THE EFFECT OF GRAPHIC ORGANIZERS AND TEXT TYPES ON THE STUDENTS' READING COMPETENCY AT SMAN 8 DENPASAR

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Abstract

This study attempted to find out the effect of graphic organizers and text types upon the students' reading competency. The subject of this study was the first grade students of SMAN 8 Denpasar. The independent variable was graphic organizers and conventional reading strategy (placebo), and the dependent variable was reading competency. Text types was the moderator variable. The study was an experiment with posttest only control group design. The total number of population was 13 classes, which consisted of 586 students. From the population, two classes consisting of 92 students were used as samples. They were divided into two groups; experimental group and control group by multistage random sampling technique. Post-test was administered at the end of treatments and then analyzed by using two way ANOVA. The result of the analysis showed that: (1) There is an effect of graphic organizers upon the students' reading competency. (2) There is an interaction between graphic organizers and text types upon students reading competency

Key words: graphic organizers, text types, and reading competency

INTRODUCTION

Reading is probably the most important skill for second language (L2) learners in academic contexts (Celce and Murcia, 2001). Reading is gradually being recognize as a valuable source of language input, particularly for students in learning environments (as in some EFL context) in which fluent speakers of English are generally not available to provide other kinds of language input. In reading, an individual construct meaning through a transaction with written text that has been created by symbols that represent language. The transaction involves the reader's acting on or interpreting the text, and the interpretation is influenced by the reader's past experiences, background knowledge as well as the reader's purpose for reading (hudelson, 1994 in Celce & Murcia, 2001). However, the

expectation and intention when reading are to comprehend what we read. In addition, Grabe (2009) states that reading is a selective process. It means that reading is a process in which the information is made to be confirmed, rejected, or refined by the readers as reading progress. This process involves partial use of available minimal language clue selected from perceptual input on the basis of the readers' expectation involving perceptual skills, experience. the language background, the ability of readers to anticipate meaning on the basis of what reader has just read, and also the organization of the text itself.

Considering the important role of reading, the process of reading should be given a serious attention in the teaching and learning process since it has also become one of the language

skills that should be mastered by the students in order to be able to perform target language well and to be competent. It is in line with the curriculum being applied in SMAN 8 Denpasar which is called School Based Curriculum (KTSP). It is a set of plan and guidelines about competency which has to be achieved by the learner. procedure of evaluation. learning teaching activity. empowerment of education source (Depdiknas, 2007).

Students are said to competent when they fulfilled basic competency and indicator. Based on the curriculum being applied, the basic competencies for reading responding to meaning and rhetorical steps in short essay accurately, fluently, and acceptable in real life context to access knowledge in "narrative", "recount", and "procedure" types of text. (Depdiknas, 2007). The indicators of reading: identifying main idea of paragraph, identifying the meaning of words in reading passage, identifying the meaning of sentences in reading passage, identifying sentence structure in narrative, recount and procedure text, identifying the characters of the story in the text, identifying the events which are occurred in the text as well as its sequences, identifying rhetorical steps of the text, and identifying the communicative purposes of the text.

As a matter of fact, stated by National Reading panel in 2000, even though the teaching of reading has been developed in a longer period of time, it is still considered a difficult problem in teaching at school. It can be proven by the students' limited ability and strategy in reading; they are not being able to comprehend the text they read. Based on the researcher's experience, the process of teaching and learning to read has been given a little attention or has not been done well. Say for example, students in SMAN 8 Denpasar have inappropriate reading strategies and capabilities. Students experience a number of difficulties when attempting to

comprehend written material. That is why they still face great difficulty for being competent in reading as what stated in curriculum applied. It is proven by the student's score in their half semester test which is below standard. It is due to the unsuitability or inappropriate techniques used by the teacher: the conventional reading technique seems to fail in equipping students with the adequate knowledge to cope with reading comprehension. So, the students could not master and apply the target language well. Therefore, it can be concluded that the students fail to perform the basic competency and indicator in order to administer the target language well.

