

CHAPTER I

INTRODUCTION

This chapter explains background, statements of the problems, the aims of the research, significance of the research, scope of the research, clarification of terms, research methodology, and organization of the paper.

1.1 Background

English as a Foreign Language (EFL) in Indonesia is taught to students from Kindergarten to the university level. In the university or tertiary level, English is taught not only to the students majoring in English as their department but also to students from other programs that appropriate to their study.

Furthermore, Brown (2001: 120) determines that “Most EFL programs are additive since the native language is the accepted norm”. In addition, “Additive bilingualism is found where the native language is held in prestige by the community or the society” (Brown, 2001: 120).

On the foreign language context, Brown (2001: 116) states, “...foreign language contexts are those in which students do not have ready-made contexts for communication beyond their classroom. They may be obtainable through language clubs, special media opportunities, books, or an occasional tourist, but efforts must be made to create such opportunities”.

Moreover, each person has his own purposes in learning English that may be different from others. “The seemingly clear dichotomy between English as the

Second Language and English as a Foreign language however has been considerably muddled in recent years with the increasing use of English worldwide for a variety of purposes” (Nayar, 1997) cited in Brown (2001: 166). With its historical background, people need English focusing on the learners need by using English for Specific Purposes (ESP) approach.

There are many problems for ESP practitioners that might emerge in the process of designing English for Specific Purposes. Hutchinson and Waters (1994: 7) state that the basic idea of ESP “If language varies from one situation of use to another, it should be possible to determine the features of specific situations and then make these features the basic of the learner’s course”.

Swales (1985) cited in Hutchinson and Waters (1994: 7) states that “Most of the work at this time was in the area of English for Science and Technology (EST) and for a time ESP and EST were regarded as almost synonymous”. Based on the theory above, the writer uses both ESP and EST as the subject of this research because they have similar meanings.

Teaching English for undergraduate students, especially for technical students are taught in a specific way, in the sense that they learn English based on their needs and purposes in technical area of their interests. The enrichment of vocabulary in the technical areas should be encouraged to achieve an appropriate level in which students are supposed to be able to communicate well in English. Based on these considerations, the lecturer gives materials, references, and assignment to the students that contains of register that they find in their study. In

this way, the undergraduates' students have some exposures to have better ability than in junior or senior high school.

This research considers the limited information regarding the existence of EST practice in Indonesian higher education. Having known that some universities do not apply ESP approach to their students, the writer is interested to do a research at the Mechanical Engineering Department applying ESP approach in the classroom which is found to be positive. This research is expected to be a model of English teaching and learning process using ESP especially English for Science and Technology at Bandung Polytechnic.

Based on the explanations above, the writer found some problems, which are considered as the foundation in conducting this research to describe the teaching of English at the Mechanical Engineering Department. Therefore, the writer chose The Teaching of English for Science and Technology in the Classroom at the Mechanical Engineering Department, Bandung Polytechnic as the topic of this research.

1.2 Statements of the Problems

Choosing a problem is the first step in conducting a research in order to make the specification the research object. This study attempts to answer the following questions:

1. What types of syllabus are applied by the lecturer for students of Mechanical Engineering Department?

2. What teaching strategies does the lecturer apply in teaching English for Science and Technology?
3. What are the students' responses to the given tasks?

1.3 The Aims of the Research

Essentially, this research is conducted to find out the portrait of teaching English for science and Technology. The aims of this research are:

1. To identify and describe the types of syllabus applied by the lecturer for students of Mechanical Engineering Department.
2. To investigate the teaching strategies applied by the lecturer in teaching English for Science and Technology.
3. To identify and describe the students' responses to the given tasks.

1.4 Significance of the Research

Nowadays English is considered as an important factor in acquiring other knowledge; a lot of people learn English for several reasons and needs that they want to meet. Based on this believe, the writer assumes that this research will bring out some benefits to ESP practitioners in designing a course to choose appropriate program in English class, which is in accordance with the principles of ESP.

1.5 Scope of the Research

There are so many factors that might limit this study. In order to make it simpler and more systematic, the writer limits the research by emphasizing more on the teaching English for Specific Purposes in Indonesian higher education, including the principles and practices of it. It means that this study will discuss several points as follows.

- a) Syllabus; what are the syllabus applied during the learning of ESP, here is EST, at the Mechanical Engineering Department, Bandung Polytechnic. It also includes the lesson plan and the materials that the lecturer gives to the students.
- b) Teaching strategies; what are teaching strategies used in teaching English for Science and Technology.
- c) Students' Response to the given tasks; students awareness about how important the learning English for science and Technology for their knowledge.

1.6 Clarification of Terms

To avoid misunderstanding of the problem investigated in this research, the writer would like to clarify the terms used in this research. The terms are described as follows.

1. English for Specific Purposes (ESP) is based on designing courses to meet learners' needs (Hutchinson and Waters; 1994: 3).

2. English for Science and Technology (EST) identified as a major sub division of the field of teaching ESP (Hutchinson and Waters, 1994: 16).
3. The teaching of EST is the practice of the theory as implementation of the ESP principles and approaches in teaching English for Science and Technology (Hutchinson and Waters, 1994: 7).
4. Syllabus development is one way of designing a course into some materials. It is usually developed in the form of a lesson plan, that the material; from one or many resources are combined and organized in a unity which contains the elements of objectives, material, test, independent works, etc (Hutchinson and Waters, 1994: 84).

