CHAPTER II

REVIEW OF RELATED LITERATURE

This chapter presents the references from the experts which are useful to give relevant knowledge in the field of the study for the next chapter. The researcher is going to describe theories and review some relevant research findings. These explanations can be shown as follows.

2.1 Speed Reading

2.1.1 Definition of Speed Reading

Bloomfield and Barnhart (1961) argue that reading is not involving anything other than a sound effect correlation with visual imagery accords. By contrast, Bennette (1997) argue that reading is a visual process - the vision is a symbolic process to see the item or symbol and then translated into an idea or image. The image will be processed into a concept and whole dimensions of thought.

Ahuja and Ahuja (2007) suggested that reading is a complex skill that involves a series of skills from some small skills. In other words, the process of reading is a double process; the first is vision process and then response process. As the process of vision, reading relies on the ability to see the symbols. The process of reading is spanning from the simplest, which is decoding the words to the expansion and development of interpretative out the author message departs from the background of the reader's experience. Decoding is the process of changing the visual

symbols into auditory patterns, while the expansion and development of interpretive involve critical reading, or sometimes creative. In the truth, reading is not a single ability. Reading also adding together with many small components which is when all components are combined will make a reading happened. Reading is a group of skill that includes skills such as word recognition skills, vocabulary, reading to discover meaning intact, reading to find the main idea, understanding the information specific factual, follow instructions, teaching learning and direction.

Smith and Dechant (1961) state, to discuss the matter of speed reading, it should speed comprehend reading material included. In line with these opinions, Nurhadi (1987) define speed reading as read that prioritizes speed with no ignoring understanding. The two aspects are key to this definition is adequate speed and a high percentage of understanding. The same thing was also stated by Soedarso (2010) that the speed reading contained therein understanding sooner. Even understanding that is the base of starting a discussion, not speed.

By some definitions and explanations from the experts above, it can be concluded that the speed reading is read with adequate speed with the purpose of reading so it can obtain the higher percentage of reading understanding.

2.1.2   Factors that Influence of Reading Speed

Dechant (1973) states that reading speed will depend on purpose, intelligence, experience, reader knowledge and level of reading material.

Speed always depends on motivation, psychological condition and reader physic, reading basic skill and format from reading material.

In a specific, factors that influence the reading speed and reading understanding from Shores are: font size, font model, black and sharpness of printing, quality and paper characteristic, page size, material organization, the amount of empty space, type and illustration placement (picture/ photo), title and sub title, written clarity, knowledge field, complexity from the idea, writer stylistic, kind of written (poem, narrative, or descriptive), writer personality, reader feels (sleepy, wary, calm, nervous), mentally ability from the reader, reading skill, reading environment, reader experience, purpose and motivate in some field or creation from material.

Based on the opinion of some experts, it can be concluded that factors that affect the speed reading are follows as:

a. the purpose of reading,

b. intelligence,

c. background experience and knowledge of the reader,

d. reader psychological conditions while reading,

e. the physical condition of the reader when reading,

f. mastery of the basic skills of reading,

g. the format of reading material, including font size, font models, black levels, paper size, organization of material, the amount of empty space, the type and placement of illustrations (pictures / photos), titles and subtitles,

h. level of difficulty of reading material, including the complexity of the idea of reading material, types of reading material, and style of writing author, and

i. the reading environment.

2.1.3   The Level of Reading Speed

Bond and Tinker (1967) state that: *"The definition of reading speed should be redefined as speed comprehend printed materials and writing."* According to Hafner and Jolly (1972), the numbers of efficient reading speed is a reasonable maximum speed that can be applied by the reader to get a sense expected from reading content. Hafner and Jolly further explains that the word natural (not forced) is defined as a warning that when a reader is too concerned with the mechanics, it is impossible to arrive at the meaning. The definition implies that efficiently in reading speed every reader may be different.

