

## CHAPTER II

### THEORITICAL REVIEW

#### **A. The Definition of Reading**

Harison and Smith (2007: 23), define reading as the act of responding with appropriate meaning to print or written verbal symbols. It means that reading is the result of interaction between the graphic symbols that represent language and the reader's language skill, and cognitive skills and knowledge of the words. In this process, the reader tries to recreate the meaning intended by the writer.

According to Wallace (2002: 4), reading as interpreting means reacting to a written text as a piece of communication. In other words, we assume some communicative intent on the writer's part which the reader has some purposes in attempting to understand.

According to Williams (2006: 11), reading is a process of obtaining meaning from written text. Readers carry out knowledge of the writing system, knowledge of the language, and the ability to interpret meaning from a text.

According to Aebersold and Field (1999: 15), reading is what happens when people look at a text and assign meaning to the written symbols in that text.

The similar definition stated by Nunan (1998: 33) that reading is a process of decoding written symbols, working from a smaller unit (individual letters) to larger ones (words, clauses, and sentences).

Based on the theories above, it can be concluded that reading is a more much complex process to obtain ideas or meaning from a text, which is symbolized in written or printed language.

## **B. Reading Comprehension**

Reading comprehension is not essentially different from other kinds of comprehension. Comprehension is sometimes, but not always related to the speed of reading. Reading comprehension means the ability to understand the material given by the author.

Jarolimek (2003: 243) gives the definition of reading comprehension as follows:

Reading with comprehension means that the reader is able to extract from the selection on the essential facts and understanding, visualize details and sense the relatedness of the facts.

From the statement above, it can be known that reading with comprehension covers not only reading the selection on the essential facts, but also trying to comprehend or understand the message in the selection of the essential facts. One indication that a reader already comprehends the selection is when he can answer the questions based on the selection.

Jarolimek (2003: 244) points out that reading comprehension is social studies consisting of a least four components:

1. Getting the literal meaning or a general understanding of what is being to be communicated.

2. Understanding and remembering facts detail that supports the ideas.
3. Recognizing and remembering the sequence of ideas or events presented,  
and
4. Following direction

All the four components above show that in reading comprehension the reader has to understand and remember the author's ideas in the selection and try to find the supporting detail that support the ideas.

### **1. Strategies on Reading Comprehension**

Grellet (2006: 4) offers some strategies in reading comprehension as follows:

#### **a. Scanning**

Scanning is quickly going through a text to find a particular piece of information. The readers only try to locate specific information (ex: name, a date, etc) and do not follow the linearity of the passage.

#### **b. Skimming**

Skimming is quickly running one's eyes over a text to get the gist of it. It is more thorough activity which requires an overall view of the text and implies a definite reading competence.

#### **c. Extensive Reading**

Extensive reading is reading longer text, usually for one's pleasure. This is a fluency activity mainly involving global understanding. Reader has general understanding without necessarily reading every word.

d. Intensive Reading

Intensive reading is reading shorter texts to extract specific information. This is more an accuracy activity involving reading for detail. Readers are expected to understand everything they read and to be able to answer detailed vocabulary and comprehension questions.

**2. Factors Influencing Reading Comprehension**

It is a fact that most students have some difficulties in comprehending a text. Those difficulties cause deficiency in the reading process. Inadequate comprehension is usually created by some factors. According to Cushenbery (2005: 63) there are several factors which influence reading comprehension so that the comprehension is not optimum. They are:

a. Emotional Factor

Learners usually become severely frustrated when they are not able to comprehend reading material satisfactorily. Their unsuccessful attempts to read, which makes them conspicuous in a socially unfavorable way, are the reason they are disappointed and ashamed. Children who are depressed or hyperactive have great difficulty in reading. Their home environment which is not harmonious with their psychology problems can hinder their concentration.

b. Intelligence Comprehension

Wolf (1997: 307) stated that reading comprehension can be defined as information processing. It assumes that reading comprehension is a cognitive process. First, the input is perceived in its visual mode and then it is processed in a general cognitive level. Therefore, a particular level of comprehension needs a particular level of intelligence. There are different levels of intelligence needed in dealing with comprehension questions at the literal, interpretive, critical, and creative level.

c. Physical Factors

Learners who have health problems such as obesity, malnutrition, neurological difficulties and granular disturbances may have a significant negative impact on reading in general and comprehension in particular.

d. Background Experience

Those who have limited experiences with words in the number of settings will have difficulty with comprehension in general because of their low level of schemata. Besides, Baker and Brown the logical organization of the text is firmly rooted in the reader's prior knowledge of the world. If a reader does not have the relevant background information, it may be difficult or impossible for him to detect the logical organization of the text being read. It can be said that efficient comprehension requires the ability to relate the textual material to the reader's existing or prior knowledge.

