### PQRST STRATEGY BASED ON SEMANTIC MAPPING IN TEACHING READING FOR THE TENTH GRADE STUDENTS OF SMA N 3 BANDAR LAMPUNG

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### ABSTRACT PQRST STRATEGY BASED ON SEMANTIC MAPPING IN TEACHING READING FOR THE TENTH GRADE STUDENTS OF SMA N 3 BANDAR LAMPUNG

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The objectives of the research are; 1.) to find out the significant difference of students' reading comprehension achievement of the students taught through the PQRST strategy and PQRST strategy based on semantic mapping 2.) to investigate the students' perception towards the PQRST strategy based on semantic mapping used by the teacher in teaching reading. The population of this research was the first grade students of SMAN 3 Bandar Lampung in the academic year 2024/2025. A quantitative and qualitative study in the form of control group pretest-posttest design was conducted which involved two classes; each class consisted of 32 students of SMAN 3 Bandar Lampung. The data were analyzed through the independent sampled t-test. The results show that the students' reading comprehension achievement in the experimental class increases from 35.42 to 90.3 whereas in the control class their reading achievement increases from 35.43 to 79.64. Additionally, the mean of experimental class (90.3) is higher than the control class (79.64) and it is revealed from the result of sig. (2tailed) that there is a statistically significant difference in students' reading comprehension achievement between control and experimental groups since the value of sig. (2-tailed) is lower than 0.05 (0.000 < 0.05). Thus, the hypothesis (H<sub>1</sub>) is accepted and it indicates that there is a significant difference in students' reading comprehension achievement between those taught through PQRST strategy and those taught through PQRST strategy based on semantic mapping. Furthermore, in the second research question, the researcher used a questionnaire in the form of an open ended question which consists of four questions. The first question until the third question used to measures the usefulness of the modified strategy, and the fourth question used to know student's difficulties while teaching and learning activity. The researcher created a coding framework to categorize the responses into themes, then identified themes that emerged from the coding process and looked for recurring patterns or opinions. The result shows that the students perceive the PQRST strategy based on semantic mapping in a positive way since the strategy helps the students comprehend a reading passage and enhance their vocabulary knowledge. However, it is also found that the students experienced difficulty in the mapping stage of the PQRST strategy based on semantic mapping. The findings suggest that teachers should avoid giving topic without prescreening and checking the background knowledge of the students because the PORST strategy based on semantic mapping involves activating the students' prior knowledge on a given topic.

# *Keywords:* reading comprehension, PQRST strategy, PQRST based on semantic mapping, perceptions.

#### ABSTRAK

### STRATEGI PQRST BERBASIS PEMETAAN SEMANTIK DALAM PENGAJARAN MEMBACA UNTUK SISWA KELAS SEPULUH DI SMA N 3 BANDAR LAMPUNG

### Oleh

#### Dwi Fitri Arnaz

Tujuan penelitian ini adalah; 1.) untuk mengetahui perbedaan yang signifikan dari prestasi pemahaman bacaan siswa yang diajarkan melalui strategi PQRST dan strategi PQRST berdasarkan pemetaan semantik 2.) untuk menyelidiki persepsi siswa terhadap strategi PQRST berdasarkan pemetaan semantik yang digunakan oleh guru dalam mengajar membaca. Populasi penelitian ini adalah siswa kelas satu SMAN 3 Bandar Lampung tahun ajaran 2024/2025. Penelitian kuantitatif dan kualitatif dalam bentuk control group pretest-posttest design dilakukan dengan melibatkan dua kelas; masing-masing kelas terdiri dari 32 siswa SMAN 3 Bandar Lampung. Data dianalisis melalui uji-t sampel independen. Hasil penelitian menunjukkan bahwa prestasi pemahaman bacaan siswa di kelas eksperimen meningkat dari 35,42 menjadi 90,3 sedangkan di kelas kontrol prestasi bacaan mereka meningkat dari 35,43 menjadi 79,64. Selain itu, rata-rata kelas eksperimen (90,3) lebih tinggi daripada kelas kontrol (79,64) dan terungkap dari hasil sig. (2-tailed) bahwa ada perbedaan yang signifikan secara statistik dalam prestasi pemahaman membaca siswa antara kelompok kontrol dan eksperimen karena nilai sig. (2-tailed) lebih rendah dari 0,05 (0,000<0,05). Dengan demikian, hipotesis (H1) diterima dan menunjukkan bahwa terdapat perbedaan yang signifikan dalam pencapaian pemahaman bacaan siswa antara mereka yang diajarkan melalui strategi PQRST dan mereka yang diajarkan melalui strategi PQRST berdasarkan pemetaan semantik. Selanjutnya, pada pertanyaan penelitian kedua, peneliti menggunakan kuesioner dalam bentuk pertanyaan terbuka yang terdiri dari empat pertanyaan. Pertanyaan pertama hingga pertanyaan ketiga digunakan untuk mengukur kegunaan strategi yang dimodifikasi, dan pertanyaan keempat digunakan untuk mengetahui kesulitan siswa selama kegiatan belajar mengajar. Peneliti membuat kerangka kerja pengkodean untuk mengkategorikan respons ke dalam tema, kemudian mengidentifikasi tema yang muncul dari proses pengkodean dan mencari pola atau pendapat yang berulang. Hasil penelitian menunjukkan bahwa siswa mempersepsikan strategi PQRST berdasarkan pemetaan semantik secara positif karena strategi tersebut membantu siswa memahami bacaan dan meningkatkan pengetahuan kosakata mereka. Namun, ditemukan juga bahwa siswa mengalami kesulitan dalam tahap pemetaan strategi PQRST berdasarkan pemetaan semantik. Temuan penelitian menunjukkan bahwa guru harus menghindari pemberian topik tanpa melakukan penyaringan awal dan memeriksa latar belakang pengetahuan siswa karena strategi PQRST berdasarkan pemetaan semantik melibatkan pengaktifan pengetahuan awal siswa tentang topik yang diberikan.

Kata kunci: pemahaman bacaan, strategi PQRST, PQRST berdasarkan pemetaan semantik, persepsi.

# PQRST STRATEGY BASED ON SEMANTIC MAPPING IN TEACHING READING FOR THE TENTH GRADE STUDENTS OF SMA N 3 BANDAR LAMPUNG

A Thesis

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### **CURRICULUM VITAE**

Dwi Fitri Arnaz was born in Metro on November 16<sup>th</sup>, 1995 as the second daughter of a lovely family of Ir. Masjari Hs. and Dra. Naziroh Sidik and she has only one sister, Eka Pratiwi Arnaz, S.S.T.

TK Beringin Raya Bandar Lampung was her place for seeking pleasure in her early-stagelearning. She continued to SDN 1 Beringin Raya in 2002. She completed the study 6 years later in 2008. Then, she enrolled in SMP N 14 Bandarlampung and she finished her junior high school in 2011. She continued her study to SMA N 7 Bandarlampung and graduated in 2014. In the same year, she successfully passed SNMPTN program and was accepted as a student of Mathematics Education Study Program of the University of Lampung. In 2015, she moved to English Education Study Program and continued her study until she finished her education.

After graduating, in July 2019, she had the opportunity to study for a master degree in English Education Study Program at the University of Lampung.

### Motto

Life is like riding a bicycle. To keep your balance, you must keep moving.

# (Albert Einstein)

All our dreams can come true, if we have the courage to pursue them.

# (Walt Disney)

The journey of a thousand miles begins with a single step. (Lao Tzu)

### **DEDICATION**

This work is fully dedicated to:

My beloved parents; Ir. Masjari Hasan and Dra. Naziroh Sidik also Ir. A. Nasir A.T., M.M., and Dra. Budiwati Sani. My lovely husband; M. Tetuko Nadigo Putra A.T., M.H. My almamater, Lampung University.

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Finally, the writer believes that her writing is still far from perfection. There might be weaknesses in this research. Thus, comments, critics, and suggestions are always welcome for future improvement. Somehow, the writer hopes this research would give a positive contribution to the educational development, the readers and to the who want to conduct further research. Bandarlampung, 16 May 2025

The writer,

Dwi Fitri Arnaz

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#### I. INTRODUCTION

This chapter covers various aspects of the study. They were background of the problems, identification of problems, scope of the research, formulation of problems, objective of the research, significances of the research, and definition of terms.

### 1.1. Background of the Problems

In teaching English, there are several skill which is possessed by the students, such as listening, speaking, reading and writing. One of the skills in learning English is reading. Reading is an ability that the students need to master besides the other three skills. According to Patel et al (2008:113) reading is the most useful and important skill for students. Reading allows students to gain information through the text. It is in line with Day and Bamford (1998: 12) who state that reading is the construction of meaning from a printed or written message. The reader constructs meaning by linking information from a written message with prior knowledge in order to construct meaning for comprehension. According to Harmer (2007:99), reading is useful for language acquisition.

Reading is an activity which requires the students to comprehend the meaning of the text well. According to Grellet (2004:7) reading is a constant process of guessing, and what one brings to the next is often more important than what one finds in it. In reading activity, the students are expected to be able to comprehend the message from the whole text appropriately.

Reading and comprehension are closely connected. Reading comprehension is emphasized in each school as Mozayan (2012: 2423) stated that the more somebody reads, the more she or he picks up items of vocabulary and grammar from text, often without realizing it, and this widening language knowledge seems to increase their overall linguistic confidence, which then influences and improves their skill in other language areas. According to Lehr (2013), reading comprehension is the process of simultaneously extracting and constructing meaning through interaction and involvement with written language. Furthermore, Israel and Duffy in Patrick (2009) stated that reading comprehension is a set of knowledge that reflects the communicative interactions among the intentions of the speaker, content of the text/message abilities and purposes of the reader or listener, and the context/situation of the interaction. In short, reading comprehension is the process of acquiring the meaning of the content and all information about the topic in the text.