Up to this point, it is obvious that the students' competency in reading comprehension should be improved because they could not be able to apply their knowledge in the target language appropriately; they do not have the ability to obtain general and specific information from the written text, they could not recognize the main idea and specific ideas in the text explicitly and/or implicitly, they could not guess the meaning of the words, phrases, or sentences based on the context, they could not make references, and the most important thing is that they unable to make use of their prior knowledge and experience to create a connection with the text they read. Thus, the students will not pass the standard stated in curriculum being applied. These phenomena have motivated the writer to conduct research on reading competency. In accordance to the stated above, it can issues overcame by applying the appropriate strategy in teaching because when it comes to the application of knowledge of language, teacher have to think of how to relate the lesson to a real life experience, context. and knowledge which are what students really need; they need to be taught how to make use of what they already have (schemata) instead of using their knowledge and skill, a reading strategy that engage them in an activity where

they can recall and apply their background knowledge and experience in dealing with reading comprehension. Therefore, the students will be familiar with the activity of using their prior knowledge and experience to organize, interpret, and processes new information lies in reading passage which will ease comprehension.

Meanwhile, for teaching the "higher" tasks, a new line of research began in the 1970's and flourished in 1980's: cognitive instruction. The apparent first use of the term cognitive strategies was in 1976 Robert Gagne and Ellen Weinstein each began to use the term. Gagne in reference to problem solving and Weinstein in reference to study strategies (Rosenshine & Meister, 1992). He also states that during the 1970's and 1980's there was an enormous period of research on developing and testing cognitive strategies in a wide range of areas: reading comprehension, mathematical problem solving, writing, problem solving, and study skills. The results of this research are ably summarized in a number of volumes. The cognitive strategy research is considered enormous as an accomplishment, particularly because this research is primarily based on intervention studies in which student learning has been the outcome measure.

In 2000, the National Reading Panel (NRP) reviewed 204 CSI (Cognitive Strategy Instruction) studies with students and concluded that there was enough evidence to recommend seven strategies: question generation, comprehension monitoring. summarizing, question answering, organizers graphic (diagrams), semantic mapping and multiple strategy approaches (NRP, 2000 as cited in Cromley. 2004). More oddly, Rosenshine (1997) in (Dole, et al,. mention several cognitive 2008) strategy which can be applied to activate prior knowledge, they are Class Discussion, Semantic Mapping,

Prequestions, Visual Aids, and Graphic Organizers. There are more than enough evidences for the experts stated above to recommend graphic organizers as suitable strategy to be applied in teaching reading comprehension. Besides, graphic organizers is also a cognitive strategy proposed by McKnight (2010) which is beneficial for enabling students to literally see connections and relationships between facts. information, and terms, remembering connecting information, facilitating the integration of long-term memory and new learning.

Graphic organizers important and effective pedagogical tools for organizing content and ideas and facilitating learners' comprehension of newly acquired information. Gardner's theorv multiple intelligences (1993, 2006) as cited in McKnight (2010), posits that students are better able to learn and internalize information when more than one learning modality is employed in an instructional strategy. Because graphic organizers present material through the visual and spatial modalities (and reinforce what is taught in the classroom), the use of graphic organizers helps students internalize what they are learning. In addition, for all learners, but for adult learners in particular, graphic organizers facilitate the integration of long-term memory and new learning. Adult learners generally have more background and long-term knowledge, and graphic organizers bridge what adult learners already know with what they are learning. Graphic organizers actually trigger long-term memory and promote synthesis with new information (Materna, 2007 in McKnight, 2010). Besides, graphic organizers are able to help students to reinforce the learned pattern (Willis, 2008).

Although the processes of reading are often too dynamic and varied for different readers with the strategy applied on different texts to be investigated, it is generally accepted

that the interaction between readers, reading strategy, and text variables is key to understanding the reading process. As a result, it has become common practice to divide readingrelated research into three separate factors: the reader, the strategy, and the text (Alderson, 2000 as cited in Shin, 2002). On the other hand, Celce and Murcia (2001) state that a consistent effort to guide students to the way texts are structured will help them build stronger comprehension skills. Activities that focus specifically on the way in which discourse is organized on specific aspect of text structure are often part of exercises that emphasize careful reading. They recommend applying graphic organizers as an effective way to carry out reading instruction that focuses on careful reading comprehension and discourse organization. The main goal of graphic representation is to assist students in comprehending difficult text, by using graphic organizers, students are able to see the key information in the text, the organization of text information, the ways that information is structured, and relationship among ideas presented in a text or a portion of a text.