### 3. Level of Reading Comprehension

Some people say that the act of reading only consists of pronouncing words. They consider that comprehension is not important. Concentrating on pronouncing words rather than comprehending the essence of the passage is a waste of precious time. Based on the idea above, the teacher needs to emphasize the basic comprehension skills. According to Burns et. Al (2008: 177) there are four levels of comprehension:

a. Literal Reading

Literal reading or reading for literal comprehension which involves acquiring information that directly stated in a section, is important and also prerequisite for higher level understanding. At this level, the readers are able to comprehend what the author has said.

b. Interpretive Reading

Interpretive reading involving reading between the lines or making inferences, it is the process of deriving ideas that are implied rather than directly stated. At this level, the readers are able to understand what the author means.

c. Critical Reading

Critical reading is evaluating written material comparing the ideas discovered in the material, which is known standards and drawing conclusion about their accuracy, appropriateness. Critical

reading depends upon literal comprehension and grasping implied ideas is especially important.

d. Creative Reading

Creative reading involves going beyond the material presented the author. It requires readers to think as they read, just as critical reading does, and it also requires them to use their imagination.

In teaching reading, a teacher must teach the four levels of comprehension level. First, use a discussion or questioning technique that brings out just what the author said or in other words, in pre-reading; a teacher ask questions related to the topic before he starts his reading. It is probably more effective to develop desire to read the article and help them arrive at a literal understanding of the piece to be read. Then, after the students have completed reading the assigned section, teacher and students should discuss it.

Based on the theories above, it can be concluded that reading is a complex process to obtain ideas or meaning from a text which is symbolized in written or printed language. Comprehension in reading means that when someone reads he must understand what he reads. It can be said that in reading comprehension, there should be an interaction between the author and the reader. The author expresses his ideas in the form of written language and the reader has to understand the meaning of the text intended by the author.

To be able to achieve the purposes of reading comprehension, one should have some basic reading skills as follows; (1) literal skills (getting the central thought and main idea, recalling and recognizing of facts and information, finding answer to specific questions); (2) interpretive skills (drawing conclusions, generalizing, deriving meaning from context); (3) critical skill (determining the writer's purpose); (4) creative skills (applying information into daily life).

In relation to the study, those skills can be implemented into two levels of understanding as follows:

1. Reading the lines

Learners are able to understand the literal meaning i.e., responding to the precise meaning of familiar words in their context and inferring the meaning of unfamiliar words from contextual clues and also visualizing the scenes and events the words conjure up.

2. Reading between the lines

Learners are able to get the writer's intent and purpose, to interpret clues to character and plot, and to distinguish between fact and fiction.

## **C. Semantic Mapping**

### **1. Definition and Techniques**

Hanf (2001: 25) describes mapping as “a verbal picture of ideas which are organized and symbolized by the reader”. It is a tool for



increasing reading comprehension and retention. The map contains the main idea in the center of the paper with spokes radiating from the center. These spokes are labeled with words or phrases that represent the subordinate idea.

Sinatra, et al. (2000: 4) defines semantic mapping as a graphic arrangement showing how the major and minor ideas are related in a written work. The map consists of nodes which can be drawn as circles, rectangles, or squares containing key words or phrases, and connecting links in the form of lines or arrows drawn between the nodes.

Davidson (2002: 52) defines semantic mapping as a map or diagrams of relationship or ideas, a graphic representation of their interpretation of information in the text or their personal responses to the text based on their knowledge. The maps are verbal graphic in nature with words and phrases connected by lines.

Maggard, defines semantic mapping as a term which describes a variety of strategies designed to show how key words or concepts are related to one another through graphic representation. (<http://www.miyazaki-mic.jp/jmaggard/history.html>).

Huynh (2002: 47) states that semantic mapping falls under the broad category of graphic organizers and can be used in any subject area to help students understand relationships and to build concepts about broad topics. Semantic mapping allows students to see relationships that may be difficult to visualize.