Based on the expected ability that the senior high school students must be owned in reading comprehension, the students are be able to catch meaning or message from the text, find the detail information, understand the vocabulary which is used in the text, inferred meaning from the each paragraphs and find the synonym and anthonym based on the vocabulary provided in the text. Contrast with the fact, some students may encounter some problems in reading comprehension, for example, find it difficult to achieve the objectives in reading, such as the students do not master vocabulary well, this is due to lack of reading experience, and exercise. Moreover, the students are failed to get the main point from the text because of their inability in reading comprehension. Realizing that understanding text is very important to be achieved

by the students in reading skill, these difficulties in understanding reading text should be known and solved both by the students and the teacher because the difficulties will give negative impact on the students' ability and motivation to achieve the reading target. Oberholzer (2005) states that "difficulty with reading can have an increasingly negative effect on the students' schoolwork and tertiary education, as reading requirements become greater and more extensive." The students should master those aspects so they can comprehend the text and answer the questions which are served well. Oakhill (1993) also shows that the specific difficulties of poor comprehend, the students do not explain why the less-skilled comprehends should have difficulty with text integration and inferences, there is no evidence that students have straight forward memory deficit. Some researchers have done the research related with the students' difficulties in reading text; Atikah (2009), Sasmita (2012), and Chung (2012). The findings of their researches convey that the students' difficulties in reading comprehension are vocabulary, grammar knowledge, and reading interest.

According to the English teacher of SMA N 3 Bandar Lampung, in the teaching and learning process, most of the teacher usually use DRA techniques (Direct Learning Activities) and translation by asking the students to read the entire reading text and interpret the sentences individually. Other problems are also found in reading such as, the students lack not only in vocabulary but also lack of drawing conclusions or inferences.

Besides, based on the researcher's experience during teaching in the class, the majority of the students do not understand the lesson which is delivered by the teacher. This happens because most of the students are required to read the whole text and immediately answer the provided questions. As a result, students do not understand the information in the reading text optimally. The conclusion of the problem above is the teacher does not implement an effective strategy in

teaching students in order to make the students be more active and creative and to motivate the students to improve their reading achievements in the classroom. It is proven by the direct observation while the teacher teaches the students in the classroom. According to Joseph (2014:1172) students have difficulty understanding and deriving the meaning of the text, it is necessary to give explicit instructions to understand it. In this case, difficulties in understanding the text can be caused because students do not know the meaning of the word and also cannot capture the information in the text reading. Therefore, students have difficulty understanding the meaning of words and cannot conclude the information.

According to Kennedy, (1981) states that comprehending English, and reading texts is not an easy thing, so many students find difficulties in comprehending English reading texts especially like looking find to detail information and main idea in the text. The difficulties in reading comprehension are influenced by several factors. Some of those factors are language knowledge, learner's background knowledge, motivation, the lack of reading strategies, and the reading process (Mardiani, 2021:987). To solve the problems in reading comprehension, the teacher must use an appropriate strategy or learning strategies to minimize the difficulties that may occur in the classroom during reading activities. The PQRST is believed to solve the problems in reading comprehension.

PQRST is one of strategies that can lead the students in reading comprehension. It is suggested by Thomas and Robinson (1982). As an instructional strategy, PQRST strategy helps students to cope their problem in reading comprehension by using five steps. They are previewing, questioning, reading, summarizing, and testing. Each step of PQRST strategy improves the teaching and learning process which is also aimed to improve the students' reading comprehension. Previewing is the first step of the strategy. This makes the student to activate their background knowledge. The second step is questioning. This step helps the students to focus and create the curiosity toward the text. This motivates the students to read. Reading is the third step. When the students read the text, they already have purpose to read based on the question and this makes them to stay focus and increase their concentration. Then, summarizing, this activity asks the students to recall all the specific information about the text. And the last is test. It helps the students to put the text into their long-term memory. Briefly, PQRST strategy is able to make students become active in reading process, make them focus on the text, attract their motivation, have a long-term memory in comprehending the text and increase their score on the test.

In addition, Vazques et al (2006) state that there are some purposes of PQRST: (1) stimulate the students to improve their previous knowledge, (2) motivate the students to actively reflect upon the material before being read in class, (3) prepare the students to participate in reading with an inquiring attitude towards the material, (4) motivate the students to deepen their understanding, (5) encourage the students to ask themselves to do the test to evaluate their comprehension degree of the material, (6) promote the development of students' autonomy in learning, and (7) improve students' final performance result. Furthermore, many studies conducted through PQRST strategy to see its effectiveness of this strategy, such as from Malia (2015) investigated whether PQRST strategy could improve students' reading comprehension in hortatory text. After conducting two cycles of action research, she found that the use of PQRST strategy improved the effectiveness of the teaching and learning process which then increases the students' reading comprehension of hortatory exposition text. Furthermore, research was conducted by Susanti (2013) at the second grade students of SMA PIRI 1 Yogyakarta to find out whether PQRST is effective to improve students' reading comprehension in the teaching and learning process. The result of class action research that she

conducted in two cycles, the researcher found that the use of PQRST technique with its accompanying actions was effective to improve the teaching and learning process of reading comprehension.

PQRST strategy helps enhance students' skills in understanding what they read and remembering information found in texts. However, there are some drawbacks to using the PQRST strategy. Research by Khoiriyah in 2013 shows that the PQRST method consists of five steps, each with varying degrees of difficulty, which can cause issues for students trying to complete each step. For instance, some students struggle with summarizing because they find it hard to identify the key points and they may not have a strong vocabulary. Only those with a higher level of knowledge can easily recall the main ideas from the reading material and navigate through this stage without trouble. To help students understand the text better, additional teaching methods are needed for reading comprehension, such as semantic mapping. This study combines the method of semantic mapping with the PQRST approach to enhance reading comprehension. Barcroft in 2014, as referenced in Nilforoushan in 2012, describe semantic mapping as the "deeper understanding of a certain issue in relation to the context." It is used as an implement for exploring how vocabulary items are conceptually linked to one another. Moreover, Yuruk (2012) points out that for semantic mapping become useful, teacher with students must collaborate to construct a visual map. This map provides the connections among vocabulary introduced by teacher, words from learners, and terms located in a reading passage. Semantic mapping supports to learners' prior knowledge of subject, effectively enhances important words, and enables students establishing new connections vocabulary into what that they currently understand. It also helps students understand unfamiliar words by relating them to words they already know in a connected framework.

Furthermore, Indiarti (2014) highlights that semantic mapping aids students in recalling words more easily because it organizes them into different categories. The structure of semantic mapping clarifies the topic, making it easier to remember. Additionally, it can reduce students' boredom when learning vocabulary. Engaging methods of semantic mapping can help alleviate this boredom, providing students with a new approach to learning vocabulary. Third, it encourages students to take part in class actively since their thoughts are shown. Although semantic mapping requires cooperation among teacher and students, it fosters active participation in class. Furthermore, the appealing character of semantic mapping in teaching vocabulary enables learners to learn new words. When vocabulary is taught using semantic mapping, students feel motivated because the approach is more engaging than the typical vocabulary list method.

As stated by Shidu in 2003, how students view things is about their opinions on events that take place during class learning, and these views can lead to recommendations or discussions aimed at helping their teachers or classmates enhance their learning experiences. A perception reflects a person's thoughts regarding what they study, helping evaluate their feelings about utilizing a method or concept, and whether they are in favor of or against what they are learning, according to Hong in 2003. This indicates that students form their own views about what they gain from the educational process and their responses to it.

As stated by (Adediwura, 2007), how students view their teachers' understanding of the subject, work ethic, and teaching abilities is completely influenced by the reality which they were taught by the teachers being assessed and know learners well. Because of this, their thoughts are filled with past experiences and responses that surveys for data gathering will evaluate. Based on the definition provided, students' perception refers to how students think about and react to what they have learned or experienced.

Additionally, how students see things can greatly help teachers get better in the future, as it allows for the assessment of how teachers are teaching in the classroom by looking at students' views (Robert, 1997). Learners' views also serve as a way to assess how successful the teaching and learning activities are in the class. It has been shown and when learners have a positive perception, they tend to perform better to reach the goals set by teachers in the classroom.

However, the researcher wants to understand how students view the utilizes of the modified PQRST strategy for reading comprehension, particularly with narrative texts. Consequently, in this study, the researcher focus to implement modified PQRST strategy to observe its impact on tenth graders' reading comprehension and their opinions about this method.

In this study, the author intends to explore if the modified PQRST method significantly helps improve students' reading comprehension in narrative texts, taking into account their various learning styles, and also to gather the students' thoughts on the method.

The following research questions were prepared based on the problem indicated earlier:

- Is there any significant difference between the reading comprehension achievements of students taught through original PQRST strategy and PQRST strategy based on semantic mapping?
- 2. What is the students' perception towards the PQRST strategy based on semantic mapping used by the teacher in teaching reading?

#### **1.2. Identification of Problem**

Concerning the issue at hand, the subsequent problems can be recognized as follows:

- The learners discovered that understanding what they read is challenging due to their limited vocabulary knowledge. This also impacted their desire to engage with the text since they experienced confusion regarding the meanings and the verb tenses present in the writing.
- 2. The PQRST strategy helps students engage more in reading, enables them to concentrate on the material, boosts their interest, aids in retaining information long-term, and improves their test scores.
- 3. Semantic mapping connects to what students already know about a subject, offers a helpful method to reinforce essential words, and allows students to add new words to their current knowledge.
- 4. Students' perception is their way of thinking about how they react to their experiences and what they have studied.

