students to learn more about reading by applying learning cell technique. This research had previously been conducted by

Setiadi, Teddy (2016), from the study conducted by researcher, it was found that the r-count higher than the r-table. From that result it there is a conclusion that it affected significantly on students after the students were taught by applying learning cell technique in reading. There are 3-4 students in one group and every group shares their ideas and creates learning materials together. Each student has same text to read and each student has responsibility to understand the text. After the discussion time is up and the students had read the text, so the students automatically have time to answer the questions. In learning cell, students are more active because the teacher only becomes a facilitator. The teacher will explain more about the topic if there are some students who still confused.

To learn lesson through learning cell technique, students are assigned to work in pairs to do a spoken question and answer activity. The researchers are really sure that learning cell technique can be a solution to make the students more active in learning reading comprehension. According to Leith (1973), "the learning cell was more effective than individual study ". This technique is hoped to make students more interested when they read a text. According to Hisyam (2008), learning cell is one of cooperative learnings. The students can ask and answer questions from many kinds of text. Learning cell or learning pairs is a way of think analytically. This technique can be applied by English teachers when they teach reading comprehension to the students. Berger (1997) stated that there must be an important thing for English teachers to upgrade the students' reading comprehension. It can be realised by identifying the key concepts, ideas, and words from the text. The teacher will do pre-teach to the students, especially when the students are reading text. So that the activities of reading text are expected to be more fun and the students can get the concepts of the material. According to Harmer (2007), reading is the finding information out from the text. If you read more, you will get more. According to Ruddel (2005), the ultimate purpose of teaching reading at school is to improve the students' ability and skills on reading by securing information and deriving pleasure".

From the explanation above the writers conclude that reading comprehension activities must be supported by mastering the language or writing skills applied in the text and the students can get the information or content after reading a text. In comprehending the text, the readers are not only have time to understand the contents of a text, but the readers must be able to evaluate the experience and the initial knowledge.

When reading comprehension is taught, the teacher needs an effective technique that can be applied on the students. One of the techniques that will be applied to solve the problem in teaching

reading comprehension is Learning Cell technique. Teaching reading comprehension in groups can be done by applying Learning Cell technique. Particularly Learning Cell technique can be applied in the small groups. When the teacher is applying that technique, the students are divided in pairs (groups). One student will practice the roleplay. One student will be acted as a tutor. Other student do roleplay as a student or a person who will need help. So, by implementing the Learning Cell technique, the students will have more opportunities to think analytically. Beside of that the students can elaborate the material into their own words.

Learning Cell Technique can have positive correlation with reading comprehension. By applying this technique, it can make students more active in the classroom. Falchikov (2001) stated that the learning cell technique can involve the co-operative learning in pairs. The students may have choice when questioning and answering the questions by having a new set of readings. There are some steps of learning cell technique. Every group has opportunity to write five questions on one paper. Student A must begin the session by asking the first question to the student B. Then the student B must answer the question from the student A. Student A will have time to present a little explanation about their question. A good answer can be achieved and carried out alternately. In the end of the class session, every group must come and give report from what they have discussed before.

This technique is very beneficial to develop the students' understanding of the reading texts. The students' interest in reading must be improved by the teacher. The teacher should be able to support the students especially when teaching the reading comprehension. The learning cell technique actively can involve the students to think and deliver questions in a different way than just writing down. The students will think analytically and creatively in changing the material taught in their own language. Then the students will give answer from the questions given by friends. It was a basic level of discussion in order to develop the students' reading comprehension.

#### **The Problem of Study**

According to the explanation as mentioned above, the researchers concerned with the researcher questions: Does the Learning Cell Technique significantly give effect on student's reading comprehension?

#### **The Objective of the Research**

According to the statements as mentioned above, the reason of choosing the topic is: to find out the effect significantly out on the reading comprehension on the students who were taught by applying the Learning Cell Technique and the

students who were taught without implementing that technique.

### Scope of the Research

The research had limitation especially on the learning cell technique used in teaching reading comprehension towards the students of tenth grade of SMAS PUTERI SION. Clearly the writer only discussed on the role of implementation of the learning cell technique to improve the student's reading comprehension. The writer focused on the comprehending the text and finding the main idea from the reading books. The writer implemented the pre-test and the post-test sessions to measure the students' reading comprehension.

### Significance of the Research

The result of this research was expected to be beneficial for the readers. The result of this research can give more insight when teaching reading comprehension. It was also expected to be applied as a reference for the next researchers. For the students it will give enjoyable learning situation which can make the students more active. For teachers, learning cell technique can be applied as an alternative technique in teaching reading. There was an expectation that by applying this technique, the teachers can easily control the students and the teachers also can improve the quality of reading comprehension.