Students apply strategy to deal with reading and the aim of reading is comprehension. Their comprehension is influenced by several factors and one of them is the type of text they read. Each type has its own structure which is different from one to another. In this research. graphic organizers beneficially used as cognitive strategy improve students competency since this strategy can help students to brainstorm and organize ideas. It will also help them to deal with text coming in different types due to the designs of the graphic which are suitable for any kinds of text types. For instance, the story plot terms and story map are the two out of several designs to deal with narrative text, sequence is suitable for understanding procedure text, and series of event chain is very useful for recount text, etc.

Simply put, there are many types of reading texts that student should learn in senior high school. Based on BSNP (2006) for tenth grade of senior high school in the first semester, the types of reading texts that they should master are in the form of narrative, procedure, and recount. Thus, this recent study is focusing on investigating the effect of graphic organizers students to reading comprehension based on the types of text. Through this study, the main and interactional effect of graphic organizers and text types on students reading competency will be investigated.

Graphic Organizers

One way to help make a curriculum more supportive of students and teachers is to incorporate graphic organizers. Graphic organizers come in many varieties and have been widely researched for their effectiveness in improving learning outcomes for various students (Hall and Strangman, 2002). organizers are Graphic а visual representation of the material a student is learning. The organizer assists the student in brainstorming and/or organizing information to make it easier to understand how ideas connect. Organizers also create a connection between different ideas, allowing a student to grasp how large concepts work together. Hall and Strangman in 2002 have stated that a graphic organizer is a visual and graphic display that depicts the relationships between facts, terms, and or ideas within a learning task. Graphic organizers are sometimes referred knowledge maps, concept maps, story maps, cognitive organizers, advance organizers, or concept diagrams

Drafke in 1993 defines graphic organizer as a diagram or illustration of a written or oral statement. Examples include matrices, hierarchies, and continua. The goal in using graphic organizers is to organize ideas and examine relationships. In doing so, people engage more of their core

thinking skills and process information more intensely, improving long term recall. Graphic organizers are especially helpful to average, under-achieving, and struggling learners. The process of reviewing information and organizing it appears to help learners arrange the material in their minds. He also argues that graphic organizers are wonderful tools to help students transition from the knowing what to knowing why. They structural provide the knowledge needed to bridge the gap between the two, thus allowing the students to move the information from their working memory to their long term memory. For information to be successfully stored into long term memory, we need to be able to elaborate, classify, and organize the information; This is the main idea and purpose of graphic organizers.

Graphic organizers are often used to activate preexisting knowledge. In schema theory it is noted that new information must be connected to prior knowledge. Once a student has activated his or her prior knowledge he or she will use that knowledge to help increase the comprehension of new knowledge (Dye, 2000 as cited in McGilL et al, 2010). They argue that researchers believe many that information that is stored in the students' schema is existing more easily understood, learned, and retained than information that is not. Teachers can help students learn more information if he or she can help the student link new information to background knowledge. Using graphic organizers is a beneficial way to help student make connection between prior knowledge and new knowledge. Graphic organizers important and effective also pedagogical tools for organizing content and ideas and facilitating learners' comprehension of newly acquired information. Gardner's theory of multiple intelligences (1993, 2006) as cited in McKnight (2010), posits that students are better able to learn and internalize information when more than one learning modality is employed in an instructional strategy. Because graphic

organizers present material through the visual and spatial modalities (and reinforce what is taught in the classroom), the use of graphic organizers helps students internalize what they are learning.

Nevertheless, A text, within literary theory, is a coherent set of symbols that transmits some kind of informative message. This set of symbols is considered in terms of the informative message's content, rather than in terms of its physical form or the medium in which it is represented. In the most basic terms established structuralist criticism, a "text" is any object that can be "read," whether this object is a work of literature, school books, a street sign, an arrangement of buildings on a city block, (Wikipedia.org).

reading Besides. in understanding text, the reader must become familiar with the fact that texts may take on different forms and hold certain pieces of information in different places. Thus, it is necessary to understand the layout of the material being read in order to focus more deeply on the parts that are more densely compacted with information. Even attention paying to the year publication of a text, if applicable, may aid the reader in presuppositions about the text as can glancing at the name of the author.

Based on generic structure and language feature dominantly used, texts are divided into several types. They are narrative, recount, descriptive, report, explanation. analytical exposition, exposition, hortatory procedure. discussion, review, anecdote, spoof, and news item. These variations are known as genres. Based on the 2006 curriculum of senior high school, there are three types of texts that are taught to the students of grade 10 in semester 1 such as: narrative text, procedure text, and recount text.