### 1.3. Scope of the Research

This study focus on finding the significant difference of reading achievements taught through modified PQRST strategy and students' perception towards the modified PQRST strategy used by the teacher in teaching reading. There are two learning strategies which are implied in the two different classes; experimental class and control class. The first strategy which is implied in the control class is the original PQRST strategy, which has five steps that is preview, question, read, summarize and test. Whereas, the second strategy which is implied in the experimental class is PQRST strategy based on semantic mapping. This modified strategy has some additional steps from the original PQRST strategy, which is making the word map, in order to help the students to enrich their vocabulary which is unfamiliar for the students. The researcher add semantic mapping into PQRST strategy, in order to help the students to overcome their difficulties which is found in the original PQRST strategy, that is lack of vocabulary. Although, there are some kinds of semantic mapping such as, mind mapping, concept maps, thinking map and bubble map. The researcher focus to bubble map in order to help the students to improve their vocabulary through this map, by putting the main word at the center of the bubble and try to develop the main word by finding its synonym and antonym and also the relation of each words and classify them through its word classes. The researcher focus to bubble map rather than other kinds of semantic mapping because it helps to visualize word relationships and enable deeper comprehension. Bubble maps, which visually connect words and ideas, help students recall and grasp unfamiliar vocabulary in an easier and more meaningful way than traditional techniques. In this research, the researcher also prefers to use reading comprehension rather than other kinds of reading such as scanning and skimming, because reading comprehension needs a deeper understanding from the reader's and also required a complex process, that is the readers need to connect the their background knowledge to the text, to get the writer's intended meaning. This research also focuses on finding aspect of reading (main idea, detail information, reference, vocabulary, inference) improved the most after being taught through original PQRST strategy and PQRST strategy based on semantic mapping. This research are quantitative and qualitative design conducted by using reading comprehension test and questionnaire. The quantitative data is analyzed by using t-test and for the qualitative data is collected by using open-ended questions in questionnaire.

### **1.4. Formulation of the Problem**

According to context of the research, there were several issues mentioned earlier, the author presents the following:

- Is there any significant difference between the reading comprehension achievements of students who are taught using the original PQRST strategy and those taught using the PQRST strategy based on semantic mapping.
- What is the students' perception towards the PQRST strategy based on semantic mapping in teaching reading.

### 1.5. Objectives of the Research

According to issue statements before, objectives of the study consisted of:

- To find out the significant difference between reading comprehension achievements of students taught through original PQRST strategy and PQRST strategy based on semantic mapping.
- To discover the students' perception towards PQRST strategy based on semantic mapping used by the teacher in teaching reading.

### 1.6. Significances of the Research

Results of this research were intended to be useful both theoretically and practically.

- In theory, the aim is to provide valuable information to English language teachers in high schools and those who create curricula regarding the effectiveness of the PQRST strategy that uses semantic mapping during learning experiences to enhance students' ability to understand what they read.
- 2. In practical terms, the outcomes of this study are predicted to serve as a guide, resource, or factor for educators that PQRST strategy can be adapted for reading instruction.

### 1.7. Definition of Terms

Several definitions used in this study require clear definitions to ensure reader comprehension, including:

### 1. Reading

Reading is a natural process in which students connect the details of a text with their prior knowledge in order to understand it better. It indicates that the process of reading includes more than just scanning at the words; it also requires the reader to combine their experiences in order to comprehend the writer's intended meaning. Ultimately, the goal of reading is to gain understanding (Nunan, 2003:68).

In the other words, reading is the way for the students to get comprehension from printed message by connecting their prior knowledge to the information in the text, in order to grasp the author's intended meaning.

### 2. Reading Comprehension

Understanding what you read is a complicated process made up of several parts. It includes various interactions between the readers and their own background (such as what they already know and the techniques they apply) along with factors connected to the content of the text (like how much they are interested in the text and how well they grasp different kinds of texts) (Klingner et al., 2007: 8).

In short, reading comprehension is the complex process influenced by some factors in which involve the reader's prior knowledge and the content of the text.

### 3. PQRST strategy

According to Thomas and Robinson (1982), the PQRST (Preview, Question, Read, Summarize, and Test) strategy improves student's reading comprehension.

Specifically, PQRST strategy consists of five instructional steps, i.e., preview, question, read, summarize and test. It is believed to increase the student's reading comprehension achievement in the class.

#### 4. Semantic mapping

Semantic mapping provides a visual organiser which can assists learners create a visual display of how words, meanings, images, and ideas are connected. It is also known as a sort of graphic organizer. Many kinds of graphic organizers can be made using diagrams, images, and propositional content so that students can better grasp the information taught by their teacher (Hedgcock, 2009: 310).

Particularly, semantic mapping is a visual or graphic organizer that can help the students to connected the idea and words from the text, so that the students can get better understanding during the teaching and learning activity.

#### 5. Narrative text

Narrative text is a type of text that tells a tale and, while doing so, offers a perspective of reality that amuses or educates the audience (Anderson, 2003:8).

Shortly, narrative is a text that tells past events to entertain and educate readers. It focuses on troublesome experiences and their resolutions.

### 6. Perception

According to Qiong (2017:18), perception is a way of processing information to gain awareness or comprehension of what we sense.

In brief, perception is not merely simply collecting sensory information; it is an active process of gathering and analyzing that data to build an accurate and meaningful representation of reality.

The first chapter included research background, scope of the research, identification of problem, limitations, objective of the study, significance of the study, and definitions of terms. The powerful concept and previous studies that provided this study were presented in following section.

### **II. LITERATURE REVIEW**

This chapter discusses the theories which were used in this research. Those theories were reading, aspects of reading, teaching reading, PQRST strategy, PQRST strategy in teaching reading comprehension, steps of PQRST strategy, semantic mapping, the procedure of PQRST strategy based on semantic mapping, students' perception, previous research, theoretical assumption, and hypothesis.

### 2.1. Reading

Reading is a crucial action that students must engage in, in order to comprehend a text. The students can learn a lot by reading a text. Some experts describe reading in a different way. For example, according to Grellet (2004:7) reading is a constant process of guessing, and what one brings to the next is often more important than one finds in it. It implies that when teaching the students to read, teachers should emphasize the use of prior knowledge to help them comprehend unfamiliar material, including concepts and simple words. Cline et.al (2006:2) stated that reading is decoding and understanding written texts. Decoding entails converting the writing system into the spoken words that it represents. Understanding is influenced by the reader's knowledge and strategy, the text's nature, the context, and the reading goals.

Moreover, according to Afflerbach (2007:12) who says that reading is a dynamic and complex process that involves skills, strategies, and prior knowledge. Reading comprehension is tested

using three types of memory scores: recall scores for common concepts, major ideas, and nonprimary ideas of a text. Reading comprehension is typically defined as the level of understanding readers have when reading a text. It shows how well readers understand the implicit and explicit meaning of the text's contents. The more easily the students recognize words, the more focus they can give to comprehension. The more time students spend in reading, the better their reading rate is (O'Connor et al., 2007:33).

Tankersly (2003:2) states that reading comprehension depends on three factors: linguistics structures of the text, metacognitive control, and background knowledge. For the first factor, the reader should be familiar with the text's linguistic structures. The second factor is that the reader has metacognitive influence over the reading passage's content. This means that while reading the material, the reader can evaluate and reflect on his or her own level of comprehension. The third and most crucial condition determining understanding is that the reader has sufficient background knowledge of the material and vocabulary mastery.

According to Willis (2008), the process of reading for understanding appears to involve several essential and interrelated phases: (a) information intake which means focusing and attending to the pertinent environmental stimuli, (b) fluency and vocabulary refer to associate the words on the page with stored knowledge to bring meaning to the text, and (c) patterning and networking referring to recognizing familiar patterns and encoding new information by linking it with prior knowledge.

In relation to reading comprehension, Snow (2002) defines reading comprehension as the process of simultaneously extracting and constructing meaning through interaction and involvement with written language. It consists of three components: the text, the reader, and

the reading task or objective. The reader contributes their cognitive capability (memory, focus, visualization), motivation, experiences, and knowledge to the process of reading. While reading, the reader creates numerous representations of the text that are necessary for comprehension. These representations comprise the surface code (the actual phrasing of the text), the text base (idea units expressing the content of the text), and the embedded mental models (the way information is processed for meaning). The reading activity consists of one or more purposes or tasks, some processes to process the text, and the outputs of the activity, all of which take place within a specific context.

According to the definition above, reading is the ability to comprehend the meaning of a written text in order to obtain the primary concept of the text using a specific strategy. Furthermore, reading is associated with how to develop a framework of thinking based on the readers' experience, the background of information (schemata), and the readers' ability to imply the writers' intention. Furthermore, reading comprehension is the process of comprehending the meaning of written or printed text based on the reader's prior experiences, knowledge, vocabulary, and language structure. In other words, reading comprehension is the activity in which the reader attempts to understand or discover the meaning of a book based on implicit or explicit information. Reading and comprehension is one activity for determining the meaning of written and spoken text. There is no reading without comprehension, and background information is used to build comprehension. Reading comprehension can be defined as the readers' ability to derive meaning from the text's substance.

### 2.2. Aspects of Reading

Reading is useful for language acquisition. Provided that students more or less understand what they read, the more they read, the better they get at it (Harmer,2007:99). According to Harmer (2007:99), in reading, there are five aspects of reading that should be mastered by the reader to

comprehend the text deeply, they are main idea, specific information, reference, inference and vocabulary.

