

CHAPTER I

INTRODUCTION

1.1 Background of the study

In this globalization era, all aspects of life are changing rapidly. Science and technology, for instance have become more and more complicated. In shorts, the change of social pattern, has created gaps between today and the future.

The globalization era' development and needs in terms of engineering, technician are not only expected to have technical competences in accordance to their specialization but also are expected to be able to communicate with international language such as English. English seemingly becomes the international language broadly used among the countries in the world. To master English, seems to be a must for technician, especially engineering because clients may come from other countries whose languages are English. Beside that many engine use English well.

A quite devastating result from the National Examination shows unsatisfactory scores obtained by the students. Most of them cannot perform the langugae skills well, namely listening, speaking, reading and writing. Listening is the easiest skill to master and writing is the most difficult. One each of those four skills has a different way of learning. For instance, if one wants to excel in speaking one should take a different path of learning than if one wants to be able to write well in the language. Listening and speaking, however, are tight connected to each other. And so, is case of reading and writing. On the other hand, many students at the vocational school level can not use English, they must

ask somebody to translate the English text. It is because the materials taught are not based on the students' needs.

In order to produce the competent and professional in communicative competence (English) especially in understanding the speaking and vocabulary comprehension in any form of speaking materials published, students must be taught and trained how to understand it. Speaking skill becomes very essential and critical in responding the rapid movement of globalization and information and technology communication era. This phenomena, for the students in academic and professional setting, it should be more intensively and extensively done by the students. In terms of academic setting, it is commonly known that speaking and vocabulary activity become a kind of daily 'menu' that must be 'consumed' by them. But in line with the students achievements of teaching learning, the learning materials many use reading and writing skills. Therefore, the students' lack communicative competence especially in understanding speaking and vocabulary comprehension in the process learning.

In term of English competence, the English competence needed by students of engineering, is really different from general English and even the other English branches such as English for Law, English for Tourism, English for Economics, etc. English for engineering is typical English and restricted English used in engineering context and workplace. It is a fact that, over years, English for engineering as a branch of ESP has been viewed by many English scholars and teachers as having significant effects on meeting students' career needs. As the demand for developing a curriculum to meet students career needs grows, ESP has been playing an increasingly important role in facilitating students'

preparation for professional requirements, training, and study. Engineering adopts many concepts, descriptions, and terminology in English. Advanced study requires sufficient English ability in technical areas. Over recent years, there has been an increase in the number of foreigners who come to work and live in.

The process of teaching and learning English for engineering is not optimal and successful yet. This may happen due to lack of teachers' competences, learning strategies, the students prior knowledge of English and motivations and learning materials as well Harmer (2007)

In addition, based on researcher's observation and experiences as well during her teaching, the low achievement of students in English for Engineering, may be tentatively and dominantly caused by the lack existing learning materials in terms of relevance and adequacy provided and delivered by the teacher.

Then, it is seemingly caused by the way and strategy how the materials are prepared by the teacher. Based on the existing documents of teaching and learning materials used at Vocational school, the teaching and learning materials is so simple and lack of innovation and creativity. The teacher often uses learning materials in term of hand out and a piece of paper. In fact, the design of learning materials either by design or innovation and creativity really influence and determine the success of teaching and learning itself.

Also, the existing teaching and learning materials at vocational school can not encourage and motivate the students optimally because it apparently does not designed by using student-centered learning. The teachers seems to be more dominant in teaching and learning process, while the students tend to be a good

listener. The materials are designed not to be based on students activities so that the students are actively involved in teaching and learning process.

In term of teaching materials, the materials may be designed and improved without prior study and need assessment in order to match the students' need and the curriculum and workplace as well. And also, the learning materials provided by the teaching are not designed to lead the students activities or problem base learning (PBL). In addition the unsuccessful teaching and learning of English for Engineering, also probably is caused by the students themselves due to their lack of motivation. Also the poor motivation of students to learn is caused by the lack of learning materials in term of contents and process of teaching and learning itself.

In Indonesian setting, education has been defined as a planned effort to establish a study environment and education process so that students may actively develop their potentials to gain the religious and spiritual level, consciousness, personality, intelligence, behavior and creativity for the establishment of a strong country. Education itself is divided two major parts namely formal and non-formal, while formal education is divided again into three levels, i.e primary, secondary, and tertiary education. School in Indonesia are run either by the government or private sector. Some private school refer to themselves as "national plus schools" meaning that they go beyond the minimum government requirements, especially in relation to the use of English as a medium of instruction or having an international syllabus instead of the national one.

In Indonesia, there are two kinds of Senior High School, namely Senior High School (*Sekolah Menengah Atas: SMA*) and Vocational High School

(*Sekolah Menengah Kejuruan: SMK*). *SMA* differs from *SMK*. In general, the students of *SMA* are prepared to continue their study to the university because they study much general knowledge, while students of *SMK* are prepared to be ready for work because they study specific knowledge based on their competencies, though they are not restricted to continue their study to the college or university. Students attending *SMA* is divided into 3 streams of their 12th Grade, namely Science, Social Studies, and Linguistics. In the *SMK*, there are many expected competencies.