Methodology

This study is an experimental research. In this study, there are three variables to be studied. First. the independent variable is reading strategy (A) with two levels namely; Graphic Organizers and conventional strategy. While the moderator variable was the text types (B) with three levels; narrative, procedure, and recount texts. addition, the dependent variable is reading competency (Y). An experiment involves usually two groups experimental subjects. In this study, the researcher used two classes; experimental group and control group. This experimental research applied factorial design. The construction of a factorial design is that, all levels of each independent variable are taken in combination with the levels of the other independent variables (Wiersma, 1986). The levels indicate the number of independent variables. Further, this experimental research used 2 x 3 factorial arrangements therefore; there are two independent variables, which are taken in combination with three moderator variables. The researcher is about to find out the effect of graphic organizers and text types upon students reading competency.

This study was conducted in SMAN 8 Denpasar. All the tenth grade students were selected as population. There were thirteen classes altogether consisting of 586 students. By using multistage random sampling, two homogeny classes as the experimental and control classes were acquired, they are; X.5 and X.12.

There are two types of research instruments applied in this study namely teaching instruments and instrument collecting for data. Teaching instruments used in this study are; experimental scenario, reading materials, and instrument for collecting quantitative data for testina hypotheses consists of reading comprehension tests.

The data were analyzed by two forms of statistical analysis namely descriptive statistic analysis (to find the mean score, median, mode, range and

standard deviation), and inferential statistic analysis (to draw inferences by using t-test and a two – way ANOVA). SPSS 17 was applied for both statistic analyses to automatically calculate the data.

Findings and Discussion

The descriptive analysis for both groups in comparison to each text types can be seen below:

Statistics

				Reco-		_	
		Narr - Graphic	Proc - Graphic	Graphic	Narr - Conv	Proc - Conv	Reco - Conv
N	Valid	46	46	46	46	46	46
	Missing	230	230	230	230	230	230
Mean		90.00	87.93	87.07	63.15	72.39	70.76
Std. Error o	Std. Error of Mean		.722	1.179	1.880	1.497	1.193
Median	Median		90.00	85.00	67.50	75.00	70.00
Mode	Mode		90	95	75	60	70
Std. Deviation		7.149	4.896	7.998	12.752	10.151	8.094
Variance		51.111	23.973	63.973	162.621	103.043	65.519
Range		25	15	20	30	25	25
Mnimum		75	80	75	45	60	60
Maximum	Maximum		95	95	75	85	85
Sum		4140	4045	4005	2905	3330	3255

Hypothesis 1

Descriptive analysis reveals that there was a difference of the results between the score in reading competency of the students taught by graphic organizers and the score of those taught by conventional reading strategy. In other words, it can be concluded that there is an effect of graphic organizers upon the students' reading competency at SMA N 8 Denpasar.

To prove whether there was significant difference between the two reading strategies, two way Anova calculations by SPSS 17 was applied. The result can be seen below:

Tests of Between-Subjects Effects

Dependent Variable: Score

	Type III Sum				
Source	of Squares	df	Mean Square	F	Sig.
Corrected Model	28859.420 ^a	5	5771.884	73.646	.000
Intercept	1702979.710	1	1702979.710	21728.999	.000
Strategy	26413.043	1	26413.043	337.015	.000
TypeText	609.964	2	304.982	3.891	.022
Strategy * TypeText	1836.413	2	918.207	11.716	.000
Error	21160.870	270	78.374		
Total	1753000.000	276			
Corrected Total	50020.290	275			

a. R Squared = .577 (Adjusted R Squared = .569)

The above table shows that the sig. value was 0.00, which was lower than 0.05. It means that the difference between the two strategies was significant. Therefore, there is enough evidence to reject null hypothesis, and of course alternative hypothesis is accepted.

Hypothesis 2

Analysis of variance reveals that there was difference of the results between the scores among the three different types of texts; narrative, procedure, and recount under different treatments; graphic organizers and conventional strategy (placebo). In other words, there is an interaction effect of graphic organizers and text types upon the students reading competency at SMA N 8 Denpasar.