The first subskill of reading is main idea. The main idea is the most essential part of the text. Generally, the essential point is not written in the text, but it becomes clear after reading it. According to McWhorter (1986:36), the sentence which states the main idea is called the topic sentence. She notes that in some paragraphs, the topic sentence communicates what the rest of the paragraph is about, but the main idea is not directly mentioned in any of the phrases. Instead, the reader is left to infer or reason out. In other words, it becomes the essential idea of a paragraph or larger part of a text, informing the reader about what the material is about.

Hereafter is specific information. Specific information is usually called as supporting details. Normally, specific information is used to develop the topic sentence or main idea in the text by giving definitions, examples, facts, incidents, comparison, analogy, cause and effect, statistics and quotation (Mc.Whorter, 1986:36). In addition, Dararat (2012:11) in order to find details that support the main idea, the readers should be able to identify which are more important than the others.

Afterward, the third sub skill is reference. References are words or phrases that appear before or after a reference in the text. According to Latulippe (1986:20), references are words or phrase which are used before or after the reference in the reading material. They are employed to avoid excessive repetition of words or phrases. When such words are employed, they are indications to the reader that the meaning can be found elsewhere in the text. The example questions of finding reference can be drawn as follows: ".......Skin is the outer layer of the body. In human beings, it is the most important and largest organ of the system that covers our body." (paragraph 1). The word "it" in this sentence refers to?

In addition, an inference is an idea or conclusion derived from data and logic. According to Kathleen (1983:31), an inference is an educated guess or prediction about something. Inferring something is a procedure that relies on existing knowledge. A logical link that connects what readers already know and don't know is required. In general, this type of question can be illustrated as follows: 1) What is the topic of the first paragraph? 2) What is the most suitable title for the text?

Finally, vocabulary is typically described as all of the words that a person knows and uses and it is all the words in a particular language (Hornby, 2006 : 1645). Furthermore, according to Hatch and Brown (1995:1) vocabulary is a list or set of words for a particular language or a list or set of word that individual speakers of language might use. From the definiton above, we can see that vocabulary is all the words in a language that are familiar and used by a person to communicate with each other.

In short, there are five aspects of reading which need mastered by the students, they are main idea, specific information, reference, inference and vocabulary. Main idea is the main point which tells the reader about the text is being discussed. Specific information is the detail information which used to develop the main idea. References are words or phrases which come before or after a reference in a text. Inference is a concept or conclusion drawn from data and logic. Finally, vocabulary is all of the words in a language that a person understands and uses to communicate with others.

## 2.3. Teaching Reading

Teaching Reading is a complex process. Teachers acquire an extensive understanding base and employ plenty teaching strategies. According to Harmer (2007:23), teaching is a difficult thing, but it is necessary and useful to see the students' learning progress. It is true that certain students may experience difficulty and tension while learning, but this is only if they receive the best teaching. It will be changed to make it more enjoyable. Based on his explanation, he believes that teaching activities and organizing the environment in favorable conditions can develop and provide some opportunities for students to achieve their objectives during the teachinglearning process.

According to Alyousef (2005:143) in teaching reading, contemporary reading tasks, unlike the traditional materials, involve three-phase procedures: pre-while-, and last-reading stages. The pre-reading step assists in activating prior knowledge. For example, the teacher may motivate students to predict what will happen next in the text. The purpose of the while-reading stage (or interactive process) is to help students build their ability to deal with material by expanding their linguistic and schematic knowledge. The teacher, for example, can encourage students to generate suitable questions for the passage, identify what makes a text challenging, and seek knowledge of tough new language. Last-reading activities include exercises, close exercises, cut-up sentences, comprehension questions, or the teacher can ask students to identify and integrate the most significant information by summarizing.

Teachers have a responsibility in teaching reading to assist students in achieving reading goals such as motivating them to obtain appropriate reading texts, encouraging them to read critically, tightening reading assignments that are useful for students, and creating a conducive environment for practicing reading. In addition, the teacher needed to be aware of the elements and aspects of reading that ought to be included in reading teaching in order to help students reach their maximum ability.

# 2.4. PQRST strategy

The PQRST strategy is often utilized language teaching strategy. It has similarities to teaching cooperative learning. Regarding crucial role of reading abilities, the PQRST strategy might be employed to teach reading strategies. Thomas and Robinson (1982), PQRST is certainly considered one among techniques which could lead the student's studying comprehension. PQRST strategy guides students through five steps to improve reading comprehension. They are previewed, questioned, read, summarized, and tested. Every component of the PQRST strategy enhances the teaching and learning process, with ultimate goal of boosting students' reading comprehension. This strategy begins with previewing. This asks learners to apply their existing knowledge. The second stage involves questioning. This phase enables students concentrate while establishing a curiosity in the text. This encourages learners to read. Reading is the next stage. While learners reading text, learners actually possess an explanation to read according to question, allowing them focus and concentrate. In the summarizing step, learners are expected to recall are all of the text's specific information. In the end, there is a test. It is beneficial for learners to remain text in their long-term memory.

## 2.5. PQRST strategy in teaching reading comprehension

In relation to the teaching reading comprehension, this strategy is useful to use. The use of PQRST strategy may support the process of teaching reading comprehension. According to Sulistyo (2011:94-95), conceptually the PQRST strategy is one of the teaching strategies which

cover of five stages/schemes: Preview, Question, Read, Summarize, and Test. It provides stepby-step guidance to students before, during, and after their reading process which is essential for their comprehension. Each stage gives benefits to students in facilitating their learning. The stages in the PQRST strategy underline the constructivist nature of learning noting that reading is an active, often necessarily selective, effortful and iterative process (Johnston & Anderson, 2005:13).

Based on the concept, PQRST strategy is proposed as the treatment to improve the students' reading comprehension since it has a well-organized stage. The strategy can create an enjoyable learning condition by helping the students to activate their background knowledge before reading and evaluating their comprehension after reading. By creating enjoyable learning condition, it is expected that the strategy can solve the problems in teaching reading and make the teaching learning process run effectively.

A study by Miqawati and Sulistyo (2014) revealed that the PQRST strategy has an impact on students' reading comprehension although no difference in the reading comprehension of students with different learning styles taught under the PQRST strategy was evidenced. In addirion, no interaction between teaching strategies and students' learning styles was observed.

Moreover, Haeriyanto (2012) reported that PQRST strategy can improve or progress the students' reading comprehension skills of the eleventh graders of MA Nurul Jadid. The students are more active in the class in terms of sharing ideas, asking and answering questions. In other words, this strategy can increase the student's involvement during the teaching learning process.

Another previous study on the implementation of PQRST strategy was conducted by Susanti (2013). She concluded that PQRST strategy is effective to improve students' reading comprehension of grade IX of SMA Piri 1 Yogyakarta. The discussion of the new vocabulary in Preview and Question steps of PQRST was done through some ways namely by guessing topics or title, learning from previous experiences, learning from a picture related to the text, and implementing 5W1H question form.

In line with the other researchers, Septiari (2013) who has conducted classroom action research to improve reading comprehension through PQRST strategy of eighth students of SMPN 2 Banjarangkan has proved that the attitude and the learning motivation of subject under the study have changed positively. It is shown by the increasing score, that the students have from reading comprehension test, which is very low before the strategy is implemented and after the strategy is conducted, the score become higher than before. The student's participation in the classroom is developed well where they become more confidence to share opinion and more active to answer questions. It indicates that PQRST is effective in improving students' ability in reading comprehension.

Vazquez et al (2006), who conducted research of the application of the "PQRST" method in the teaching of English of difficult or complex technological subject in Universidad Europea de Madrid, Spain. They found that the teaching of a course through the PQRST method, both in English and in Spanish, not only leads to fully satisfactory results but also that this method is accepted by the majority of the students involved. While Miqawati and Sulistyo (2014) in their research using PQRST strategy investigating reading comprehension, and learning styles, made a conclusion that the PQRST strategy was effective in the teaching of reading comprehension

in that students who were taught by using PQRST strategy achieved better scores in reading comprehension than those taught using translation and reading aloud.

Other research conducted by Febtiningsih, Zaim and Jufrizal (2013) showed that the students with low interest taught by PQRST techniques had significantly higher reading comprehension on procedure text than those who were taught by QAR (Question Answer) technique at grade VII of SMPN 2 Padang. It indicates that PQRST technique affects the students with low interest on reading comprehension on procedure texts, that is, producing higher reading comprehension than QAR techniques. This is due to that PQRST technique gives more contribution than QAR techniques in comprehending text.

In teaching reading comprehension, PQRST strategy can lead the students to find the ideas and help them in the vocabularies problem. In this case, the use of PQRST strategy is very helpful for the students as many of students are weak in finding details information. In all cases, the teaching reading is encouraged as a thinking process, with an emphasis on understanding (Westwood, 2001:51).

# 2.6. Steps of PQRST strategy

There are several processes in teaching reading through the PQRST strategy which consists of six stages (Westwood, 2001). It can be done well if the teacher gives the right way in the teaching process as follows:

Step 1

In the first step, the teacher introduces the PQRST strategy and its effectiveness in the teachinglearning process. The teacher can also explain the basic explanation for using this strategy. As a result, students are motivated to apply this strategy. Step 2

The teacher then assigns reading materials to the children in the following stage. Preview stage is the first stage in the PQRST strategy. Students can quickly skim the entire chapter to obtain a sense of the important concepts. This is accomplished by first reading the chapter outline, followed by reading the chapter, paying special attention to the headings and sub-sections, the type of text, the orientation of the text, the verbs used in the text, and glancing at pictures, numbers, and slanted words in the text, as well as the organizational structure of the text. If there is a summary, take the time to think about each point in the summary; questions will arise that must be addressed later when students read the material in the full context. This preview stage will provide students with an overview of the chapter's topics and how they are organized. The goal is to get topic ideas and main parts of text.

