Chapter 1

Introduction

Background of the Study

Learning English is not easy for Indonesian students. In learning English, there are four basic skills which should be reached by them: reading, writing, listening and speaking. Among those four basic skills of English, reading is one of the significant skills that should be acquired well. The important of reading has been admitted by many people.

Langer (1981) cited in Yusuf (2011, p. 1451) states that "Reading is the most important activity in any language class, not only as a source of information and pleasurable activity, but also as a means of consolidating and extending one's knowledge of the language." Therefore, reading plays an important role in learning English. A reader can obtain more knowledge of any kinds from reading. Reading makes the readers have an insight, wider perspectives, and more knowledgeable.

However, there have been several problems in reading. Many students in all educational levels, especially senior high

school level have difficulties in understanding various text books. This problem might be caused by several factors. Fitrawati (2009) claims that there are three factors which might influence the readers' reading comprehension ability and one of them is the teacher's strategies or techniques of teaching reading. She states that teachers usually asked the students to read the text. Then the teachers explained the difficult words if there were any. However, if there were not any, the teacher would ask the students to answer some comprehension questions related to the text. They easily felt bored with reading class because the techniques or strategies of teaching reading were not interesting. In other words, teachers could not attract the students' interest in reading. As a result, they felt lazy to read and did not understand the text well.

Chiramanee (1992) cited in Thongyon and Chiramanee (2011, p. 2) supports Fitrawati's view. He indicates that "Thai learners' reading ability was low because of inappropriate teaching method and outdated teaching techniques."Chandavimol (1998) cited in Thongyon and Chiramanee (2011) states that in general practice of teaching reading, the students are asked to read by themselves and continued by doing the post-reading exercises. Those teaching reading activities will be very boring.

That condition also happened in Senior High School of Universitas 17 Agustus '45 or popularly called as SMA Untag '45 Surabaya. Based on the information from one of the English teacher there, most students were not interested in Reading class; they felt sleepy and bored when they were asked to read the text. As a result, they had difficulty in understanding what they read. When the researcher asked the teacher whether he provided pre-reading activity and interesting technique in teaching reading, he said that in Reading class he seldom provided pre-reading activity; they directly asked the students to read the text, discussed some difficult words, and did some reading comprehension questions. That teaching technique made the students feel bored and lazy because the teacher did not provide any activities which could motivate and make them interested in reading the text going to be discussed.

The teacher should provide a technique to motivate and attract the students' interest to read the text so that they can comprehend the text. Rizqiya (2013) claims that the lack of reading comprehension is the result of the low interest in reading. It can be concluded that the teacher has to motivate and make the students to be interested in reading at the

beginning in order that the students can comprehend the text they read.

There are many techniques which can help the students to improve their reading comprehension ability some are: pre-questioning, guessing reading content from pictures, learning vocabulary before reading, and mind mapping. Lindsay and Knight (2006) mention that the techniques which can be done to develop the students' reading comprehension ability are pre-questioning, pre-teaching vocabulary, and mind mapping.

Mind mapping can be used as a technique to motivate and increase the students' interest in reading. Hobartswan (2010) cited in Chairunnisa (2013) said that mind mapping is an important technique to improve motivation, especially in drawing and coloring image to represent information in mind map. Mind mapping is useful for not only improving students' motivation but also activating their background knowledge. "Mind Mapping is a technique which aimed to activate the whole brain or background knowledge (Buzan, 2013, p. 6 cited in Indrayani, 2014, p. 18)."

Besides a technique, the teacher should also use appropriate steps of teaching reading. In teaching reading, there are three phases: pre-reading, whilst-reading, and post-reading activities (Avery &Graves, 1997 cited in Medina, 2008). Pre-

reading activities are intended to prepare the students before reading, to motivate them to read the text, and to activate or build their background knowledge or schema related to the topic going to be discussed. If the students do not have any related schemata, the teacher is responsible for helping them by providing background knowledge so that they are able to achieve better comprehension.