The inferential statistics analysis presented in table above clearly shows that the value of f was 11.72 and the sig. value was 0.000. Due to the fact that the sig value was below 0.05, which means that there is an interaction between graphic organizers and types of text. Thus, there is more than enough evidence to accept alternative hypothesis, and null hypothesis is rejected.

The presence of the interaction can clearly be seen in figure below. The

figure illustrates the average score of students' reading competency in A1B1 (graphic organizers treated group students for narrative text), A2B1 group (conventional reading strategy treated students for narrative text), A1B2 group (graphic organizers treated students for procedure text), A2B2 group (conventional reading strategy treated students for procedure text), A1B3 group (graphic organizers treated students for recount text), A2B3 group (conventional reading strategy treated students for recount text).

Estimated Marginal Means of Score

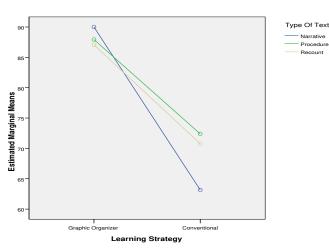


Figure of an interaction between reading strategies and types of texts

The figure clearly shows that there is disordinal interaction occurred between reading strategies and types of text. It can be concluded that, there is an interaction between reading strategies and types of text. However, it was found out that the students treated with graphic organizers strategy consistently gained higher mean score compared to the group treated with conventional reading strategy.

Based on the statistical analysis done descriptively, it was found that the mean scores of the students taught by using graphic organizers for narrative text was 90.00 while the mean score of the students taught by conventional reading strategy for narrative text was

63.15. The result indicated that graphic organizers are significantly better than conventional reading strategy comprehending narrative text. For the procedure text, it was discovered that the mean score of the students taught by using graphic organizers was 87.93, while the mean score of the students taught by using conventional reading strategy was 72.39. The result showed that graphic organizers are better than conventional reading strategy comprehending procedure text. And for recount text, it was found that the mean score of the students taught by using graphic organizers was 87.07 while the mean score of the students taught by using conventional reading strategy was 70.76. The result for the third type of text also indicated that graphic organizers are better than conventional reading strategy. Hence, the research's result provides the realistic data on the role of graphic organizers when combined with text types.

The findings of this study supported findings conducted by other researchers; Wiriani (2011) identified the significant effect of two strategies: graphic organizers, and creative mapping on the students' reading competency. She found out that among the two strategies applied, graphic organizers treated students in SMP Negeri 1 Pekutatan performed better in comprehending text. She concluded that graphic organizers provide students with a visual representation of the main concept in content areas. This helps them to comprehend the text easily. Thus, from this fact, it was obvious that the application of graphic organizers helps to overcome the reading problem encountered by the students and at the same time improving their reading competency

The group that studied the texts with graphic organizers surpassed the group that studied the texts with conventional reading strategy. Graphic organizers is considered more effective to be used in comprehending reading text since this strategy ease the students when deal with the difficult text. In line

with that, Celce & Murcia in 2001 state the importance of students' awareness text structure and discourse of organization in reading comprehension; students in academic settings are often expected to learn new information from difficult text. It is important that L2 students do not become confused by the larger organization of texts (e.g., comparison-contrast, problem-solution, narrative, and classifications) and features of different genre (e.g., stories, procedure, etc). A consistent effort to guide students to see the ways the text are structured will help them build stronger comprehension skills. Activities that focus specifically on the ways in which discourse is organized and on specific aspects of text structure (e.g., transition phrases, words that signal patterns of text organization, pronoun references, headings, and subheadings) are often parts of exercise that emphasize careful reading, in line with that, she also add that an effective way to carry out reading instruction that focuses on careful reading comprehension and discourse organization is through the use of graphic organizers (i.e., visual representations of text information). The main goal of graphic representations is to assist students in comprehending By difficult texts. using graphic organizers, students are able to see the information in а text. organization of text information, the ways that information is structured, and relationship among ideas presented in a text or portion of a text.

Therefore, the application of graphic organizers has a great impact enhancing students reading competency. Brainstorming helps students to recall information, make connection, and then set a purpose in reading, while the awareness of text structure and discourse organization helps them to see the key information in a text, the organization of text information, the ways that information is structured, and relationship among ideas presented in a text or portion of a text, which will ease comprehension.