#### Step 3

Furthermore, there is the questionning stage. Students try to ask specific questions regarding reading assignments in this step. Students might begin this level by converting the titles of the chapters and subtitles into questions. The teacher allows students in producing readers' focus and finding questions to support important topics in each section. They can employ WH-questions such as who, what, why, which, when, where, and how. This question could lead them to seek additional information from the reading material.

# Step 4

Following that, students thoroughly reading stage the text. They try to answer the questions at the question stage while reading. They can also highlight difficult terms and focus on the essential topics. If students have trouble understanding the text, they can read it again.

# Step 5

After the students have finished reading in the previous step, they attempt to remember the main idea and read the information. Summarizing stage is an effective method for improving

learners recall of material. Students aim to read material and must know how much information they can recall from the text and state it in their own terms. Summarizing will expose gaps in students' knowledge and assist them in organizing material in their heads. Students could make notes from the passage they read.

#### Step 6

Finally, students must know and remember what they have read. This can be started by recalling as much as they can without looking at their books or recitation notes. It encourages students to consider the importance of what they are learning and how everything fits together. Readers test themselves to see how well they grasp the text they read. This can be accomplished by reviewing all of the content and storing it in their long-term memory.

# 2.7. Semantic Mapping

Semantic mapping is a term, which describes a variety of strategies designed to show how key words or concepts are related to one another through graphic representations. Semantic mapping assist the students to improve their vocabulary development. According to Zaid (1995) semantic mapping is an effective technique for teaching vocabulary and textual patterns of organization, and it is also effective for improving note taking and creative thinking skills. General definitions can be given, semantic mapping is a visual representation of knowledge, as picture of conceptual relationship. Antonacci (1991) "stated a graphic arrangement showing the major ideas and relationship in the text or among word meanings". However, the researchers warn to against the danger of presenting closely related new words. Tinkham (1993), suggests that learners should start by learning semantically unrelated words and also avoid learning word with similar forms. For example, because affect and effect have similar s forms, simultaneously studying them is likely to cause confusion.

Semantic mapping can be defined as a visual representation of knowledge, as picture of conceptual relationship. Semantic mapping also as a vocabulary presentation technique in learners' vocabulary retention in the framework of a study. Sokmen (1997) "state semantic mapping generally refers to brainstorming association which a word has and then diagramming the result". As Heimlich (1986), describe it as categorical structuring of information in graphic form. By using Benedictus (2022) said that schemata was already existing knowledge structures think of them as comprising a sort of organizational chart or map, to which new details are constantly being added. Schema theory was identifying the importance connecting new experience to prior knowledge and organizing that new information students learn when they connect what they already know with what they discover through experiences. Generally, semantic mapping has been used in the following ways: 1) for general vocabulary development, 2) for pre and post reading, 3) for the teaching study skill, 4) for a link between reading and writing instruction, and 5) for an assessment technique.

We can conclude that semantic mapping is a visual strategy for vocabulary expansion and extension of knowledge by displaying words related to one another in categories. Semantic mapping also builds on student's prior knowledge while it draws a component and shows the relationship among the components.

# 2.8. The procedure of PQRST strategy based on semantic mapping

Table 2.1 Differences between PQRST strategy and PQRST strategy Based on Semantic Mapping

| PQRST strategy                        | PQRST strategy Based on Semantic Mapping    |
|---------------------------------------|---|
| a) In the preview stage; the students | a) In the preview stage; the students are   |
| are given picture or title of the     | given picture or title of the text by the   |
| text by the teacher. The students     | teacher. The students try to guess the kind |

try to guess the kind of the text which is provided by the teacher.

- b) In the questioning stage; the teacher encourages students to create questions based on WH-questions related to the text.
- c) In the reading stage; the students read the whole text to find the answer of their own questions.
- d) In the summarize stage; the students create their own conclusion by noting the main points of the text.
- e) In the test stage; the teacher gives the test to the students to find out the student's comprehension about the text.

of the text which is provided by the teacher.

- b) In the questioning stage; the teacher encourages students to create questions based on WH-questions related to the text.
- c) In the reading stage; the students read the whole text to find the answer of their own questions.
- d) For the semantic mapping steps; the teacher draws a bubble map at the board, and write down the word "Malin Kundang" at the center of map, also the teacher shares the first student's worksheet in the form of mapping to the class. Then, the teacher allows the students to write down the vocabulary which are they are familiar with the topic.
- e) For the semantic mapping steps; the teacher asks the students to mention many words or vocabulary as they know in their background knowledge (schemata) that has been written on the first worksheet. For example, the students can mention several words related to Malin Kundang, such as stone, ship, curse, and many more.
- f) For the semantic mapping steps; furthermore, the teacher shares the second worksheet to the students to write down the new vocabulary which are not familiar with, that is still related to the topic which provided by the teacher in the white board.
- g) For the semantic mapping steps; after that, the teachers ask to combine the first worksheet and second worksheet. After that, the students are asked to analyze the relation between the words that they have known before with the new words which have been written in the student's worksheet and grouping

| them into the same word classes or<br>categories. Not only just write their<br>synonym and antonym.                            |
|--|
| h) In the summarize stage; the students create their own conclusion by noting the main points of the text.                     |
| i) In the test stage; the teacher gives the test<br>to the students to find out the student's<br>comprehension about the text. |

The researcher put several steps of semantic mapping into the step of PQRST strategy. By combining Semantic mapping with PQRST strategy, teacher will provide the additional benefit of helping students visualize how word meanings can be categorized. This strategy also helpful in getting an overview of a topic and it is effective for improving note taking and creative thinking skill. Eventually, the advantages of using semantic mapping based on PQRST strategy can motivate and involve students in the thinking, reading, and writing aspects. It enhances vocabulary development by helping student link new information with previous experience.

# 2.9. Student's Perception

In general, perception is the interpretation of particular conditions and setting. According to the Longman Dictionary of Contemporary English, perception can be defined as an individual's cognitive framework and conceptualization of a particular subject, the process of observing and perceiving stimuli through the senses of sight, hearing, etc., and the innate capacity to quickly comprehend and identify information (Ou Qiong, 2017). Then, Perception is a numerous sequence of cognitive processes by which individuals obtain and interpret sensory information (Catling & Ling, 2011). This indicates that perception generates meaning based on sensory experience.

Furthermore, perception is influenced by attention, beliefs, and expectations (Feldman, 2011). In other words, by understanding students' perceptions, it indirectly knows about students' views. Moreover, the belief systems of learners involve a wide variety of topics and possess the capacity to impact learners' motivation to acquire knowledge, their anticipations regarding language acquisition, their perspectives on the ease or difficulty of language acquisition, and the specific learning strategies they prefer (Richards & Lockhart, 1996). According to the study, students' perceptions influenced their attitudes and impressions during the teaching-learning process, which influenced their learning ability.

When identifying the students' perceptions, there are two types of perceptions: positive and negative perceptions. Self-perception must be manifested in all personal acts, thoughts, and actions toward oneself, one's abilities, and one's body. It is also influenced by how others react to them. This perception, in turn, shapes each person's behavior as they go through life.

- Positive perception is an invaluable asset that equips one with the courage and self-assurance to face challenges, look beyond oneself, and navigate the world. It promotes relationship building and giving to others.
- 2. The negative perception tends to concentrate on their wants and attempts to establish and validate their value.

In this research, the researcher uses a Likert scale questionnaire adapted from Fennel (1992) which will be used to collect the data on students' perceptions of the implementation of the strategy.

#### 2.10 Previous Research

There has been some previous research done using PQRST strategy. According to Sulistyo (2011: 94), PQRST (Preview, Question, Read, Summarize, Test) strategy is useful as an instructional reading strategy by paying more attention to key information in reading activities. This strategy is a step-by-step plan that has been proven to raise test scores for students who follow the steps involved. This strategy helps the students focus on studying and prioritizing the information in a way that relates directly to how they will be asked to use the information in an exam. The strategy can be modified to suit any particular form of learning and it can also allow more accurate timing of work.

Meanwhile, some researcher also implemented PQRST strategy in the classroom. Haeriyanto (2012) reported that PQRST strategy can improve or progress the students' reading comprehension skills of the eleventh graders of MA Nurul Jadid. The students are more active in the class in terms of sharing ideas, asking and answering questions. In other words, this strategy can increase student involvement during the teaching learning process.

In line with the other researchers, Septiari (2013) who has conducted classroom action research to improve reading comprehension through PQRST strategy of eighth students of SMPN 2 Banjarangkan has proved that the attitude and the learning motivation of subject under the study have changed positively. It is shown by the increasing score, that the students have from reading comprehension test, which is very low before the strategy is implemented and after the strategy is conducted, the score become higher than before. The student's participation in the classroom is developed well where they become more confidence to share opinion and more active to answer questions. It indicates that PQRST is effective in improving students' ability in reading comprehension. In dealing with some of the studies mentioned above, the author attempts to apply Semantic Mapping in implementing the PQRST strategy. The author will also observe student's perceptions to the strategy.

#### 2.11 Theoretical Assumption

There has been some previous research done using PQRST strategy. As suggested by Sulistyo (2011: 94), the PQRST (Preview, Question, Read, Summarize, Test) strategy is effective as an instructional reading strategy since it emphasizes crucial information in reading activities. This step-by-step has shown to enhance test results of the learners who follow the steps. It can assist learners focus on learning and organizing data in a form that is related immediately, to the way will learners be directed to apply it in the test. Strategy might be adapted to fit any type of learning and promotes more accurate timing of work.