In the *SMK*, there are six areas of competencies (*Bidang Keahlian*), namely: 1) Technical and Engineering, 2) Information and Communication Technology, 3) Health, 4) Arts, Crafts and Tourism, 5) Agri-Business and Argo-Industry, and 6) Business and Management. The six areas of competencies still have some skill programs (*Program Study Keahlian*), for example in Technical and Engineering, there are three skill programs, namely: 1) Electrical Engineering, 2) Industry Engineering and 3) Computer Engineering, and the third skill with competency skills (*Kompetensi Keahlian*), for example in Computer Engineering, it has software engineering competency. A more detailed description is presented in chapter 2.

English is considered to be very important for now and future. Students are expected to master English fluently. The development of the language skills are aimed at the improvement of the students' proficiency in English. Language classes at higher educational school always make use of the text of specific professional fields such as Technical and Engineering, Information and Communication Technology, and Business. The text should be focused on the

communicative needs of the students of a certain higher school level. However, the teaching and learning of ESP include much more than the teaching of English through specific contents and materials.

ESP courses are providing the learners with competence of use English For Specific Fields of knowledge at the advanced level. It is also concerned with the design of curriculum, using approaches, methods and techniques in advanced of ESP and develops materials for the syllabus : type of authentic scientific writing, grammatical features, vocabulary building and principles in the teaching and learning ESP

The phrase 'problem-based learning' reveals that this is a learning method based on solving problems. With the spread of Problem-based learning approach to language teaching. It is an approach to structuring the curriculum that involves confronting students with problems from practice that provide a stimulus for learning. Given that teaching does not automatically lead to learning, problem-based learning is viewed in the context of an approach to learning rather than as a teaching technique.

Based on the realities above, it can be concluded that the learners motivation and the lack of vocabulary are the problems in English teaching-learning process. In solving the learners' motivation, English for Specific Purposes (ESP), in this case, English for software engineering is extremely needed in order to increase their motivation. It is supported by Chen (1993) which stated that ESP will be more motivated, benefit, and effective in increasing students' learning motivation because it relates to their field of the study and caters to their needs. From his statement, it can be assumed that the materials

which concern to the field can increase the learners' motivation. It means, the materials for students of software engineering should concern to their field that is software engineering.

In connection with learning motivation and the existing phenomena of vocational school students motivation by simple classroom observation shows that the students motivation and curiosity seems low and not satisfying.

Relating to explanation above, the researcher interested in choosing this topic because of some reasons; 1) the teaching materials used only based on the curriculum made by Government which also used to other competencies. So, the students of engineering require specific materials to support their competencies 2) to develop English teaching materials that can be used to enhance the teaching-learning process 3) The process of problem-based learning used by students to solve problems in learning material, 4) the materials developed and designed by using need analysis so that they are really good, relevant and reliable for the students 5)

Based on the problems, the researcher as one of the English teachers at the *SMK* is very much interested in conducting a research on developing ESP teaching materials at *SMK*, so that students are made ready for their Computer Work Practice and meet the challenges and competitions in the workplace.

1.2 The Problems of the Study

Based on the previous elaboration and explanation, the problems of this study are as follows:

1. What language skills and materials are needed by the students of the software engineering in the Vocational High School?
2. How is the English materials developed for the majoring in software engineering students in the Vocational School?

1.3 The Objectives of study

In referring the above research problems, the objectives of this research are:

- 1) to find out language skill and materials are needed by the students of Software Engineering in the vocational high school
- 2) to develop the English materials for the majoring in software engineering students at the vocational high school.

1.4 The Scope of the Study

Due to limitation of resources and for the shake of accuracy and reliability of research result, this research will focused on the development ESP teaching materials. The materials based on the existing materials used by the English teacher. Then, to support to understanding the materials, this ESP teaching materials also discussed related grammatical pattern, speaking and vocabulary usages in line with the topics/theme of the materials themselves. Finally, it will be developed through problem-based learning (PBL)

1.5 The Significances of the Study

In developing the ESP teaching materials for the students of the software engineering, it is expected that the findings can be a valuable source of information in connection with the theoretical as well as the practical aspects. Theoretically, this study is hoped to be useful in developing the knowledge and science, especially in the implementation of theories of ESP in teaching materials.

Practically, this study is a conceptual contribution to the teachers, administrators, developers and educational institutions in responding to the dynamic needs of the students. The findings are expected to be used as inputs for the teachers in implementing appropriate learning needs for students in order to obtain a more leverage learning outcomes. So, the findings should be very useful and become a sample of how teaching materials can be directed to the students' needs. It is also expected that the findings will arouse English teachers and other researcher in terms of promoting and exploring relevant materials to be taught. It can be concluded that the conduction of Present Situation Analysis and Target Situation Analysis will be very beneficial for the development of teaching and learning materials.