Semantic maps reflect a way to (1) illustrate the attributes related to an idea or concept and (2) show the relationships among those elements, usually in a way that is not possible through verbal means. The process of making a semantic map is sometimes called webbing, probably because the finished product can resemble a spider web.

Further description of semantic mapping is provided by Johnson, Pittelman, and Heimlich (1996: 779) who describe the technique as “a categorical structuring of information in a graphic form. It is an individualized content approach in that students are required to relate new words to their own experiences and prior knowledge”.

From the above definitions, it can be concluded that semantic mapping is a graphic arrangement designed in the form of nodes (circles or squares) and connecting links to show how key concepts or main ideas and subordinate ideas are related to one another. It functions as an advanced organizer to activate student’s background knowledge.

There are a number of ways to create maps. Widomski (1999, cited in Maggard,) promotes a combination of semantic mapping and directed reading activities to enable readers to make use of schemata so that they might achieve a fuller understanding of a text. Widomski says that word webs always consist of the following parts: a core question (which could be the main idea of the text, for example), the web strands (the answer to the core question), the strand supports/supporting details (the facts and inferences in a text), and the strand ties (the graphic

representations of connections or lines drawn between major and minor ideas on a semantic map).

Maggard, (<http://miyazaki-mic.jp/maggard/history.html>) describes the procedures of semantic mapping used by Johnson & Pearson (1984) as follows: First, instructors choose a core concept of a text and display it visually so that all students can see it. The core concepts might be written on a blackboard, on an overhead transparency, on a large sheet of paper, or even displayed from a computer which has an overhead projection system.

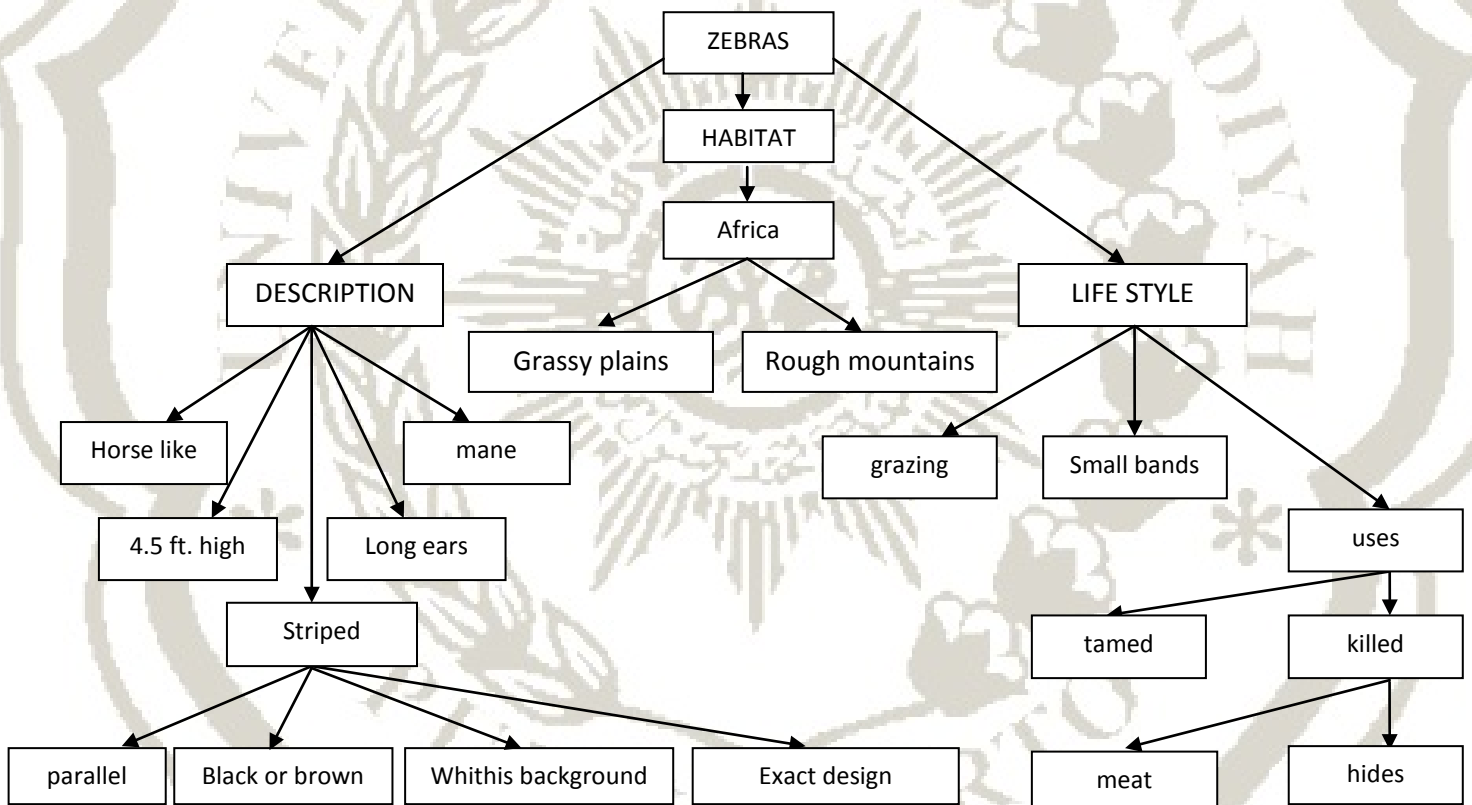
Next, students are encouraged to write down a series of words or phrases associated with the core concept. After brainstorming and generating lists of words or phrases relevant to the topic, students are asked to compare their lists with their peers. Then students are asked to illustrate relationships between each word on their list by linking the words or phrases together with lines.