Meanwhile, some researcher also implemented PQRST strategy in the classroom. Haeriyanto (2012) said that PQRST strategy can enhance or development learners analyzing understanding competencies of the 11th graders of MA Nurul Jadid. Students actively participate in class by presenting thoughts, asking questions, and answering them. In conclusion, this strategy might increase student engagement during the teaching-learning process.

In similar to other studies, Septiari (2013), who carried out classroom action research in order to enhance reading comprehension through the PQRST strategy of eighth-grade students at SMPN 2 Banjarangkan, found that their perceptions and learning enthusiasm of the topic under research were improving. The implementation of the strategy resulted in an increase in students reading comprehension test scores, which were previously poor. Students' classroom engagement improves as they gain confidence in sharing their opinions and actively respond to queries. In short, PQRST can improve students' reading comprehension skills. In dealing with some of the studies mentioned above, the author attempts to apply semantic Mapping in implementing the PQRST strategy, in order to overcome the weaknesses which is found in the PQRST strategy that is lack of vocabulary. The author will also observe student's perceptions to the strategy.

# 2.12 Hypothesis

In this study, the researcher suggests the following hypothesis based on the previous theories and assumptions:

- H1 : There is significant difference in the students' reading comprehension after they are taught through PQRST strategy and PQRST strategy based on Semantic Mapping and students have positive perception on the PQRST strategy based on semantic mapping in teaching reading.
- H0 : There is no significant difference in the students' reading comprehension after they are taught through PQRST strategy and PQRST strategy based on Semantic Mapping and students have negative perception on the PQRST strategy based on semantic mapping in teaching reading.

In summary, this chapter discussed about reading, aspects of reading, teaching reading, PQRST strategy, PQRST strategy in teaching reading comprehension, steps of PQRST strategy, semantic mapping, the procedure of PQRST strategy based on semantic mapping, students' perception, previous research, theoretical assumption, and hypothesis.

#### **III. RESEARCH METHOD**

This section has seven subchapters, including research design, data sources, research instruments, validity and reliability, data collecting techniques, research procedures, data analysis, and hypothesis testing.

# 3.1 Research Design

This study included both quantitative and qualitative data, using two classes: control and experimental. Each class received a pre-test in the form of a reading test at the beginning of their session. After doing pre-test, the students in control class were taught to read a text using PQRST (Preview, Question, Read, Summarize, Test) Strategy, on the other hand, learners in experimental class were taught to read a text using PQRST (Preview, Question, Read, Summarize, Test) Strategy based on Semantic Mapping. Next, researcher administered posttests for learners in both the control and experimental groups. At the final session, the researcher distributed a questionnaire analyzing students' perceptions of the PQRST strategy on semantic mapping. Based on the procedure above, the researcher used Control Group Pre-test-Post-test Design for the first research question (Setiyadi, 2018). The research design is described below:

# G1 T1 X T2 G2 T1 O T2

G1 = Experimental Group

G2 = Control Group

T1 = For the first time, students took a reading test before receiving treatment. (Pre-test)

X = The treatment, teaching reading through PQRST strategy based on semantic mapping.

O = The treatment involves teaching reading using the original PQRST strategy.

T2 = The final session the learner took reading exam after being taught using strategy. (Post-test)

This study occurred in six sessions in every group, with the presentation given as follows.

1. The initial meeting was for pre-test.

2. The second to fourth were for treatments.

- 3. The fifth meeting was for a post-test.
- 4. The sixth meeting focused on the questionnaire.

The researcher applied this strategy since the pre-test (T1) assessed students' initial abilities. Before receiving treatments, students were given an exam that seems to be an accurate assessment of their performance. Following the pre-test, the researcher administered treatments (X) to the learners. In the end of treatment, the researcher conducted a post-test (T2) to contrast the difference in score before and after treatment. A questionnaire was used to gather qualitative data from learners. Questionnaire intended determine students' perceptions on implementing the PQRST strategy using semantic mapping.

# **3.2 Data Sources**

The subjects of this research were the tenth-grade students of senior high school. Numbers of learners of each class were 32 students. This study involved six meetings. Researcher took two classes, one as control and one as experiment class.

#### **3.3 Research Instrument**

Researcher utilized a reading comprehension test and a questionnaire as research instruments. Reading test was used to contrast effectiveness of teaching reading comprehension using the PQRST strategy and PQRST strategy based on semantic mapping. The reading test included five aspects of reading: main idea, specific information, inference, reference, and vocabulary. Test consisted of multiple-choice questions (a, b, c, d, and e). It was chosen because they are quick, easy to understand and, most significantly, reliable, meaning they are neither subjective or affected by marker judgments (Heaton 1975). Multiple-choice format can lead to WH questions are simple to comprehend than no-choice because it provides learners with several options. Before choosing a decision, learners may want to read the text to see if any of the possibilities are expressly mentioned. To answer the second research question, the researcher administered perception questionnaire to learners regarding implementation of the PQRST strategy based on semantic mapping in teaching reading comprehension. Following that, researcher presents four questions for the questionnaire, in which students can express their opinions on the application of PQRST strategy based on semantic mapping. The questionnaire was in the form of open-ended question.

### 3.4 Validity and Reliability

The final number of questions was decided to be 34 questions after eliminating 16 questions from a total of 50 questions in a try out test to select good questions. Researcher has to check whether instrument is appropriate for collecting data. As a result, the researcher went through some steps to ensure the validity and reliability of the students' responses. When conducting research and determining whether or not the test items are applicable, the researcher first calculated and assessed the validity by administering the test to determine the test's validity, reliability, or level of difficulty, and discrimination power. Before administering the

pretest and post-test, the 34 questions were evaluated to see if they were of good quality. Good test must fulfil some requirements: validity, reliability, level of difficulty, and discrimination power.

#### 3.4.1 Validity of Reading Test

Validity is related to the way the test assesses the subject it is meant to assess. There were four kinds of validity: face validity, content validity, construct validity, and empirical or criterion validity. To determine if the test had strong validity, researcher employed both content validity and construct validity. Face validity is associated with test arrangement, but criterion-related validity is associated with possible performance assessment, as in a replacement test (Hatch and Farhady 1982). As a result, these two validities were considered less essential.

#### a. Content Validity of Reading Test

Content validity was intended to determine whether the exam questions accurately reflected what would be covered. The test items were selected to include a good representation of the instruction materials taught to the students (Heaton, 1975). To determine the content validity of reading comprehension, researcher attempted to compile materials for senior high school learners using the existing curriculum. This study employed descriptive writing that senior high school learners could understand. To assess content validity of a measuring instrument, researcher first specified what should be measured. In this study, scoring criteria are based on five aspects: identifying the main idea, obtaining detailed information, reference, inference, and vocabulary (Nuttal, 1985). All test items with good validity were used to collect data for this study, hence the bad ones should be eliminated or corrected. As a result, all test items may be matched to the aim, indicating that the materials were taught.

# b. Construct Validity of Reading Test

| No.  | Aspect               | Item Number                    | Total | Percentage |
|------|----------------------|--------------------------------|-------|------------|
| 1.   | Main Idea            | 11, 18, 21, 30, 34, 37, 41.    | 7     | 20.5%      |
| 2.   | Specific Information | 2, 8, 9, 28, 40, 42.           | 6     | 17.6%      |
| 3.   | Vocabulary           | 4, 10, 17, 23, 31, 35, 38, 43. | 8     | 23.6%      |
| 4.   | Reference            | 5, 19, 24, 39, 47.             | 5     | 14.7%      |
| 5.   | Inference            | 6, 13, 20, 29, 36, 45, 48, 49. | 8     | 23.6%      |
| Tota | Total                |                                | 34    | 100%       |

 Table 3.4.1. Specification of the Reading Test

Construct validity issues whether tests were real representation in accordance under concept of what learning the language means (Heaton, 1975). The validity model of a test was capable of evaluating those detail characteristics in line considering language behavior and learning theory. The instrument's validity relationship referred to construct validity, in which the questions reflected six kinds of reading skills, i.e., identifying the main idea, supporting details, references, inferences, and vocabulary. Reading ability was part of the validity of the construct and item number.

#### c. Face Validity

Face validity is concerned with structure of the exam and extensiveness of the instruments, involving directions, and consistency of multiple choices (a, b, c, d, and e). In this study, face validity was used to ensure that there is no mistyping in the instrument and all mechanical elements in order for it to seem obvious and suitable. It was employed for demonstrating whether instruments were good enough to be assessed or not.

### **3.4.2 Reliability of Reading Test**

The next important part that should be tested was instruments' reliability. The researcher employed correlation product moment to assess reliability of reading test, which was then utilized in Spearman Brown formulation. The instruments were considered accurate if the same subject was calculated on multiple occasions, indicating a comparable outcome. If the end result displays score 0.80–1.00, the instrument's value will be very high and reliable. After collecting the try-out test data to test dependability of the reading test, researcher calculated data using ITEMAN.

Based on the standard of reliability above, it could be concluded that the reading tests should be considered reliable if the tests reach the range of 0.80 to 1.00 (very high and reliable). Furthermore, the reliability of the reading test in this research is presented below:

## **Reliability of The Whole Test**

(Spearman Brown's Prophecy Formula on Hatch and Farhady, 1982)

~ 4

$$r_{k} = \frac{2r1}{1+r1}$$

$$r_{k} = \frac{2(0.98)}{1+0.98}$$

$$r_{k} = \frac{1.96}{1.98}$$

$$r_{k} = 0.98 \text{ (very high)}$$

From the calculation above, it is clearly seen that the reliability of the reading test is 0.98. Based on the standard of reliability, it can be concluded that the reading test is considered reliable. Further information can be seen in Appendix 10.