Nurhadi (2010) divides the reading speed into three levels, namely:

a. Low   : 175-250 words per minute

b. Medium or adequate   : 250-350 words per minute

c. High or effective   : 400-500 words per minute or more

Adequate of reading speeds for each level of education are different. Reading speed for the final grade of primary school students or junior high school student level was considered adequate when revolve around 200 words per minute. High school students are considered to have adequate reading speed when they are able to read about 250 words

per minute. For a college student is about 325 words per minute, while a graduate student and doctoral program is about 400 words per minute. For adults (not in school), the speed can drop back and considered to be adequate at a speed of 200 words per minute. The Reading speed must be followed by a level of understanding to the reading of 50% or 40-60% (Nurhadi, 2010).

2.1.4   How to Measure Reading Speed

Reading speed is usually measured by how many words or readable words every minute, with the understanding of an average of 50%, or in other words ranged from 40% to 60%. At this level of understanding, the speed reading is considered adequate (Nurhadi, 2010).

According Nurhadi (2010), a way of measuring the speed of Reading is as follows:

a. Clocked start Reading (hours ..., minutes ..., seconds ....).

b. Mark where the start of Reading (much easier when starting from the title reading).

c. Read the text with adequate speed.

d. Mark where the final reading (at the end of the sentence, if short reading).

e. Noting the expiration time reading (... hours, minutes..., second...).

f. Calculate how much time it takes (in seconds).

g. Count the number of words in the text that is read (including punctuation).

h. Multiplying the number of words with the number 60 (1 minute = 60 seconds). Result multiplying the total number of words.

i. Dividing the multiplication result by the amount of time required for reading. The result is "the number of words per minute".

More simply, Soedarso (2010) suggests a formula to measure the speed of reading is follows as:

$$\frac{Total\ number\ of\ words}{total\ time\ for\ reading\ (in\ second)} \times 60 = number\ of\ words\ per\ minute$$

60 = 1 minute in second

2.1.5 The Obstacles of Speed Reading

Ahuja and Ahuja (2007) state, there are some speed reading obstacles that affect the reading efficiency. The obstacles include vocalization, movement of the lips, speak or listen inwardly, shake head, point the finger, reading word for word, the analysis of word, blocking of the eyes, step back and re-read. Difficulty level of reading material and a shortage of motivation from the reader also can be affecting the efficiency of reading.

Soedarso (2010) states there are six inhibitors that influence speed reading, namely:

a. Vocalization

Vocalization or reading aloud means saying word by word to complete. This slows down the reading. Murmured, even with the mouth closed and the sound is not heard, it is also called reading aloud.

The way to identify vocalizations is by putting a hand on the neck while reading, if the vibrations felt in the Adam's apple, it meant reading aloud or vocalization. As for how to get rid of this habit is to blow or shape the lips like a whistle while reading as he put his hand on the neck to ensure no vibration in the Adam's apple.

b. Lip movement

There are some adults still continue the habit when they are childhood, that is to say a word by word what they read by moving the lips. Moving the lips or muttering while reading although without sound, it is also as slow as like reading aloud. Reading speed when read aloud or with lip movements is only a quarter of the speed from silent reading. By moving the lips, someone more frequent regression (back to back), because when the eyes can quickly move forward, the sound is still behind.

There are some alternative ways to remove the habit of reading with lip movement, likely:

1) Tightening the lips firmly, emphasizing the tongue to the palate.

2) Chewing gum while reading.

3) Using a pencil or something else that is light enough, then clamped to the lips (not the teeth), keep the pencil does not move.

4) Saying repeatedly, "one, two, three."

5) Making a whistling lip movement, but without sound.

c. Head movements

As a child, when reading a text, children only recognize word by word. The result is they move the head from left to right, so they can read the lines in full. As an adult, they had already recognized many words so that should be enough the eyes movement not head movement.

There are some alternative ways to eliminate the practice of moving the head:

1) Putting an index finger to the cheek and leaned elbows on the table during the reading, if the hand was forced by the movement of the head, realize and stop the movement.

2) Holding the chin with hand like stroking a beard and when the head moves, realize and stop the movement.

3) Putting the tip of the index finger in the nose, when the head moves will be realized immediately and stop the movement.

d. Pointing the finger

When they just learning to read, the individual had to say word by word that is read with the help of the finger or a pencil to pointing word by word. This is to ensure that there are no words passed. Therefore, they practiced constantly and nobody gave further hints that it is no longer needed to be done if they have been able to read, finally it became a habit and carried into adulthood.