The important role of background knowledge or schema on reading comprehension was noted by Carrell and Eisterhold (1983). They said that a reader's comprehension depends on her or his ability to relate the information that she or he gets from the text with prior knowledge. Therefore, if the students do not have related schemata, meaning that she or he does not have an understanding of the incoming data from the text, then she or he will find difficulties to understand a text and must do something to get a level of comprehension (Celce-Murcia, 1991). In summary, prior knowledge or schemata is really needed because it can help the readers to get better comprehension.

Reading is an interaction process; it means that when someone is reading, there is a process in his or her mind. Hedge (2000, p. 188) explains that "In trying to create meaning from the text, you were undoubtedly involved in an active

process, a process which Goodman (1967) called a psycholinguistic guessing game."

According to Nuttall (2005, p. 16),

> "These [Top-down and bottom-up processing] are complementary ways of processing a text. They are used whenever we read; sometimes one predominates, sometimes the other, but both are needed. And, thought normally unconscious processes, both can be adopted as conscious strategies by a reader approaching a difficult text."

In other words, reading process can be classified as top down processing and bottom-up processing. "In bottom-up processing, the reader builds up a meaning from the black marks on the page: recognizing letters and words, working out sentence structure" (Nuttall, 2005, p. 17). In this process, reading is essentially a mechanical decoding process. The readers try to encode or translate the printed symbols in the text by recognizing letters, combining them to form words, then combining the words to form phrases, clauses and sentences of the text. In other words, the readers comprehend the reading text mainly by language knowledge. This kind of processing is usually used when the readers do not have ample background knowledge related to the text.

Meanwhile, "In top-down processing, we draw on our own intelligence and experience – the predictions we can

make, based on the schemata we have acquired – to understand the text" (Nuttall, 2005, p. 16). It means that when the readers use top-down processing in comprehending the content of the text, they relate what they read with their experience, prior knowledge, or schemata. Carrell, Devine, and Eskey (1988, p. 4) also claim that "Schema theory has provided numerous benefits to EFL teaching and, indeed, most current EFL textbooks attempt schema activation through pre-reading activities." It can be concluded that schema has an important role in a reading process. Stott (2001) assumes that readers not only possess all the relevant schemata, but also that these schemata actually are activated. It means that schemata require to be activated. The most appropriate time to activate or build the students' schemata is in pre-reading activity.

The study of the importance of pre-reading activities on reading comprehension ability has been conducted by many researchers. Thongyon and Chiramanee (2011) investigated the effects of three pre-reading activities such as: guessing reading content from pictures, learning vocabulary before reading, and pre-reading questioning toward the students' reading comprehension. In their study, they found that pre-questioning has a positive effect on reading comprehension ability.

Many studies about the effectiveness of mind mapping on reading comprehension ability have also been conducted by many researchers. Rizqiya (2013) investigated the use of mind mapping in teaching reading. She implemented mind mapping as a whilst-reading. She found that mind mapping could improve the students' reading interest and comprehension ability.

Many previous studies investigated the effect of mind-mapping and pre-questioning on reading comprehension and implemented mind mapping as a whilst-reading activity; they did not investigate the levels of reading comprehension ability. Therefore, in this study the researcher implemented mind mapping as a pre-reading activity because she considered the importance of background knowledge on reading comprehension. Besides, the researcher investigated the levels of the students' reading comprehension ability. In this study, she used reading comprehension levels based on Barrett Taxonomy which consists of literal comprehension, inferential comprehension, evaluation, and appreciation (Ruddell, 2007).

Research Questions

Based on the background of the study, the researcher intends to investigate the effects of mind mapping and pre-questioning on the reading comprehension of senior high school students. It can be formulated as follows:

1. Is there any significant difference between the students who received mind-mapping and those who received pre-questioning in their reading comprehension achievement?

2. Is there any significant difference between the students who received mind-mapping and those who received pre-questioning in their literal comprehension level?

3. Is there any significant difference between the students who received mind-mapping and those who received pre-questioning in their inferential comprehension level?