### Hypothesis of the Researcher

According to the previous explanation of theoretical and conceptual framework, the hypothesis are formulated as following below:

$H_0$  : There is no significant effect on the students' reading comprehension by applying the Learning Cell Technique

$H_1$  : There is a significant effect on the students' reading comprehension by applying the Learning Cell Technique

## 1. RESEARCH METHODOLOGY

### Research Design

The writer applied the experimental research. According to this design, the writers used two groups of student. The guide reading comprehension done by students who could find the main ideas out in the text was called as experimental group and comprehending without the ultimate teaching technique was called as the controlled group. The research sample was the grade X students of SMAS PUTERI SION. There were two classes used as the sample of this research. There were 20 students in one class.

The data were taken from the pre-test and post-test sessions. It was taken from the experimental class and the controlled group. The result from the pre-test was compared with the result from the post-test. Pre-test was undertaken to know the students' reading comprehension before and after having treatment done by the researchers. The Pre-test session was done before the treatment

session. The researchers gave 3 sheets of paper. The research instrument was the reading comprehension. A number of questions was designed into multiple choices form. One paper contained of reading text and another paper contained 20 questions related to reading text within 40 minutes. The text specification of the reading text would be made based on syllabus. After giving the pre-test session to the students, the researchers did a treatment to the students. It was done by applying the learning cell technique in the teaching process. After giving the treatment to the students, the post-test session was done to the students. This session was done to know the significance difference on the students before and after applying the learning cell technique in reading comprehension. Then the data result was analyzed by applying SPSS.

### Population and Sample

#### Population

Ary et al (2003) stated that population can be defined as the entire of the members of any well-defined class of people, events or objects. In conducting this research, there was population that was investigated by the researchers. The population of this research was the students of tenth grade of SMAS PUTERI SION. There were two classes at this grade that consist of 20 boy students and 20 girl students.

#### Sample

The Sample in this research was a part of number and characteristic that the population had. In choosing the sample, the researchers applied simple random sampling. This sample was chosen randomly and followed by these characteristics:

- Xa was experimental group that taught by applying the Learning Cell Technique.
- Xb was controlled group that taught by applying the Conventional Technique.

### The Instrument for Collecting the Data

By doing a test, the researchers got the data. The research instrument in this research was the reading test. It was designed into multiple choice test form. The researchers gave 3 sheets of paper to the students. One paper consisted of the reading text and another paper consisted of 20 questions related to reading text and it was done by the students in 40 minutes.

### The Procedure of Research

There were some procedures of collecting the data:

#### Pre-test

There is a function of doing the pre-test. It was done to know the main scores from the controlled class and the experimental class before getting treatment. The pre-test was undertaken before doing treatment. Reading text and multiple choices test that consisted of 40 items were given to the students.

**Treatment**

The treatment had been undertaken after doing the pre-test session. The treatment was undertaken to both groups with the same topic but it had different way. In the experimental group, the researchers taught the reading comprehension by applying the learning cell technique and in the controlled group the researcher taught the reading comprehension without applying the learning cell technique.

**Post-test**

In the last meeting the researchers gave the post-test session to the students. The mean scores of students from the controlled group and the experimental group was known after giving the post-test. It was undertaken after the students were given the treatment. The test items from the post-test were exactly same as undertaken in the pre-test session. The test was undertaken to measure the students' reading comprehension ability. The test was conducted after the researchers taught the students by applying the learning cell technique.

**Scoring the Test**

Answer sheets were collected to get the data. In calculating the percentage of the students who had done the reading comprehension test, the writer applied the formula to get the mean score:

$$X = \frac{\sum X}{N} \qquad Y = \frac{\sum Y}{N}$$

Where:

X = the mean score from pre-test score

Y = the mean score from the post- test score

N = the mean score from the number of sample

There were five categories of calculating the percentage of the students' scores, namely: Excellent, Very Good, Good, Fairly Good, and Fair.

**Table 2.1**  
**The Description of Students' Scores**

NO	Classification	Score
1	Excellent	90- 100
2	Very Good	80-89
3	Good	70-79
4	Fairly Good	60-69
5	Fair	50-59

(Gay in Darmayani, 2012:26)

**The Technique of Data Analysis**

To approve the hypothesis, the researchers applied the formula of t-test. This formula was applied to compare both mean score from the experimental group and mean score from the controlled group. After knowing the mean score of the students, it can be stated that there was a significant difference from the means of two groups or not. After collecting the data, the researchers did calculation a test statistic with a formula.

