### **CHAPTER I**

#### INTRODUCTION

# A. Background of Study

Appropriate reading materials are necessary in obtaining rich information and increasing students' mastery of vocabulary since they are more likely to encounter new words by reading text. This theory is supported by Hammer (1998), who elaborated that reading materials provide many opportunities in broadening students' language mastery such as; vocabulary, grammar, punctuations as well as how students construct sentences, paragraph and texts. In other words, vocabulary should be taught only in context, never in list of words to be memorized along with dictionary definitions. This is an ineffective way of language learning.

Sadly, most of the reading materials being taught at Vocational High Schools in Indonesia are not suitable with the students' major. Even though there are no statistical data published by the government about this subject matter, we are more likely to encounter non-suitable materials in vocational schools. As the result, SMK graduates are not equipped with the knowledge and competencies which are relevant to their specific field of occupation. This does surely impact national economic growth since these graduates will not be able to compete both in the national and international job seeking as most of them do not fulfill the requirement of the rapidly growing technological advancement which is inseparable from daily use of English language.

In SMK Cinta Rakyat Pematang Siantar, the researcher found that the current teaching-learning process was utilizing the textbook "Buku Bahasa Inggris" published by Kemendikbud (Kementrian Pendidikan dan Kebudayaan Republik Indonesia) in 2017. As previously mentioned above, vocational high schools should focus on specific materials since regular senior high schools already implement general materials. The English reading material of computer network engineering should rivet on English language's viewpoint of computer science. Yet in fact, the text book is compiled of general material and the particular content of procedure texts are not related with any computer skill. Below is an example of a procedure text found in the text book:

# **How to make Chocolate Dipped Strawberries**

### You will need:

- 2 chopped bittersweet chocolate
- ½ tablespoon whipping cream
- Dash almond extract
- 8 strawberries

## **Steps:**

- Combine the chocolate and the whipping cream in a glass measuring cup or bowl.
- Microwave at medium power for 1 minute.
- Stir the almond extract and cool slightly.
- Finally, dip each strawberry into the melted chocolate.

## **Table 1. Existing Reading Materials**

The table above shows that the reading material is very much suitable for the common study program but it is not suitable for the information technology program such as computer network engineering. The students will not encounter

the terms such strawberries, microwaves, and chocolates while operating a computer. They should be bestowed with glossary of, in example; computer operating manuals, hardware and software, building area networking, etc. Being provided with inappropriate material, the students' may lose their interest in learning English as the materials they learned will not be applicable in their future occupation. Therefore, the researcher believed that the reading materials need to be developed to be appropriate with their specific major.

Vocational high school adopt slight differences with Senior high school in terms of curriculum, syllabus, and teaching - learning materials. In general, the students of senior high school are guided to enter the university in order to continue their study in any field of knowledge. On the other hand, the students of vocational high school are prepared to be ready for work right after graduation since they have studied a specific knowledge based on particular competencies, although they are not prohibited to continue their study in the university.

SMK Cinta Rakyat Pematang Siantar is currently implementing the 2013 curriculum. Based on the Government Regulation No.60/2014 on the 2013 curriculum for vocational high school, the teaching-learning system in any vocational school must concern on the spectrum of vocational skills based on the students' specific majors. This regulation also contains some adjustment on the basic and core competencies since it's no longer compatible towards the current world development, science and technology, as well as the jobs requirements.

In addition, Government Regulation RI No.20 of 2003 article 18 stated that vocational high school is a place where students are prepared to enter their specific field of occupation. Vocational students may earn living by their profession field

right after they graduated. Therefore, they should have acquired special abilities to support their particular knowledge. The government is also encouraging the graduates of junior high schools to proceed into vocational schools. This encouragement is intended to prepare human resources who are "work ready" in order to reduce unemployment in their productive age and reduce the number of poverties.

SMK Cinta Rakyat consists of several majors. One of the those is computer network engineering. Computer network engineers, also known as network architects, are responsible for the testing, designing and maintenance of computer networking systems. These systems may involve a local office network or a large global network system. Those who work well independently and are interested in computers and advanced Internet technology are ideally suited to get started in this career.

English is a very important subject for vocational school, especially in computer network engineering classes. Students are expected to master English because if they don't, they will not be able to keep up with the upcoming technological updates. Development of the language skills are aimed at the improvement of students' proficiency in English both verbal and nonverbal. Language classes at higher educational school use the text of specific professional fields. This is only achievable if the teaching and learning English contains specific content and materials.

Before developing the suitable teaching material for students, the analysis of students' needs of teaching materials is very important to do. The researcher began this study by acquiring information from students and teachers by doing interview

and analyzing their course book as a preliminary data. This research also analyzed the existing syllabus and reading materials. Since the existing reading materials are not in accordance with syllabus and irrelevant toward the computer network engineering students' needs, designing reading materials is crucially required. The development of reading materials is based on Educational Research and Development (E-R&D).

## **B.** The Problems of The Study

Based on the background of the study, the research problems can be formulated as follows:

- 1. What type of English reading materials are needed by eleventh-grade students of Computer Network Engineering at SMK Cinta Rakyat Pematang Siantar?
- 2. How to develop the reading materials through R&D based on Problem Based Learning?

## C. The Objectives of The Study

In line with the problems of the study, the objectives of this study are:

- To find out the appropriate English reading materials needed by eleventh-grade students of computer network engineering at SMK Cinta Rakyat Pematang Siantar.
- To achieve appropriate reading materials by the development of the English reading material through R&D based on Problem Based Learning.

## **D.** The Scope of The Study

The study was focused on developing and designing English reading materials which are relevant for the eleventh-grade students of computer network engineering through Problem Based Learning at SMK Cinta Rakyat Pematang Siantar, specifically in Procedure Text.

## E. The Significances of The Study

The findings of the study are expected to be significant and relevant theoretically and practically.

Theoretically, the findings of this study are expected to add up new horizon for the way of language learning. The materials are also expected to provide a good reference for further studies.

Practically, the findings of this study are expected to be useful for administrators, developers and educational institutions in implementing and selecting appropriate English reading materials for their students, particularly the students of Computer Network Engineering, with the goal of improving their English mastery. As well as other researchers in terms of promoting and exploring relevant materials to be taught in vocational school.