Further, result of the two-way Anova calculation indicates that graphic organizers which are beneficially used as cognitive strategy interact with the three types of text; narrative. procedure, and recount. It means that types of texts contribute the students' reading competency. Thus, among the three types of text, the students in graphic organizers treated group got the highest score in comprehending narrative text. In the placebo group, the students' score in recount text was the hiahest and their score comprehending narrative text was the lowest.

It is due to the fact that narrative text has the most complex generic structure among the three. This complexity could be understood by the students through the representation of graphic through which its generic structure is exposed in the design of the graphic; the complex text and difficult information are compressed in a simple and understandable graphic representation. This crucial part does not exist in conventional class that is why comprehending narrative text is more difficult than the other two. It can concluded that students comprehend narrative text better due to the nature of narrative text that entertain and amuse readers which also supported by the ability to recall schema, making connection, making inference and awareness of text structure and discourse organization, are involved in graphic organizers learning activity.

Conclusion and Suggestion

Based on the research findings discussed in Chapter IV, the conclusion can be drawn as follows:

- a. There is an effect of graphic organizers upon students reading competency. Students treated by graphic organizers consistently gained higher score than the scores gained by those treated by conventional strategy
- b. There is an interaction between graphic organizers and types of text

upon the students reading competency.

Based on the findings, discussion and conclusion, some suggestions can be drawn as follows:

Due to the consistent better result of graphic organizers on students' reading competency for each type of text, English teachers at SMAN 8 Denpasar are encouraged to apply this strategy in teaching reading for any types of texts. and the students should also practice strategy in attempting comprehend reading text in any types since this strategy comes in many shapes and designs which administer characteristics of the structure. Thus, the effectiveness of graphic organizers could benefit both teacher and students when they deal with reading course.

To other researches, the result of this study is expected to serve as guidance in conducting further researches on similar topics, probably involving other cognitive strategy and other types of texts.

REFERENCES

BSNP. 2006. Panduan Penyusunan Kurikulum Tingkat Satuan Pendidikan Dasar dan Menengah. Jakarta: Badan Standar Nasional Pendidikan

Celce, Marianne & Murcia. 2001.

Teaching English as A
Second or Foreign
Language. Third Edition.
United States of America:
Heinle & Heinle

Cromley, Jennifer J. 2004.

Metacognition, Cognitive
Strategy Instruction, and
Reading in Adult Literacy.
Retrieved from
http://www.ncsall.net/fileadmin/resources/ann-rev/rall-v5-ch7-supp.pdf on
Saturday, March 24th, 2012

Depdiknas. 2007. Kurikulum Tingkat Satuan Pendidikan SMA.

Drafke, I	Jakarta: Departemen Pendidikan Nasional. Michael. 1993. Graphic Organizers. Retrieved from http://www.sanchezclass.com/reading-graphic-organizers.htm
	Tuesday, February 28 th , 2012
Grabe, Wi	Illiam. 2009. Reading in A Second Language; Moving From Theory to Practice. United States of America: Cambridge University
Hall, T.,	Press & Strangman, N. (2002). Graphic organizers. Wakefield, MA: National Center on Accessing the General Curriculum. Retrieved from http://aim.cast.org/learn/his toryarchive/backgroundpa pers/graphic_organizers . On Thursday, March 1st,
McGill, J	fulie., Murphy, Kelly & Freeman, Kim. 2010. Graphic Organizers. Retrieved from http://www.sanchezclass.com/reading-graphic-organizers.htm on Tuesday,
McKnight,	February 28 th , 2012 Katherine S. 2010. <i>The Teacher's Big Book of Graphic Organizers</i> . United States of America: John Willey and Sans Jac
Rosenshine	Wiley and Sons, Inc e, Barak and Meister, Carla. 1992. The Use of Scaffolds for Teaching Higher-Level Cognitive Strategies. Retrieved from http://www.ascd.org/ASCD /pdf/journals/ed_lead/el_19 9204_rosenshine.pdf On
Wiersma	Monday, March 19 th , 2012 William.1986. Research Methods in Education: An Introduction. United Stated of America. Allyn and Bacon.Inc

- Willis, Judy M.D. 2008. Teaching the Brain to Read; Strategies for Improving Fluency, Vocabulary, and Comprehension. United States of America. ASCD
- Wiriani, Ayu. 2011. The Effect of Semantic Mapping Strategies on Students' Reading Competency (an Experimental Study on the Eight Grade Students of SMP Negri 1 Pekutatan. Unpublished Thesis; Undiksha