**2. RESEARCH FINDINGS**

**Data Analysis**

The researchers got the data after taking the pre-test and post-test results of grade X students of SMAS Puteri Sion. There were 20 students (Xa) in the experimental group and there were 20 students (Xb) in the controlled group. After doing the reading comprehension test, the researchers analyzed the reading comprehension test scores. The results of each group were described as presented in the table below:

	Pretest_Xa	Posttest_Xa	Pretest_Xb	Posttest_Xb
N	Valid 20	20	20	20
	Missing 0	0	0	0
Mean	55.75	80.50	53.25	61.25
Std. Error of Mean	1.787	1.916	1.809	1.490
Median	57.50	80.00	55.00	60.00
Mode	60 <sup>a</sup>	80	50 <sup>a</sup>	60
Std. Deviation	7.993	8.569	8.315	6.664
Variance	63.882	73.421	69.145	44.408
Range	25	30	25	25
Minimum	40	70	40	50
Maximum	65	100	65	75
Sum	1115	1610	1065	1225

a. Multiple modes exist. The smallest value is shown

The researchers conducted the pre-test session. The experimental class got a total score was 1,115 and the mean was 55.75. 65 was the highest score and 40 was the lowest score. In the controlled class got a total score was 1,065 and 53.25 was the mean score. 65 was the highest score of the students and 40 was the lowest score of the students.

Pre-test (Xa)

Pre-test (Xb)

$$M_{Xa} = \frac{\sum Xa}{N}$$

$$M_{Xb} = \frac{\sum Xb}{N}$$

$$M_{Xa} = \frac{1115}{20}$$

$$M_{Xb} = \frac{1065}{20}$$

$$M_{Xa} = 55,75$$

$$M_{Xb} = 53,25$$

The next step done by the researchers was doing the treatment. It was done to know the difference of significance after and before applying the learning cell technique. From data as presented above, it was known that the total score of students after doing the post-test session in the experimental class was 1,610 and 80.50 was the mean score of the students. The total score of students from the post-test session in the controlled group was 1,225 and the mean score of students was 61.25. The SPSS calculation had a conclusion that 80.50 was the mean score of the students in the experimental class and 61.25 was the mean score of the students in the controlled group. There was different mean from controlled group and experimental group. It was 19.25. The students' mean score in the experimental class was higher than the students' mean score in the controlled class.

Pre-test ( $X_a$ )

$$M_{X_a} = \frac{\sum X_a}{N}$$

$$M_{X_a} = \frac{1610}{20}$$

$$M_{X_a} = 80,50$$

Post-test ( $X_b$ )

$$M_{X_b} = \frac{\sum X_b}{N}$$

$$M_{X_b} = \frac{1225}{20}$$

$$M_{X_b} = 61,25$$

#### Analysis of Data

The data were analyzed to prove the hypothesis. In analyzing it, the formula of t-test was applied.

		Levene's Test for Equality of Variances		t-Test for Equality of Means		95% Confidence Interval of the Difference				
		F	Sig.	t	df	95% Confidence Interval	Lower	Upper		
Post-Test	Equal variances assumed	.485	.489	7.931	38	<0,001	18,320	1,437	14,300	24,944
	Equal variances not assumed			7,931	38,828	<0,001	18,320	1,437	14,300	24,944

In this research, the degree of freedom (df) was  $X_a + X_b - 2 = 38$ . Based on the table as presented above, it can be known that the t-test was 7.931. The t-test was higher than the t-table 3.319. The significance (p) was 0.001. The significance can be seen that 0.005 ( $p < 0,005$ ), it means that  $H_1$  was accepted and  $H_0$  was rejected. The research findings were significant because  $p < 0,005$ . From the data as presented before, the hypothesis of this research was accepted. From the experimental group had significant effect. It was different than the students who were taught by applying conventional technique.

#### The Findings of the Research

After doing the research, the researcher concluded

1. There was a difference significantly on the students' reading comprehension ability after taught by applying the Learning Cell Technique. It was more effective than the students who were taught without applying that technique. It can be known from the mean of the post-test ( $X_a$ ). It was 80.50. The mean of the post-test ( $X_b$ ) was 61.25.
2. The result of the research concluded that the t-test was higher than the t-table ( $t\text{-test} = 7.931 > t\text{-table} = 3.319$ ). The significance or p was 0.001 under 0.05 ( $p < 0,05$ ).  $H_1$  was accepted and  $H_0$  was rejected. At final, it can be stated that the Learning Cell Technique significantly affected the students' reading comprehension.

#### 4. CONCLUSIONS AND SUGGESTIONS

##### Conclusions

According to the findings data, it can be conclude as follows:

The researcher found that Learning Cell Technique significantly effect on the student's reading comprehension. After applying the learning cell technique, the students can get various vocabularies that come from their opinion so that the learning process were more fun and challenging

##### Suggestions

The researchers gave some suggestions that can be beneficial in applying the Learning Cell Technique:

1. For English teachers  
This technique is really beneficial for teaching reading comprehension. It can be applied effectively to make the students more active and interested with the materials that they learn.
2. For students  
By applying the learning cell technique, it was expected that the students will be able to develop their reading ability and they will be more attractive in learning English.
3. For the next researchers  
The other researchers can explore the effective function of the learning cell technique in analyzing the students' reading comprehension.

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