1.7 Research Methodology

1.7.1 Research Design

This research represents a qualitative research. It is a kind of method that involves the collection of data for the purpose of describing existing condition Cresswell (1994: 43) defines that qualitative research is interpretative research that includes statements about past experiences of the researcher that provide familiarity with the topic, the setting, or the informants.

Thus, the technique used for obtaining the data is organized and analyzed in order to say something meaningful. The kinds of data would be qualitative. Then the qualitative data is organized by descriptive analytic technique. That is to organize data by describing, clarifying, and analysing the data obtained.

“The procedures for qualitative study include advancing the assumption of qualitative design, indicating the specific type of design, reflecting on the researcher’s role, discussing data collection, developing data recording procedures, identifying data analysis procedures, specifying verification steps, and delineating the narrative outcomes of the study” (Cresswell, 1994: 143).

Based on the theory above, the writer applied the procedure of qualitative study in order to fulfil the process of the qualitative research.

1.7.2 Population and Samples

The population in this research are the students at Mechanical Engineering Department Bandung Polytechnic who study English for Technology subject and one of the English for Technology lecturer of Bandung Polytechnic. The writer considers the population randomly as long as they make sure that EST applied in their English course.

Afterwards from the population above, the writer took one class consist of 30 students of 2nd semester as the sample. The samples decided based on the consideration between The Head of English Department and the English lecturer of Bandung Polytechnic. So the writer has the permission merely to investigate that class.

1.7.3 Procedure of Data Collection

Cresswell (1994: 143) mentions the procedure of the qualitative research: “The procedures for qualitative study include advancing the assumption of qualitative design, indicating the specific type of design, reflecting on the

researcher's role, discussing data collection, developing data recording procedures, identifying data analysis procedures, specifying verification steps, and delineating the narrative outcomes of the study". This research was obtained by collecting the data through the observation, questionnaire, and interview as follows:

1. Interview

Both the students and the lecturer were interviewed to obtain information about their perception on English subject. It aimed to prove the data collected through the observation and questionnaire also to answer the first research question. When the writer interviewed the lecturer or the students, she used tape recorder or MP4 player to record the interview. So that she could replayed and analyzed the data easily. "During the interview, she should take notes in advance for the need of a transcription was important" (Creswell, 1994: 152).

2. Classroom Observation

Observation is held towards the students and their English lecturer. Classroom observation is needed to collect data such as teaching and learning activities. It is aimed to answer the second research question, to find out the students' interest on the subject, and to find out the implementation of English for Science and Technology in the classroom.

3. Questionnaire

Questionnaire was distributed to answer the third research question, to find out their perception regarding the English for Technology subject, their English lecturer, and the implementation of the English for Science and Technology in

order to gain the additional information to measure and analyse data collected. It is also to find out their experience in the classroom relating to the implementation of English for Science and Technology.

1.7.4 Technique of Data Analysis

This study employed qualitative descriptive method. In this way, the data was organized by describing, clarifying, and analyzing the data obtain. The result of questionnaires presentation is put on the table to evaluate the responses answer and to make the results more clearly. To simplify the analysis of the data obtain that analyzed by the descriptive statistics, several steps were done in analyzing the data, namely: (1) The data was examined from the questionnaire; (2) The questionnaire divided into groups; (3) The data was classified and tabulated the percentage to know the frequency of each alternative answer given by respondents; (4) The data was calculated by using descriptive statistics. The formula of percentage:

$$P = \frac{fo \times 100\%}{n}$$

fo = Frequency observed

n = The number of sample

(5) The calculation is putting the data on the table which consist of the number of alternative answer, option frequency, and percentage. It used to show the percentage of the answer that classified into groups; (6) Percentage of each answer is put on figure to show the percentage of each answer.

1.8 Organization of the Paper

This study is organized into five chapters as follows: chapter I provides the Background of the study, Statement of the problems, The Aims of the Research, Significance of the Research, Limitation of the Research, Clarification of Terms, Research Methodology, and Organization of the Paper.

Chapter II focuses on literature review which provides information to investigate research problem, there are: English as a Foreign Language (EFL), The Definitions of English for Specific Purposes (ESP), The Characteristics of ESP, Variable and Absolute Characteristics, The ESP Course Design, The Approaches to ESP Course Design, The Stages of ESP Course Design, The Teaching of English for Science and Technology, Syllabus, The Criteria of the Syllabus, Lesson Plan, Materials Development, Teaching Strategies, the English for Science and Technology classroom, Learner Roles, Task Based Learning, The Research on EST Teaching

In Chapter III, Methodology describes Research Design, Research Site, Population and Samples, Procedure of Data Collection, Interview, Classroom Observation, Questionnaire, Document Analysis, Technique of Data Analysis and Trustworthiness. After conducting research, the writer explained the data on the Chapter IV Findings and Discussion tried to find the answer of all research questions such as Syllabus Applied by the Lecturer, Teaching Strategies applied by the Lecturer, and Students responses to the given tasks. The last chapter is Chapter V consists of the Conclusions and Suggestions.