During the process of constructing a semantic map, instructors can identify what is in and what is outside their learners' level of awareness in regards to core ideas and supporting details. This can provide instructors with important diagnostic information which can help them lead the class in an appropriate direction. It is only after students have completed the pre-reading maps that they read the text.

Recently, semantic mapping has been used in a variety of ways, including the following (Maggard in <http://www.miyazaki-mic.jp/maggard/history.html>)

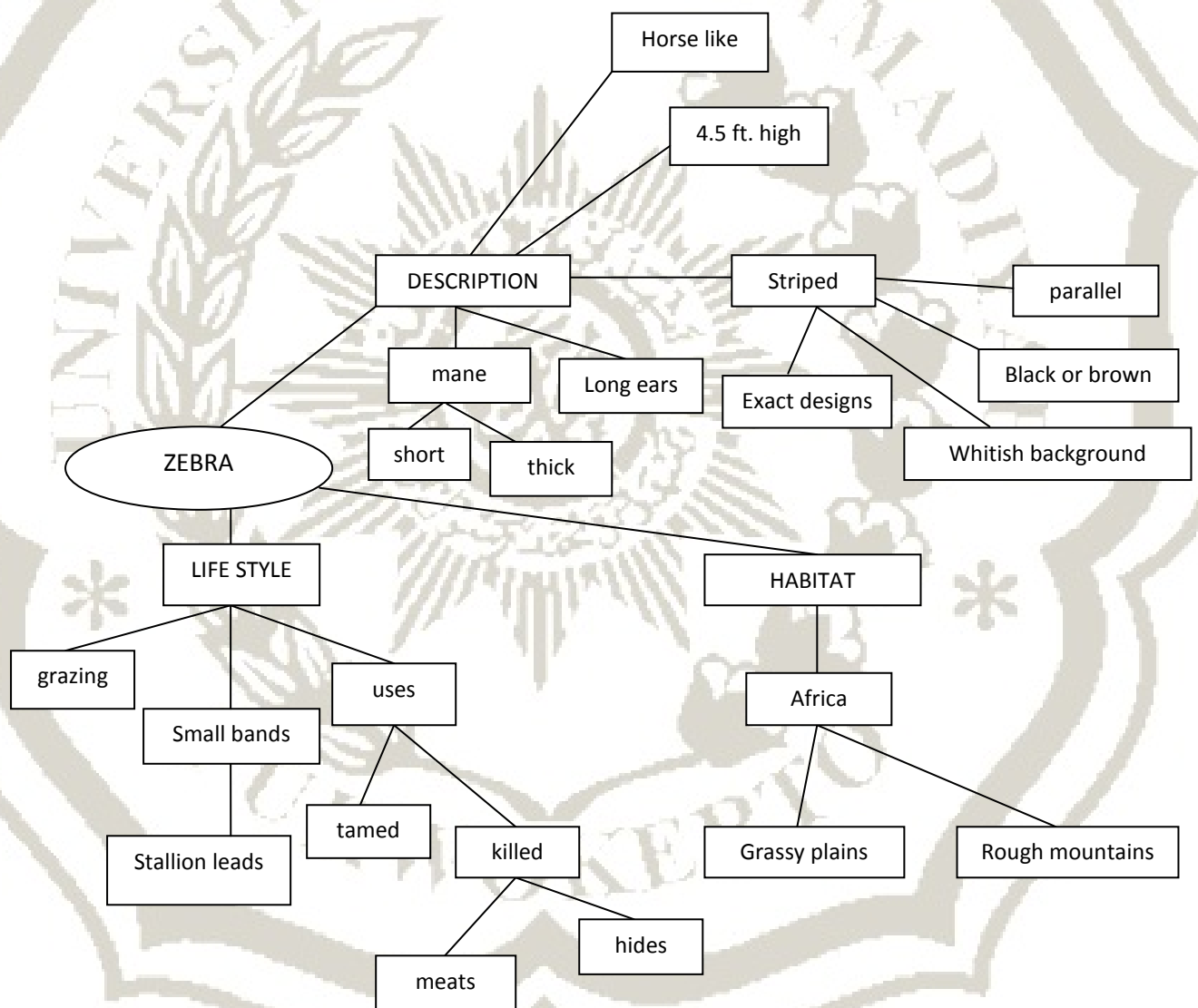
- a. As a technique for increasing vocabulary and improving reading comprehension
- b. As a means of improving the teaching of study skills
- c. As a framework for identifying the structural organization of texts
- d. As a means of teaching critical thinking skills
- e. As a link between reading and writing instruction