Reading by pointing a finger or other object strongly inhibits because the movement of the hand slower than eye movements. These habits can be removed in an easy way as follows:

1) Hold the book with both hands.

2) Insert the hand into the pocket while reading.

e. Regression

During the reading, the eyes move to the right to catch the words which lie next. However, the eyes often move back to back to reread a word or a few words before. The habit of always returning (regression) to the back to see some words is a serious obstacle in reading.

The desire to look behind are caused by some factors such as, compelled because of lack of confidence, feeling less precise grasp the meaning, feeling lost something, or misread a word. Dreamy habit is caused regression.

Regression can be reduced by implementing the following matters:

1) Instil confidence. Do not try to understand every word or sentence in a paragraph and do not get hung up on details. Keep reading; do not follow the temptation to go back while reading.

2) Facing the reading material. Still consider to reading material.

3) Continue reading until the end of the sentence. What do you think about lagging will be reappear. The ability of the brain and eyes

far beyond expectations. Therefore, continue to force it to read. Thus, individuals will replace old habits with new ones.

f.   Sub-Vocalizations

Sub-vocalization or reciting in mind the words was read also performed by readers who have a high speed. Sub-vocalization also inhibited while reading because individuals become more concerned with how to pronounce correctly rather than trying to understand the ideas contained in the words being read.

Eliminate completely reading by reciting in mind what they read is impossible, but it can still be tried by expanding the reach of the eye, so the fixation (eyesight) can catch a few words at a time and immediately absorb the idea than reciting.

2.2 CALL

CALL or computer assisted language learning is a kind of process in learning language which uses computer as the media. It has developed over the last 30 years and been actively applied to second language (L2) but it has come out in the early 1980s. CALL fell out of favour among language tearchers, however, as it appeared to imply a teacher- centred approach (instructional), whereas language teachers are more inclined to prefer a student- centred approach.

Nowadays, computer is not the new thing anymore. Everyone has been familiar about this thing. Computer offers many advantages for the people to do anything even some of them depend on their life or job to the computer. It

can happen that computer will take place of all jobs or activities. The student can learn faster, easier, and more enjoyable using computer.

In Indonesia, CALL has been introduced and applied as language learning media. Now, many students have had their own computer. So, it can make easier to learn by using CALL. CALL not only can be used as teaching media at school, but also can used as learning media in everywhere. That way is possible to the researcher to develop speed reading media by using CALL to student learning media.

2.3 Developing Media

The definition of materials in materials development is anything which is used to help teacher learners.There are many materials which are usually developed by the researcher. Based on Brian Timlison (2012) that materials for language learning will be taken to be something that can be used to facilitate the teaching learning of a language, such as coursebooks, videos, flash cards and games. The most of the literature focuses on printed materials.

Tomlinson (1998) "Materials can be in a form of a textbook, workbook, cassette, CD-ROM, video, photocopied handout, newspaper, paragraph written on whiteboard or anything which presents or inform about language being learned". Tomlison (2001) states that materials mean anything which can be used to facilitate the learning of a language (linguistic, visual, auditory or kinesthetic).

2.4 Macromedia Flash

Flash is a software which has ability to draw also animate it, and easy to learn (Akbar et al, 2008). Flash not only used in the making of animation, but now flash is also widely used for other purposes such as game development, presentation, web building, learning animation, and make a film.

Flash is a graphics program produced by Macromedia Corp, a software vendor in the field of web animation. Macromedia Flash was first produced in 1996. Macromedia Flash has been produced in several versions. The last version of Macromedia Flash is the Macromedia Flash 8 and now Flash has moved into Adobe vendor.

2.5 Syllabus and Indicator of Basic Reading

Syllabus is a set of plans, arrangements of learning implementation and assessment that arranged systematically containing some components related to the achievement of learning materials. The indicator is the size, characteristics or traits that show the achievement in learning process.

Here, the researcher tries to develop speed reading material in University Muhammadiyah of Gresik especially for first semester student of English Department. Thus, the syllabus will play important role for the researcher in developing speed reading material. Because the syllabus only show general objective in teaching, the researcher tries to make indicator that will be appropriate with learning outcome on syllabus.

