

**THE EFFECT OF VENN DIAGRAM STRATEGY TO STUDENTS  
READING COMPREHENSION ABILITY AT EIGHT GRADE OF  
SMP SWASTA NURUL ILMI PADANGSIDIMPUAN**

**By:**

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**ABSTRACT**

Penelitian ini difokuskan pada masalah siswa dalam kemampuan membaca teks Bahasa Inggris. Masalah yang dihadapi siswa adalah memahami kosa kata sulit dalam yang terdapat pada teks Bahasa Inggris. Selain itu, mereka juga kesulitan mengidentifikasi tata bahasa dan karakteristik teks yang dibaca. Penelitian ini adalah penelitian eksperimen. Populasi nya adalah semua siswa di kelas delapan SMP Swasta Nuril Ilmi Padangsidimpuan tahun akademik 2017/2018. Sample yang diambil adalah berjumlah enam puluh dua orang yang dibagi ke dalam kelas control dan kelas eksperimen. Data dikumpulkan melalui pre-test dan post-test dalam bentuk tes pilihan berganda. Data dianalisis menggunakan rumus t-tes untuk membuktikan hypothesis. Hasil dari penelitian ini menunjukkan penghitungan t-tes pada post – test 3.408 dengan sig 2.00. Dengan demikian hypothesis diterima karena  $t_{count} > t_{table}$  yaitu  $3.408 > 2.00$ . Oleh karena itu dapat disimpulkan bahwa ada pengaruh penggunaan Venn diagram terhadap kemampuan membaca siswa kelas delapan SMP Swasta Nurul Ilmi Padangsidimpuan.

**Key words:** *venn diagram, kemampuan membaca*

**A. INTRODUCTION**

Reading comprehension is the process of extracting and constructing meaning through written language. The process includes three elements; they are the reader, the text, and the activity to comprehend the reading text. The students as the reader try to find out the purpose of the text they have read. Their activity in reading is comprehension activity because students cannot get the meaning of the text without comprehension. The students should have attention, memory, and motivation in reading text. So, the teacher should help them not only to read the text but also help them how to find the meaning or the content of text.

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Reading becomes an important skill that students should have. It is an activity which enlarges students' knowledge. Many books and other references of knowledge have been written in English and it is regarded as the main sources. In order to get the knowledge, the students should have reading skill to comprehend the texts. The reading skill can influence students' successfulness in learning process at school since reading is not only for *Reading* subject but also for all subjects. This skill can be useful for them in reading the materials of other subjects.

In Indonesia, English teaching learning process, especially in Junior High School level, reading is categorized as language skill that should be mastered by all students. It can be seen from English syllabus in curriculum that place reading comprehension in almost every subject of English materials. For example, the material is about vocabulary or expressing something, the learning not only about that but also related into content of text. So, the reading material cannot be separated from reading comprehension, because reading comprehension is one of the aspect ability in English lesson.

Teaching reading in junior high school Nurul Ilmi Padangsidempuan is based on the School Based Curriculum. The School Based Curriculum is an operational curriculum that is arranged, developed, and implemented by each school that is ready and able to develop it. This curriculum includes content standard and graduate competence standard. In the level of junior high school, the students are expected to be able to understand written text to reach the functional level including the ability of understanding many kinds of short functional text, such as descriptive text. In conclusion, students need to have a good reading to get comprehension of the text.

Moreover, based on the researcher first observation, the researcher found some information about students' weakness in comprehending the text. The first weakness is the students are difficult to get meaning of the text because they are lack on vocabulary of text. The students must use a dictionary to help them in gaining the meaning word by word in text. Then, the students also get difficulty in identifying the language features of the text. Moreover, sometimes they confused

to decide the grammatical form that included in the text. In short, the students need a strategy to make them easier in reading text.

One of the reading comprehension strategies that provided into text is graphic organizer. According to the RAND Reading Study Group graphic organizers were developed on the basis theory of meaningful verbal learning. When students are introduced to the material for which they have little background knowledge their learning will be improved if they have a structure and clear method for organizing the information. Graphic organizers provide students with a tangible system to organize information in a way that is meaningful to them. When used accurately, graphic organizers allow students to visualize the relationship among key concept and terms in informational text.