#### a. Level of difficulty

Level difficulty was determined by student's perception of the item's easy or complexities. It was crucial because test items that were too basic (that all students correctly answered) could reveal nothing about disparities within the test population. Research objects should not be overly simple or challenging for students. This study assessed the complexity of test items using the ITEMAN 4.2, which was separated into three groups. Thus, the criterion for level difficulty were as follows:

Level difficulty from 0.000 - 0.30 referred to hard.

Level difficulty from 0.30 - 0.70 referred to medium.

Level difficulty from 0.70 - 1.00 referred to easy. (Shohamy, 1985:79)

Based on the criterion of level of difficulty above, it could be concluded that the reading tests is categorized into three criterions, they are hard or difficult, medium or average and easy. Furthermore, the level of difficulty of the reading test in this research is presented below:

| Number  |           |
|---|-----------|
| 3, 10, 20, 24, 30, 35, 39, 43, 45, 49   | Difficult |
| 1, 2, 4, 5, 6, 7, 8, 9, 11, 12, 13, 14, 15, 16, 17, 18, 19, 21, 22, 23, 25, 26, 27, | Average   |
| 28, 29, 31, 32, 33, 34, 36, 37, 38, 40, 41, 42, 44, 46, 47, 48, 50.                 |           |
| -   | Easy      |

Table 3.4.2. Level of difficulty

From the table above, it is clearly seen that there are 10 questions tend to be difficult, the 40 questions tend to be average and there is no question that tends to be easy. Further, information can be seen in Appendix 11.

## b. Discrimination power

Discrimination power was defined as "the degree in which the item distinguishes among the high level and the level achieved by learners on the test." A good item that fit with the requirements was one in which good learners performed well while poor students failed. To determine discrimination power, the following ITEMAN 4.2 criteria were used: 0.00 to 0.20 refers to poor.

0.21 to 0.40 refers to satisfied.

0.41 to 0.70 refers to good.

0.71 to 1.00 refers to excellent.

A negative discrimination power refers to bad item. (Heaton, 1975:180)

Based on the discrimination power above, it could be concluded that the reading tests is categorized into three criterions, they are hard or difficult, medium or average and easy. Furthermore, the level of difficulty of the reading test in this research is presented below:

| Number  |           |
|---|-----------|
| 1, 3, 7, 12, 14, 15, 16, 22, 25, 26, 27, 32, 33, 44, 46, 50                       | Poor      |
| 2, 4, 5, 6, 8, 9, 10, 11, 13, 17, 18, 19, 20, 21, 23, 24, 28, 29, 30, 31, 34, 35, | Satisfied |
| 36, 37, 38, 39, 40, 41, 42, 43, 45, 47, 48, 49                                    |           |
| -   | Good      |
| -   | Excellent |

From the table above, it is clearly seen that there are 16 questions tend to be poor, the 34 questions tend to be satisfied and there is no question that tends to be good or excellent. Further, information can be seen in Appendix 11.

#### 3.4.3 Questionnaire

Questions of interview were set to be standardized semi-structured using open-ended questions. The interviewer used a semi-structured format to investigate questions and ensure clarity. As a result, questions are intended to make it clearer and build on the respondent's answer. In the words of Ary et al. (2010), open-ended questions are a type of question which asks interviewees respond freely. Finally, they may answer every question in their own words. The questions asked during interviews were deemed attitude questions, so they were used to get certain individuals' perspectives on certain topics (Creswell and Widhiatama, 2016). Questionnaire was used to assess students' perceptions of the PQRST strategy based on semantic mapping conducted by the researcher. It was made to obtain detailed data on students' perceptions, including researcher writing questions in both English and Indonesian. Questionnaires consisted of 4 questions in which they were made based on two categories namely usefulness and difficulty. The study examined students' perceptions of modified PQRST strategy's impact on reading comprehension and other reading aspect. On the other side, the problem concentrated on identifying potential challenges that students would experience when implementing the strategy. The findings of the analysis were later classed as positive or negative perception. The questions of the open-ended questionnaire were written by adapting from Fennel (1992) and Tanaka and Sanchez (2016).

| Category   | Number | References                                  |
|------------|--------|---|
| Usefulness | 1,2,3  | Fennel (1992) and Tanaka and Sanchez (2016) |
| Difficulty | 4      | Fennel (1992) and Tanaka and Sanchez (2016) |

Table 3.4.4. The Organization of the Perception Questionnaire.

#### 3.4.4. Validity of the Questionnaire

Researcher employed a questionnaire to assess students' perceptions of the PQRST strategy based on their semantic mapping. The questionnaires consisted of 4 questions in which they were made based on two categories namely usefulness and difficulty. The study examined students' perceptions of modified PQRST strategy's impact on reading comprehension and other reading aspect. On the other side, the problem concentrated on identifying potential challenges that students would experience when implementing the method. The investigation revealed either positive or negative perceptions. The questions of the open-ended questionnaire were written by adapting from Fennel (1992) and Tanaka and Sanchez (2016). The questionnaire's validity was assessed by two English teachers with over ten years of experience. Two raters were used to determine whether the questionnaire items were appropriate for the underlying theory. The questionnaire was appropriate for the used theory, according to the raters' assessment.

# 3.4.5. Reliability of the Questionnaire

A research instrument's reliability refers to its consistency and dependency while measuring an attribute. In this study, the researcher employs triangulation to improve the reliability of the questionnaire. According to Cresswell (2012: 259), triangulation is the process of verify information through multiple people (e.g., the headmaster and a learner), categories of data (e.g., observation notes and interview), or treatments of information acquiring (e.g., documents and interviews) in definitions and problems related to qualitative research. Triangulation is often used to capture unique aspects of the same phenomenon rather than cross-validating statistics. To prevent the notion, prejudices, and researcher's own perspective. Triangulation solves these problems. In this study, researchers used triangulation, which involves time and methodology triangulation. Time triangulation is used in different time for the same group

whereas methodology triangulation is to use some methods namely questionnaire, observation, and interview.

#### 3.5 Data Collecting Technique

As data sets existed in the format of reading comprehension for learners, it was gathered through two reading tests: pre-test and post-test. All learners in each test needs to complete reading comprehension test. Pre-test and post-test scores of learners were analyzed to assess the students' abilities before and after treatment. The data collection technique is stated in the following order:

#### a. Pre-test

The pre-test had been administered to discover access point for reading comprehension aspects of the student before the treatments, both in the experimental class and in the control class. The students received multiple-choice test. The pre-test items were the same as those on the posttest. The test consisted of multiple-choice questions with five options.

# b. Post-test

This test's aim was to determine the learners' capability and progress of reading comprehension success after being taught by the strategy chosen. Students were also given multiple choice tests in this test with 5 alternative options.

#### c. Questionnaire

The perception questionnaire was used to investigate students' perceptions on the use of PQRST strategy based on semantic mapping. To make sure learners know all the questions of questionnaire, it was written in English and Indonesia. It consists of four in the form of open-ended questions.

## **3.6 Research Procedure**

The researcher used the subsequent processes with a view to acquire the data:

1. Determining subjects of the study

This study's population consisted of tenth-grade of senior high school students. Researcher divided the sample into two classes: experimental and control.

2. Selecting the material

This research used a narrative text according to the curriculum for senior high school students in the second semester.

3. Administering try-out test

Goal of this exam was to assess the quality of test utilized for research instrument to decide which questions need to be changed or removed for pre-test and post-test.

4. Administering the pre-test

Pre-test was given to measure reading comprehension aspects before the treatments were given in class. This test included reading comprehension from the Narrative text of the multiplechoice test. After the test was completed, each test item was calculated.

5. Conducting treatments

After pre-test, each student received three treatments. Treatments were teaching-learning reading applying PQRST strategy based on semantic mapping in experimental class and PQRST strategy in the control class.

6. Administering the post-test

After treatments were given, a post-test was conducted to see if there was a significant difference in learners' pre-test and post-test score.

#### 7. Administering the Questionnaire

After treatment was completed, an open-ended questionnaire was distributed. The questionnaire's goal was to gather students' perspectives on the implementation of PQRST strategy based on semantic mapping that occurs throughout treatment.

#### 8. Data analysis

After pre-test and post-tests, data were examined with SPSS and ITEMAN. It was used to determine the impact of reading comprehension on learners who were taught using PQRST strategy based on semantic mapping.

#### **3.7 Data Analysis**

The researcher assessed data with Statistical Package for Social Science (SPSS) application. Researcher collected data by administering reading comprehension tests following teaching with the PQRST technique and the PQRST strategy based on semantic mapping. The reading test was computed before and after treatment. An independent group t-test was carried out to assess mean scores from pre-test and post-test results for the experiment and control classes. Researcher examined data with statistical methods as follows:

- 1. Scoring pre-test and post-test.
- 2. Computing total number of right answers for pre- and post-tests.
- 3. Using a t-test to tabulate the student's reading comprehension test results.

Directly calculated calculation was written as follows:

$$\frac{X1 - X2}{SD}$$

In which

$$\frac{SN}{D} = \frac{SD}{\sqrt{n}}$$

Where:

XI = Mean of the pre test

X2 = Mean of the post test

S N= Standard error of differences between two means (denominator)

SD = Standard deviation

N = Number of students

(Hatch and Farhady, 1982)

4. Analyse pre-test and post-test results using SPSS to see if there was a significant improvement in student gains or not.