The following are examples of semantic mapping:



*Figure 1 an example of Sinatra's semantic mapping*

Sinatra described different formats of semantic map; (1) *the narrative sequential*, format arranges information in several parallel hierarchical strands, (2) *the thematic or descriptive map* displays elements and details about person, places, or things around a central theme, and (3) *the comparative and contrastive map*; relationship among concepts by displaying how class, examples and attributes are related.



*Figure 2 an example of Johnson et al. semantic mapping*

## 2. Application of Semantic Mapping in Reading Comprehension

Semantic mapping can be used before, during, or after reading activity. Semantic mapping activities that are carried out during the pre-reading phase of a lesson is to activate learners' schemata and to introduce them to main point of the text. As a pre-reading activity, teachers can use core questions to enhance the comprehension, main ideas, supporting details, pattern of textual organization, as well as character and plot development. In this phase, a semantic map is developed by placing the central idea in a circle in the center of a sheet of paper. Students then brainstorm words and phrases that relate to the topic. "Key words" are then written on spokes radiating from the central topic word (Johnson and Pittleman; 1996: 778-783).

During mapping activities learners are instructed to make associations with the main ideas in a text and their supporting details via word collocations, co-ordinates, super-ordinates and synonyms. Furthermore, they are asked to make associations between reading passages (e.g, short stories, newspapers, articles and novels) and what was inside of their level of awareness prior to reading the texts. In other words, learners are asked to create their own unique semantic networks of association with a given text (Maggard in <http://www.miyazaki-micjp/jmaggard/history.html>).

Heimlich and Pittleman (1998) also encourage post-reading mapping. During the post-reading phase of a lesson learners can add new ideas, concepts and even categories to their pre-reading maps. The final

phase of map construction comes when the learners are asked to recall the details of a text and to discuss and graph new information onto their pre-existing maps.

If semantic maps are generated during both phases, it is wise for students and teachers to use different colors on the second map. This makes it easier to see which words or phrases are new to the learners.

The results of semantic mapping as described above could certainly represent a schema about the subject, and it would more resemble students' schema for the subject. (Johnson and Pittleman; 1996: 778-783).