The researcher hopes that a Venn diagram can explore students' comprehension in reading text. This strategy motivates students to more interest in gaining the meaning of text. Venn diagram strategy support students to develop reading comprehension, to identify the main ideas, to compare to text. By using Venn diagram, students not only compare and contrast the text but also student can develop reading comprehension and identify the main idea of the text. Therefore, the researcher focused on this research about the effect of Venn diagram strategy to students' reading comprehension ability. The researcher applied this strategy through descriptive text in order to evaluate students' reading comprehension ability.

## **B. THEORETICAL DESCRIPTION**

### **1. Reading Comprehension**

Reading is the ability to obtain any information or messages that can build perception and capability to express what is read before. Reading means understanding a written text<sup>2</sup>. She gives some points when people read, they need to perceive and decode letters, and they understand words and symbols in a text and gather meaning from what is read. From her statement, it can be concluded that when beginning to read a text, the students depend on decoding letters to

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<sup>2</sup> Penny, Ur. *A course in Language Teaching Practice and Theory*. (Cambridge: Cambridge University Press 1991). p. 138.

understand words; but as soon as there is a meaningful context, they tend to bring their own interpretation to the word according to its general shapes and the sense of the text rather than according to its exact component letters. Thus, reading activities should stress on reading for understanding rather than decoding of letters.

Reading for understanding is purposed to comprehend. This is in line with the statement that reading comprehension depends heavily on knowledge about the world as well as on knowledge of language and print<sup>3</sup>. It means that when the students read, they try to comprehend the symbol or written words about whatever it is to construct new knowledge from the interaction between texts and background knowledge. The teacher provides the text to students in order to evaluate their comprehension. Evaluation or assessment will show the students' result in reading.

Assessment is the measurement of the ability of a students or the quality of success of a teaching course. Assessment is also the process of gathering information about students' understanding and skills. It means that assessing student is a significant aspect of every teacher's work and the important things for students because they get grading and score. An assessment requires planning and organization<sup>4</sup>. Before planning the assessment, it first identifies the purpose of reading assessment such as monitoring the students' progress in reading, evaluating or diagnosing reading behavior, moving from one level to another within a given program. For these purposes, the teacher/lecturer needs to assess both process and product (reading comprehension level). He also explains that reading assessment should match with the purpose to task. When the purpose is to read comprehend, the tasks can be retellings, literature response journals, anecdotal records, literature discussion groups, and texts with comprehension questions.

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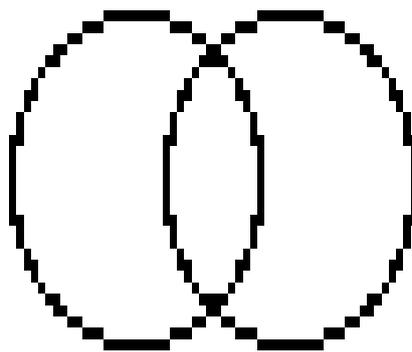
<sup>3</sup> O'Malley, J. Michael and Pierce. *Authentic Assessment for English Language Learners*. (New York: Wesley Publishing Company, 1996). p. 94

<sup>4</sup> O'Malley, J. Michael and Pierce.,Op. Cit. p.97

## **2. Venn Diagram Strategy**

A Venn diagram is a type of strategy in using graphic organizer. Graphic organizer has its roots in schema theory, when students learn something new, they must be able to retain the information for later use<sup>5</sup>. Our knowledge is stored in a scaffold hierarchy as a way of organizing information. As a type of graphic organizer, Venn diagram is used as a strategy or tactic to teach in learning objectives that have been written<sup>6</sup>. A Venn diagram is a visual organizer used to compare and contrast defined concepts. Venn Diagrams are made up of two or more overlapping circles. The circles show relationships between defined concepts and allow learners to visually organize similarities and differences between the defining characteristics of the defined concepts.