5. Comparing the outcomes from experimental and control groups.

6. Organizing the discussion about results.

7. Answering research question by stating the result of the analysis.

To answer second research question about students' perceptions after being taught using PQRST strategy based on semantic mapping and PQRST strategy, researcher classified questions depending on themes, calculated the responses, and totalled all of the points for every learner. Summarizing all of the statements above, the researcher examined the research issues

concerning advancement on students' writing achievement after being taught utilizing PQRST strategy based on semantic mapping.

## **3.8 Scoring System**

Researcher determined scoring system for work of students before obtaining the results. While doing so, the researcher applied Arikuntos' formula (1989). An ideal maximum score was 100. Scores for the pre-test and post-test were determined using following formula:

 $S\frac{r}{n}100$ 

Where:

S: Test's score

R: Total of right answer

N: Total

# **3.9 Normality test**

While gathering pre- and post-test data, Shapiro-Wilk test was performed on SPSS Statistics version 26. Initial task was to verify data normality. Normality test was used to examine whether data from experimental classes one and two were normally distributed or not. The hypothesis formulations were:

Ho : The data has normal distribution.

Ha : The data has not normal distribution.

Criteria for accepting hypotheses for the normality test were:

Ho was accepted if Sig.  $> \alpha = 0.05$ 

Ha was accepted if Sig.  $< \alpha = 0.0$ 

## 3.10 Homogeneity Test

After assessing data for normality and homogeneity. A homogeneity test was done to check whether the given data was homogeneous. The gain score obtained was verified for homogeneity using Levene's test using SPSS version 26. Consider the following assumptions for homogeneity:

Ho : The variance of the data was homogenous.

H1 : The variance of the data was not homogenous.

Criteria for accepting hypotheses for homogeneity test were:

Ho was accepted if Sig.  $> \alpha = 0.05$ 

H1 was accepted if Sig.  $< \alpha = 0.05$ 

# 3.11 The Equality of Pre-test Score

Before teaching the PQRST based on semantic mapping strategies, students' reading comprehension was assessed using a pre-test. Because the themes were chosen specifically, the equality of scores in both groups was highlighted. Goal was to compare before intervention similarities between students taught using the PQRST strategy and the PQRST strategy based on semantic mapping. Data were analyzed with an independent sample T-Test. While the acceptable requirements for tests were:

1. Score of Sig. >  $\alpha = 0.05$  indicates that there was no significant difference of the learner's pre-test.

2. Score of Sig.  $< \alpha = 0.05$  indicates that there was significant differences of learner's pre-test.

## **3.12 Hypothesis Testing**

Pre- and post-test results were compared to determine the gain. An independent T-test was used to measure the difference in reading comprehension achievement between two experimental classes. Furthermore, the t-test results were used to analyze the significant difference in learners' reading comprehension achievement before and after being taught using the PQRST strategy based on semantic mapping. In addition, determine whether offered hypothesis was accepted or rejected. In that case, a significance level of 0.05 was used, implying a 5% risk of error in hypothesis. Hypotheses have been created in the following order:

H0 : There was no significant differences of learners' reading comprehension after they were taught through PQRST strategy based on semantic mapping.

H1 : There was significant differences of learners' reading comprehension after they were taught through PQRST strategy based on semantic mapping.

Standards for accepting speculation have been as follows:

1. Ho was approved if t-table higher t-ratio. It suggests that there was no significant difference in students' reading comprehension after being taught using PQRST strategy and PQRST strategy based on semantic mapping. 2. Ho was rejected if t-table was less than t-ratio. It means that there was significant difference of students' reading comprehension after being taught by PQRST strategy and PQRST strategy based on semantic mapping.

This chapter describes strategy employed in the study. It also showed how data was examined following treatment. Data was derived from the pre-test and post-test scores.

# V. CONCLUSIONS AND SUGGESTIONS

The last chapter of this thesis deals with conclusions of the results of the data analysis and suggestions. It presents the conclusions of this research and the suggestions for English teachers and further researchers.

#### 5.1. Conclusion

According to the discussions of the research findings on the previous chapter, the researcher intends to draw the conclusions.

1. PQRST strategy and PQRST strategy based on semantic mapping can be helpful reading strategies that can be used in teaching learning process of reading class. After being taught using PQRST strategy, students' reading comprehension achievement is significantly improved because it provides a series of organized steps to the students before, during, and after reading process that helps the students become active in reading process, focus on the text, comprehend its content, and recall the information without difficulty due to high retention. In PQRST strategy based on semantic mapping group, there is also an improvement in the students' reading comprehension achievement. However, from the calculation, it can be concluded that there is a significant.

difference in the students' post-test mean between PQRST strategy and PQRST strategy based on semantic mapping group, in which the mean score of students who were taught by using PQRST strategy based on semantic mapping is higher than those who were taught through PQRST strategy. This occurs since each step of PQRST strategy based on semantic mapping has its own task that specifically involves the students actively in the thinkingreading process such as brain-storming (Preview) session, increasing concentration by giving question (Question), learning new knowledge through in-depth analysis of a reading passage (Read), activating and enhancing their knowledge bases regarding specific topics or vocabularies discussed (Map stage), Checking on their acquired knowledge (Summary), and checking the students' understanding of the reading materials by giving a reading test (Test). The organization of a series of steps helps the students achieve several goals namely comprehending reading materials at deep level (semantic), remembering the information of reading materials, and recalling the information.

2. Based on the result of students' perception towards the implementation of PQRST strategy based on semantic mapping, it is found that the students perceive the strategy in a positive way since the strategy helps the students comprehend a reading passage and enhance their vocabulary knowledge. However, it is also obtained that the students face a difficulty in Map stage of PQRST strategy based on semantic mapping.

#### 5.2. Suggestions

After conducting her research on investigating the students' reading comprehension achievement taught by PQRST strategy based on semantic mapping at SMAN 3 Bandar Lampung, the researcher suggests teachers and further researchers to do things as follows:

#### 5.2.1 Suggestions for English Teacher

- 1. During the implementation of PQRST strategy based on semantic mapping, most of the students spent more than twenty minutes on mapping stage and this occurred since they were not familiar with the story. Thus, it is suggested for the teacher to prepare learning materials that the students are familiar with in order to make it easier for the students to carry out the mapping stage.
- 2. In applying mapping stage, the teacher should prepare image, symbol, or other teaching tools that can help students understand the assignment, words, or the concept of the idea. The teaching tools are needed because some students struggled a lot in carrying out mapping stage. They did not understand the word that represented the concept of the idea and this caused the learning process to focus only on the explanation of the word.
- 3. The teacher should monitor the students' progress and help them solving some problem that arise during the implementation of the strategy by walking around the class since some students perhaps are hesitant to voice their problem to the teacher.

4. The teacher should prepare ice breaking activity to the students when they lose focus or interest in order to regain the students' attention.

#### 5.2.2. Suggestions for Further Researchers

- 1. During the implementation of PQRST strategy based on semantic mapping, it is suggested to further research to pay more attention towards the use of vocabulary in the reading text since this strategy focuses on memory retention, understanding, and integrating previous knowledge with new knowledge and the implementation of this strategy can help students comprehend some vocabularies that are found in the text and expand their knowledge of words. In addition, this research found vocabulary as one of the reading aspects that improved the most after the treatment and the further research can use the finding as a reference to verify the use of PQRST strategy based on semantic mapping in increasing vocabulary more deeply.
- 2. Further research is suggested to monitor and evaluate students' activity in each step of PQRST (Preview, Question, Read, Summarize, and Test) since some students may have difficulties in carrying out certain stages; therefore, monitor and evaluation can provide robust data for identifying problem and enabling decision-making for the next step. For example in this research, some students were confused about where to start reading even though questions were already provided and students also produced inaccurate

information in Summarize stage. These problems need to be analyzed in order to find the cause, students' reaction, and its solution so that the data obtained is more varied.

- 3. During semantic mapping stage, majority of the students have difficulty in comprehending some information from the text in the forms of words and phrases due to their background knowledge and vocabularies. Further research can use this finding as a reference to conduct depth analysis on which part most students often have difficulty with, whether vocabularies, phrases, or sentences. The outcome of the analysis may identify students' learning difficulty, reading problem, or factor that causes it.
- 4. This research is limited by short-time period and small sample size. The result cannot be universalized to all situational contexts since they may be appropriate for certain fields but not others. Thus, further research should be applied in longer-time period and bigger sample size in order to get more accurate result.
- 5. This research uses narrative text as a reading material and it is found that some students are not familiar and interested with the content of the text; thus affects their engagement. Further research can use this finding to analyze the use of varied texts in teaching and its impacts on students' engagement and their comprehension.
- 6. It is suggested to apply PQRST strategy based on semantic mapping on higher level preferably intermediate level or higher since this strategy requires all students to carry out several structured stages and comprehend some

information in the form of sentences, vocabularies, or phrases. This situation requires all students to possess critical thinking, sufficient amount and depth of background knowledge, and vast knowledge of words or they cannot carry out each stage well. This situation needs to take into consideration since it is found in this research that majority of students have difficulty in following the stages and comprehending some vocabularies, sentences, or phrases due to their vocabulary limitation and background knowledge.

To conclude, those statements above signify the conclusion of this study during the research of PQRST strategy based on semantic mapping. Besides, the suggestion above can be considered to conduct a better further research with respect to PQRST strategy based on semantic mapping. Other skill such as listening, reading, and writing can also be examined whether they can be improved with PQRST strategy based on semantic mapping.

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