### **3. Classroom Application of Semantic Mapping**

Zaid (2005: 9) explains that there are three places in a lesson where semantic mapping may be used; as pre-reading strategy to activate students' prior knowledge or to help the teacher in assessing the students' readiness to do the assignment. The teacher asks the students to think of ideas related to the topic. This brainstorming phase allow students to make use of their prior knowledge or experience. Thus prior knowledge can be used as a stepping block to new knowledge. This phase gives the teacher insight into the level of readiness of each student to new topic. As a strategy to allow students' to record what they are learning during reading. As they are reading, the students write down the new information they gained from the text and decide what to add to or to eliminate from the pre-reading map. New information is thereby integrated with prior knowledge. As a post-reading strategy to allow

them to integrate or synthesize what they have studied. After reading, the students discuss the information acquired from the reading and how to modify the pre-reading map. The class as a whole decides the final shape of the map. It serves as a visual representation of the knowledge they gained from the reading. The steps in teaching and learning process using semantic mapping strategy are described as follows:

**a. Pre-Reading**

- 1) Write the topic of the text and draw a circle around it.
- 2) Ask students to think about the topic and share as many words as they can that relate to the topic.
- 3) Discuss and record on the map information and words that students suggest.
- 4) Write the information in cluster.
- 5) Discuss each of the cluster or categories of words and determine appropriate labels or headings.

**b. During Reading**

- 1) Have the students read the text.
- 2) Have the students use their notes during a discussion period in which they share the information about the topic gained through their independent reading.
- 3) Through discussion, elicit main ideas and supporting details. Records these on the map using the main idea headings and supporting details as the information listed under the categories. Use colored pens so that each major category and its detail are



written in different color. This helps students to associate the supporting details with the main idea. Add new information to the map.

**c. Post Reading**

- 1) After the students have finished reading the text, add new information about the topic to the map suggested.
- 2) After the students have had an opportunity to add all of the new information to the map, have them make their own copies of the semantic map from the chalkboard.

**4. The Advantages of Semantic Mapping**

Muchtar (2010) said that using semantic mapping, the teacher and students will get some advantages as follows:

- a. Semantic maps can help children to develop the strategies to learn and mentally organize the details.
- b. It encourages a brainstorming approach to any given organizational task, eliminating the hurdle of initially establishing an intrinsically appropriate or relevant conceptual framework to work within.
- c. Using the semantic mapping strategy in the pre-reading phase could stimulate the students' prior knowledge (schemata);
- d. Using the semantic mapping strategy in the whilst-reading phase helped the students to record the information obtained from the text; and

- e. Using the semantic mapping strategy in the post-reading phase provided the students with an overall description about the text.

## 5. The Disadvantages of Semantic Mapping

Some disadvantages of using semantic mapping are:

- a. It is boring to use semantic mapping all the time.
- b. Not all the students to generate words in categories.
- c. Students with limited prior knowledge may fail to implement it properly or to apply it into what they read.

To overcome the problems above, the teacher has to be more creative in using the media. The teacher has to help the students when they have difficulties in following the lesson using semantic mapping and motivates them when they have low achievement.

### D. Rationale

Reading is very essential in that it is the basic skill needed in learning any subjects. Reading is a thinking activity which involves comprehension strategies of the reader to gain knowledge. When a student can read texts effectively, he is a successful reader. By doing so, he can absorb and transfer the desired information into his brain and keep it inside. In other words, he can obtain any knowledge or information he reads when he is able to comprehend the reading text. Thus, a successful reader can successfully learn.

Reading comprehension can be defined as a thought process through which readers become aware of idea, understand it in terms of their

experiential background, and interpret it in relation to their own needs and purpose. Comprehension involves almost every type of understanding and thinking. Therefore, in reading lesson, teacher should use the techniques which explore and maintain students' thinking process.

As stated in the previous chapter, students have no interests and motivation in reading class because the teachers use one technique, method or media over and over again. The reading class becomes monotonous and the students get bored of this. So, teachers should be creative to solve these problems. In line with this, the writer proposed a solution, that is, by using semantic mapping technique in teaching reading to improve students' reading comprehension.

It is widely believed that learners learn better if they are taught to build up relations between the terms in a text. Semantic mapping strategy is based on building up new relationships between the components of the text. Semantic mapping technique is used to motivate and involve students in the thinking, reading, and writing aspects. It enhances vocabulary development by helping student link new information with previous experience.

Accordingly, the researcher believes that it is necessary to use semantic mapping strategy for teaching reading comprehension. Students need to read about what they are interested in and to interact and communicate effectively.

### **E. Basic Assumption**

Based on the related theories explained above, the writer proposes the following research hypothesis:

- The use of semantic mapping strategy can improve the reading comprehension of class VIII B students of MTS Asy-Syafi'iyah Karangasem Margasari Tegal in the academic year of 2014/2015.