Based on basic reading syllabus (Appendix 8) it can conclude some indicator related with the learning outcome, those are:

Core Competence	Learning Outcome	Indicators
Students are able to read fast and comprehend short story	- Students are able to read fast. - Students are able to understand the text literally and find the information explicitly from the text.	- Students are able to read fast at least 300 WPM (words per minute). - By using objective test (multiple choices) at least students are able to answer 2 questions correctly for 4 questions / at least 50% of total questions.

From the indicator above, it can make category to choosing text that will be used at this study.

1. Subject-matter. Here, the texts are reflected for the material in the syllabus and need analysis. There are two topics in basic reading that appropriate with need analysis, those are: famous people and sports.

2. Length. In syllabus long or short text have different total words. It because using short story and for speed reading, so it give arranged 90 – 350 words.

3. Language. A good text is the text which is not too easy and not too hard to understand for the reader. It will appropriate with readability level.

2.6 Readability Reading Text

According to Richard in Zamanian and Heydari (2012), Readability are how easy written text are able to read and understand. Moreover, readability depends on some factors like average length each sentence, the

total of new vocabulary in a text, and complexity of the sentence structure. Other definition is from Dale and Chall in Zamanian and Heydari (2012) stated that readability is total interaction from all reading material element which is influence reader success in reading. Success here, it mean that how far reader can understand about the content, the optimal using of reading speed, and finding the interesting thing in a text.

Nutall in Arab (2009) stated readability is made reference to challenge or linguistic difficulty from a reading text. Moreover, a reading text should appropriate with the reader level.

From explanations above, it can conclude there are some factors that influence the readability of the reading text, such as the length of the sentences in reading text, vocabulary and structure, and understanding and enjoy of the reader.

2.6.1   Calculator of Readability Level - Flesch Reading Ease

Flesch Reading Ease introduced by Rudolf Flesch (1911-1986). He is a Ph.D. from Columbia University who worked as a writer and consultant. In 1949, Flesch published a book entitled "The Art of Readable English". Through the book, he introduces the related formula to calculate the level of readability text, which is still used by many authors.

There are various ways of measuring the readability level of a reading text. One is by using the Flesch formula, also known by the term "Flesch Reading Ease" or FRE. This formula is one of several formulas that are very popular in measuring the readability of the text.

Interpretation of the Flesch Reading Ease consists of 100 points, where the higher the number is found, the easier readability of the text. Conversely, if the readability score are closer with the number 0, it is mean that the text can be categorized difficult text. Scores of reading text with a readability level standard (not too difficult and not too easy) is in the range of 60-70.

Formula of FRE is arranged based on the number of syllables per word and the number of words per sentence. The formula used to calculate the level of readability of text is as follows:

$$206.835 - (1.015 \times ASL) - (84.6 \times ASW)$$

Explanation:

ASL: Average Sentence Length (the number of words divided by the number of sentences)

ASW: Average of Syllables per-Word (the number of syllables divided by the number word)

The way to measure the readability of a text by using the Flesch Reading Ease formula is to calculate: (1) The number of syllables of the text; (2) The number of words in the text; and (3) Number of sentences in the passage. After getting the three points, the next step is to enter the numbers obtained in the formula or the formula above.

2.7 Review of Previous Studies

An analysis of CALL materials at English education department of University of Muhammadiyah Gresik" was done by Dipo Al Kautsar (2011). He

has problem statement there is how does the CALL material of call match with the syllabus of English education department of University of Muhammadiyah Gresik? Then he found that the CALL course supports the student need to develop the material of English adopted an authentic material and adapted the materials fit in with the teacher need and students of English.

Pengembangan bahan latihan membaca cepat di SMP dengan menggunakan macromedia flash by Qomariyah (2013). She makes speed reading material for junior high school also module for using the material. From her research it shows that the use of speed reading material is very useful to increase students reading speed also their comprehension.

From the previous studies above, the researcher will show the similarity and differences between this study and the previous. The similarity is both of the studies focus on speed reading material which will help students increase their speed in reading and also using Macromedia Flash 8 for creating the material. The differences are the subject of the research and contain of the material. Which is this researcher will focus on basic reading students with short story as the material whereas the previous studies focus on junior high school students and just in a sentence and their speed in reading.