4. Is there any significant difference between the students who received mind-mapping and those who received pre-questioning in their evaluation level?

5. Is there any significant difference between the students who received mind-mapping and those who received pre-questioning in their appreciation level?

Purpose of the Study

According to the research questions above, it can be concluded that the objective of this study is to find out whether:

1. There is a significant difference between the students who received mind-mapping and those who received pre-questioning in their reading comprehension achievement or not

2. There is a significant difference between the students who received mind-mapping and those who received pre-questioning in their literal comprehension level

3. There is a significant difference between the students who received mind-mapping and those who received pre-questioning in their inferential comprehension level

4. There is a significant difference between the students who received mind-mapping and those who received pre-questioning in their evaluation level

5. There is a significant difference between the students who received mind-mapping and those who received pre-questioning in their appreciation level.

Theoretical Framework

Reading is a major skill to learn everything, especially English. Reading ability is a basic and significant criterion to measure someone's English level. The important role of schema on reading process has been admitted by many linguists, cognitive psychologists, and psycholinguists. There have been many researches about the effect of schema on reading comprehension ability and the results showed that schema is very useful for improving the students' reading ability.

Xiao-hui, Jun, and Wei-hua (2007, p. 18) define schema as "The prior knowledge gained through experiences stored in one's mind. It is an abstract structure of knowledge."Ajideh (2006, p. 4) mentions "Schema theory proposes that when individuals obtain knowledge, they attempt to fit that knowledge into some structure in memory that helps them make sense of that knowledge." It means that the students' prior knowledge or schema directly affects their comprehension ability.

Xiao-hui, Jun, and Wei-hua (2007) state that there are three types of schemata: linguistic schemata, formal schemata, and content schemata which are related to reading

comprehension. Linguistic schemata refer to readers' existing language proficiency in vocabulary, grammar and idioms. Formal schemata are the organizational forms and rhetorical structures of written texts. Meanwhile, content schemata are related to the background knowledge of the content area of a text, or the topic a text talks about. Content schemata deal with the knowledge relative to the content domain of the text, which is the key to the understanding of texts. Those who were lack of language schemata can use content schemata to understand the texts by connecting their prior knowledge with the incoming information they read.

There are three kinds of reading strategies: top-down strategies, bottom-up strategies, and interactive strategies. Every reader may use different kinds of reading strategies when they are reading. Most of EFL students use top-down strategy in comprehending the text. Nuttall (2005) states that when a reader uses top-down strategy in comprehending the text, he will try to relate what he reads with his prior knowledge or schemata to comprehend the text he reads.

The appropriate time to activate prior knowledge is in the pre-reading activities. Celce-Murcia (1991) said that the goal of pre-reading stage is to activate the students' knowledge of the subject, to provide any language preparation that might be
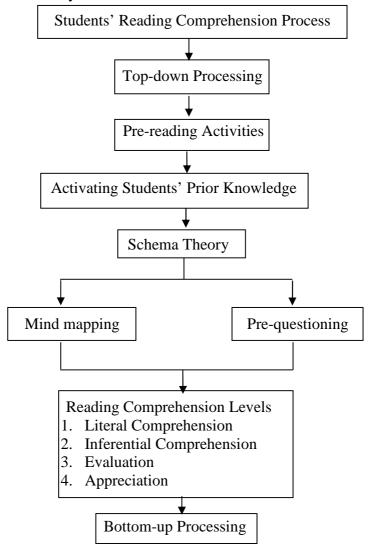
needed for coping with the passage, and finally to motivate the students in order to want to read the text.

Mind mapping and pre-questioning can be used as a technique to motivate the students and activate their prior knowledge as well. Mind Mapping is a technique which is aiming for activating the background knowledge (Buzan, 2013, p. 6 cited in Indrayani, 2014, p. 18). Brown (2001, p.172 cited in Hodijah, 2012, p.3) claims that "Pre-questioning is some questions which are provided before the students read the whole text, in order to build the students' interest and motivation, also their cognitive factors and pre-questioning is very useful to activate the schemata, thus the students can predict what will be faced by them in the reading text."