Venn diagram can be used with other tactics such as concept frames and concept maps<sup>7</sup>. It is important to note that Venn diagrams can become complicated and difficult to interpret as more concepts are compared. They work best when only two or three concepts and their characteristics are compared in a single diagram. Information is usually presented to students in linear text. Especially when there is a lot of information, it is difficult to see relationships in this format. Venn diagrams enable students to organize information visually so they are able to see the relationships between two or three sets of items. They can then identify similarities and differences. The following shows the form of Venn diagram.



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<sup>5</sup> Praveen, D. Sam, & Rajan, Premalatha. *Using Graphic Organizers to Improve Reading Comprehension Skills for the Middle School ESL Students. English Language Teaching*, 6(2),(2013 p.155-170).

<sup>6</sup> John Venn *.The Diagrammatic and Mechanical Representation of Propositions: Philosophical Magazine and Journal of Science.5 10 19. p.59.*

<sup>7</sup> Jeremy Jones. *Teaching with the Brain in Mind “ What Hula Hoops and Venn Diagram have in Common.* Articles. <http://home.att.net/~teaching/graporg.htm>. (09th September 2010.p.27)

### 3. Descriptive Text

Descriptive text is a text which says what a person or a thing is like. Its purpose is to describe and reveal a particular person, place, or thing. Description is a type of written text, which has the specific function to give description about an object (human or non human)<sup>8</sup>. Descriptive text consists of two generic structures. They are identification and description by which a writer describes person or an animal, or a tree, or a house, or camping as his topic. The identification is to identify the object to describe. The description describes parts, qualities, and characteristics of the parts of the object. In addition, grammatical pattern also includes in descriptive text. It uses simple present tense, focus on specific participants, use attributive and identifying processes, and use declarative sentence.

This is an example of descriptive text.

<b>Title</b>	My Lovely Cat
<b>Identification</b>	I have a stray cat as my pet. He is really playful; He loved to play with me and the new things he found.
<b>Description</b>	He has orange and white fur, his fur is so soft and I like to rubs it for him. He has a long tail. He likes to play with it. He is also always try to catch his tail sometimes. I also like to hold him in my hand, when i hold him like that he will fall asleep.

## C. RESEARCH METHODOLOGY

### 1. Research Design

The researcher used experimental research. Experimental research is only type of research that can test hypothesis to establish cause and effect.<sup>9</sup> It means researcher manipulated at least one independent variable, control other relevant variables, and observes the effect on one or more dependent variables in

<sup>8</sup> Pardiyono. *Teaching Genre Based Writing*. (Yogyakarta: Andi Offset. 2007.p. 34).

<sup>9</sup>L.R Gay and Peter Airaisan. *Educational Research for Analysis and Aplication*,America: Prectice Hall,(1992,p.367)

experimental research. This research has two classes. First, experimental class and second control class. Experiment class used a treatment that was Venn diagram strategy but in control class used direct method in teachers' strategy.

## **2. Population and Sample**

The population in this research is the second year students at junior high school Nurul Ilmi Padangsidimpuan. They are consisted of seven classes for about 205 students. The sample were taken from eight class of population to become two classes that includes control class and experimental class that consisted of 62 students.

## **3. Technique of Data Collecting**

The researcher used use test as the technique of collecting data. The researcher used pre-test and post-test to experiment class and control class in order to know the effect of using Venn diagram strategy toward students' reading comprehension ability, especially in descriptive text at the second year students at junior high school Nurul Ilmi Padangsidimpuan.

## **4. Technique of Data Analyzing**

### **a. Requirement Test**

Requirement test have measured normality and homogeneity of data. The researcher has used SPSS 21.0 to account the data normal and homogeny. Normality test was used to test the existence of normality of data. This research used a formula Kolmogorov-Smirnov to calculate normality of the test. Homogeneity test was used to find out the variances of data. The data were calculated by using analysis of variance (ANOVA).

### **b. Hypothesis Test**

The researcher used T – test to prove the hypothesis was accepted or was rejected. The hypothesis test was taken from pre – test and post – test data result. The T – test result was calculated from SPSS program ver. 21.00 with basic assumption, if  $t_{count} > t_{table}$ , it meant that hypothesis was accepted.