Emilia (2004) cited in Andanty (2006) claims that reading comprehension is a matter of how deep a reader's understanding of the text is. In other words, reading comprehension can be defined as the level of understanding of a text or message and everyone has their own level of understanding in reading; their understanding comes from the text they read and their own knowledge outside the text. According to Barrett taxonomy, there are four levels of reading comprehension: literal comprehension, inferential comprehension, evaluation, and appreciation (Ruddell, 2007).

The following is the theoretical foundation that the researcher used in this study.

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│  Students' Reading Comprehension Process      │
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              │  Top-down Processing  │
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              │ Pre-reading Activities │
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        │ Activating Students' Prior Knowledge   │
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              │  Schema Theory    │
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| Mind mapping | | Pre-questioning |

Reading Comprehension Levels
1. Literal Comprehension
2. Inferential Comprehension
3. Evaluation
4. Appreciation

Bottom-up Processing

(Adapted from Celce-Murcia & Ohlstain, 2000, p. 15)

Significance of the Study

The result of this study is necessary for the researcher to know the importance of mind mapping on the students' reading comprehension level. As an English teacher, the researcher often found many students had difficulties in comprehending the text they read and they felt bored with Reading class. Therefore, the researcher expects that the result of this study could motivate and give good input to the others in order to provide a technique such as mind mapping when they teach Reading.

Next, practically the researcher expected this study could give contribution to English teachers who will teach Reading. From the result of this study, English teachers were expected to be able to use mind mapping and pre-questioning as a pre-reading activity.

The last expectation of this study was it gave information on how to implement mind mapping to improve students' reading comprehension level to the future researchers who are interested in conducting further researches about the effects of mind mapping on the students' reading comprehension level.

Assumptions

This study is based on the following assumptions

1. The students who have related content schemata (background knowledge), e.g. topic familiarity, cultural knowledge, and previous experience will comprehend the text they read.

2. Pre-reading activities which activate the students' background knowledge can help the students comprehend the text they read.

3. The use of mind mapping in pre-reading activity will help the students comprehend better the text being read.

Scope and Limitation of the Study

This study was limited to analyze the effect of mind mapping on the students' reading comprehension generally and specifically to investigate the effects of mind mapping on the students' reading comprehension levels (literal comprehension, inferential comprehension, evaluation, and appreciation). The participants of this study were the first grade of senior high school students at SMA Untag'45 Surabaya. The researcher chose the first grade of senior high school students because

they were considered as intermediate students who have low English proficiency.

Definition of the Key Terms

1. Pre-reading activities are the activities which are directed at reader's prior knowledge, especially of building and activating reader's schemata before reading (Mukhroji, 2011).

2. Reading comprehension is the understanding, evaluating, and utilizing of information or ideas which is gained through an interaction between the reader's background knowledge and the text being read (Smith and Robinson, 1980, p. 205 cited in Andanty, 2006, p. 25).

3. Mind mapping is a teaching reading technique in which the students are asked to write what they already knew about the topic going to be discussed based on the generic structures of the text, in order to attract their interest and motivation and activate their background knowledge before they read, thus they can get a better reading comprehension.

4. Pre-questioning is a teaching reading technique in which the students are asked to answer some pre-reading questions provided by the teacher before they read the whole text, in

order to attract their interest and motivation and activate their background knowledge before they read, thus they can get a better reading comprehension.

5. Literal comprehension level requires the students to understand the information which is explicitly stated in the text.

6. Inferential comprehension level requires the students to understand the information which is implicitly stated in the text.

7. Evaluation level requires the students to make an evaluative judgment about some aspects of the text.

8. Appreciation level requires the students to involve their emotional response to plot and the author's use of language.

Organization of the Study

This study is organized into five chapters. The first chapter introduces the study. The second chapter presents some related literature and previous studies which support this study. Chapter 3 illustrates the methodology of the study. Chapter 4 presents results and discussion and the last chapter is conclusion and suggestion.