**D. RESULT OF THIS RESEARCH**

**1. Data Description**

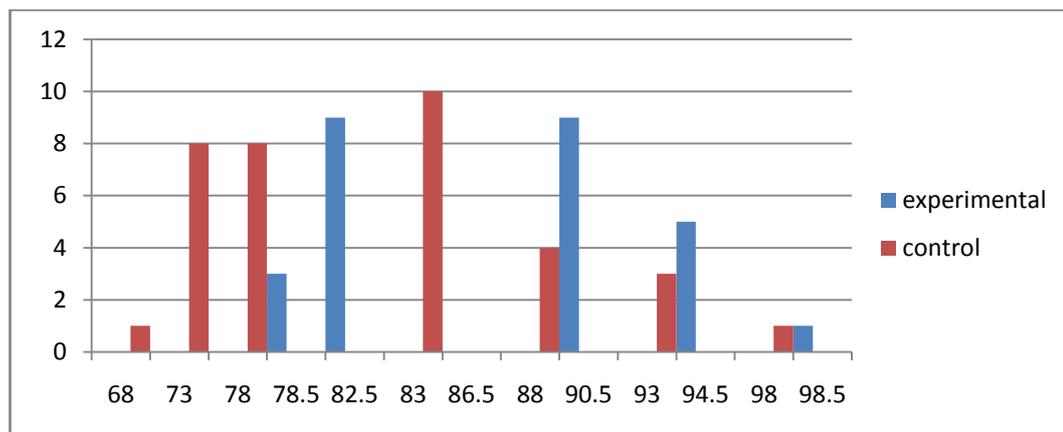
The researcher had done pre – test and post - test in experimental and control class to account their reading comprehension ability before and after they were given a treatment. The two classed are eight pi – 2 as experimental class and eight pa – 2 as control class. By giving pre-test to both of class, the researcher has calculated their result before given treatment. The researcher did not apply venn diagram strategy to experimental class and control class. After getting the pre – test result, the researcher gave a treatment into experimental class to examine their reading comprehension ability in descriptive text. Then, the control class was not given a treatment but the researcher used direct method as teachers’ strategy when they were in teaching learning process. The next progress of these two classes was seen from the result of post – test. The researcher got the comparison data between post-test score an experimental and control classs after gave a treatment.

**Table.1 The Comparison Score of Students’ Reading Comprehension in Experimental and Control Class Post – Test**

<b>Experimental Class</b>				
No.	Interval	Mid Point	F	Percentages
1	97 – 100	98.5	1	3.7%
2	93 – 96	94.5	5	18.52%
3	89 – 92	90.5	9	33.33%
4	85 – 88	86.5	0	0
5	81 – 84	82.5	9	33.33%
6	77 – 80	78.5	3	11.11%
<b>Control Class</b>				
No.	Interval	Mid Point	F	Percentages
1	96 – 100	98	1	2.86%
2	91 – 95	93	3	8.57%
3	86 – 90	88	4	11.43%
4	81 – 85	83	10	28.57%
5	76 – 80	78	8	22.86%
6	71 – 75	73	8	22.86%
7	66 – 70	68	1	2.86%

The previous table shows the result post – test of experimental class and control class. It can be seen that the highest interval score in post-test of experimental class was 97 up to 100 (1 student/3.7%) and the lowest was 77 up to 80 (3 students/11.11%), meanwhile the control class was 96 up to 100 (1 students/2.86%) and the lowest interval score was 66 up to 70 (1 students/2.86%).

The data are presented in the next diagram comparison between description data post-test of experimental and control class.



**Diagram 1 The Comparison Data of Students' Reading Comprehension Ability in Experimental dan Control Class Post – Test**

Based on the diagram above, it can be concluded that the frequency of students' score in post test from 97 up to 100 (1 students) in experimental class and 96 up to 100 (1 student) in control class; 93 up to 96 (5 students) in experimental class and 91 up to 95 (3 students) in control class; 89 up to 92 (9 students) in experimental class and 86 up to 90 (4 students) in control class; 85 up to 88 (0 students) in experimental class and 81 up to 85 ( 10students) in control class; 81 up to 84 (9 students) in experimental class and 76 up to 80 (8 students) in control class; 77 up to 80 (3 students) in experimental class and 71 up to 75 (8 students) in control class. Then, the interval which highest frequency in post-test of experimental was 89-92 (9 students) and the interval which had lowest frequency was 85-88 (0 students). In post test of control class, the interval which had highest frequency was 81-85 (10 students) and the lowest frequency was 96-100 (1 students).

From the description of comparison data above, it can be concluded that the students' score of experimental class by using venn diagram strategy was higher than the students' score of control class by using direct method teachers strategy. It means that venn diagram startegy explore students' reading comprehension ability in experimental class.

## 2. Data Analysis

### a. Requirement Test

The result of the requirement test is the data were distributed normal and homogeneous. The calculated can be seen in the next table.

**Table 2. Normality Test Experimental and Control Class  
Pre-Test and Post - Test**

<b>One-Sample Kolmogorov-Smirnov Test</b>				
	<b>Pre - Test</b>		<b>Post - Test</b>	
	Experimental Class	Control Class	Experimental Class	Control Class
Kolmogorov-Smirnov Z	1.031	.955	.856	.954
Asymp. Sig. (2-tailed)	<b>.239</b>	<b>.322</b>	<b>.456</b>	<b>.322</b>
a. Test distribution is Normal.				
b. Calculated from data.				

Normality table shows that the result of normality tests in pre – test between experimental class and control class had sig > 0.05. It can be seen from Asymp.Sig (2-tailed) that in experimental class 0.239 > 0.05 and in control class 0.322 > 0.05. It means that the data of experimental and control class in pre – test reading comprehension ability were distributed normal. Then, the result of normality test in post – test between experimental class and control class had sig > 0.05. It can be seen from Asymp.Sig (2-tailed) that in experimental class 0.456 > 0.05 and in control class 0.322 > 0.05. It means that the data of experimental and control class in post – test reading comprehension ability were distributed normal.

**Table 3 Homogeneity Test Experimental and Control Class  
Pre – Test and Post – Test**

**Test of Homogeneity of Variances**

	Levene Statistic	df1	df2	Sig.
Pre - Test	,365	4	19	,830
Post - Test	1,467	4	20	,249

Table shows that the result of homogeneity data of students' reading comprehension ability from experimental and control class in pre – test and post – test had sig > 0,05. Firstly for pre – test, it can be seen from score of Levene Statistics sig. shows 0,830. It means that  $0,830 > 0,05$ . In sum, the data distribution of homogeneity reading comprehension ability both of experimental and control class in pre – test were homogenous. Secondly for post – test, it can be seen from score of Levene Statistics sig. shows 0,249. It means that  $0,249 > 0,05$ .

In sum, the data distribution of homogeneity reading comprehension ability both of experimental and control class in post – test were homogenous. In sum, both the data in pre – test and post – test experimental and control class were homogeneous.

**b. Hypothesis Test**

Hypothesis was gotten after requirement test of the data were done. The researcher had found that the data of students' reading comprehension ability in pre –test and post – test were distributed normal and data variances were homogenous. The data would be analyzed to prove the hypothesis. The result of t – test displayed as follow:

**Table 4 The Result of T– test  
Students’ Reading Comprehension Ability**

$t_{count}$		$t_{table}$
Pre – Test	Post - Test	
2.327	3.408	2.00

Based on the result of t – test in pre – test was 2.327, the result was gotten before given a treatment while after given a treatment the result explored in post – test was 3.408. It means that the result of  $t_{count} > t_{table}$  that was  $3.408 > 2.00$ . In this way  $H_0$  was rejected and  $H_a$  was accepted. Therefore, after analyzed hypothesis test, it can be concluded that the hypothesis proved there is an effect of implementing diagram Venn into students’ reading comprehension ability.

#### **E. CONCLUSION**

From the result findings, the researcher concluded that Venn diagram strategy explored students’ reading comprehension ability. It can be proved from the result of hypothesis test. The result of t – test for students’ reading comprehension ability showed good score after given treatment because the  $sig > 2.00$  that was  $3.408 > 2.00$ . By resulting these, the researcher concluded that there was an effect of venn diagram strategy into students’ reading comprehension ability.

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