

## **CHAPTER III**

### **RESEARCH METHODOLOGY**

This chapter discusses the research methodology which includes the research design, the data collection, the data analysis, and the limitations of the present study. The research design provides the theoretical framework on which the research is based on, the purposes of the research, and the research site and participants.

#### **3.1 Research Design**

This present study is in the domain of applied linguistics, especially in ESP. ESP is an approach to language teaching which aims to meet the needs of particular learners. Some experts, including McDonough (1984), Hutchinson and Waters (1987), Robinson (1980 & 1991), Jordan (1997), Dudley-Evans and St John (1998), agree that the key stages in ESP are needs analysis, course (and syllabus) design, materials selection (and production), teaching and learning, and evaluation. The five stages can actually be contracted into three phases: needs analysis, course design, and application. ESP therefore begins with identifying learners' needs, and then designing a course on the basis of the needs, and finally the practical application of the course design. Learners' needs may include objective and subjective needs (Brindley, 1989; Robinson, 1991) or perceived and felt needs (Berwick, 1989; Dudley-Evans & St John, 1998). Course design is the process by which the raw data about learners' needs are interpreted in order to produce an integrated series of teaching-learning experiences, whose ultimate aim is to lead the learners to a particular state of knowledge. This entails the use of the theoretical and empirical information available to produce a syllabus, to select, adapt or write materials in

accordance with the syllabus, to develop a methodology for teaching those materials and to establish evaluation procedures by which progress towards the specified goals will be measured. The course design is based on the principles suggested, among others, by Taba (1962), Dubin & Olshtain (1986), Hutchinson & Waters (1987), Robinson (1991), Graves (1996, 2000), Jordan (1997), Diamond (2008), and Nation & Macalister (2010).

The ultimate aim of this present study is to propose a design for the English course at the university level. To achieve the intended aim, the researcher would do three main sets of activities. First, this present study began with library research to find out the concept of ESP and to review literature on ESP and previous related studies. Second, on the basis of the theory, needs analysis was conducted in order to identify the needs of the students and other concerned parties including the language instructors, the heads of departments and study programs, the heads of the faculty, and the head of university's language institute. Third, the results of needs analysis would be analyzed and interpreted to produce a course design appropriate for the students.

This present study used questionnaire, interviewing, observation, and review of documents as the data collection methods, as suggested by Patton (1990), Brannen (1992), Marshall & Rossman (1995), Maxwell (1996), Bogdan & Biklen (1998), Wray *et al.* (1998), Glesne (1999), and Silverman (2005). The data were analyzed quantitatively and qualitatively. Descriptive statistics were used to present the data quantitatively in the form of percentage.

The study was conducted at a state university in South Sumatra, Indonesia. The university has ten faculties and the school of postgraduate studies. The faculties include Faculty of Economics, Faculty of Law, Faculty of Engineering, Faculty of Medicine,

Faculty of Agriculture, Faculty of Teacher Training and Education, Faculty of Social and Political Science, Faculty of Mathematics and Natural Sciences, Faculty of Computer Science, and Faculty of Public Health.

Due to easy accessibility and institutional support, the researcher focused the study on the Faculty of Teacher Training and Education. The faculty has three departments with twelve study programs: Department of Language and Arts Education with two study programs (Indonesian Language and Literature Education Study Program, and English Education Study Program), Department of Social Sciences Education with three study programs (Civics Education Study Program, History Education Study Program, and Economics/Accounting Education Study Program), Department of Mathematics and Natural Sciences Education with four study programs (Mathematics Education Study Program, Physics Education Study Program, Chemistry Education Study Program, and Biology Education Study Program), and three other separate study programs (Health and Physical Education Study Program, Guidance & Counseling Education Study Program, and Mechanical Engineering Education Study Program).

There are two campuses where the students of the faculty can study: Indralaya main campus and Palembang campus. Indralaya main campus is located in Ogan Ilir, about 38 kilometers to the southern part of the city of Palembang. Palembang campus is located in Bukit Besar, Palembang. There are two locations of Palembang campus: Bukit Besar and Ogan. Bukit Besar location holds classes for the students of English Education Study Program, Indonesian Language and Literature Education Study Program, Guidance & Counseling Education Study Program, and Health & Physical Education Study Program; while Ogan location accommodates the students of other than the four study programs. The

faculty opens student enrollment for both campuses; therefore, each study program may have one class of students on Indralaya main campus and one or more parallel classes on Palembang campus.

At the Faculty of Teacher Training and Education, English is a compulsory 2-credit course for the freshmen in the first or second semester, except for the students of English Education Study Program; and the course is coordinated by the university's Language Institute. On Indralaya campus, the students have English classes at the language institute, while the students in Palembang have English classes on their respective locations. Due to the constraint of time, the researcher took the study programs which offer the course in the second semester, namely Mathematics Education, Biology Education, History Education, Economics/Accounting Education, Civics Education, Guidance & Counseling Education, and Health & Physical Education Study Programs. In terms of study program, there were 7 classes in Indralaya and 8 classes in Palembang. Table 3.1 shows the number of classes and students. The number of students here indicates the actual number of second-semester students who were present at the time when they filled out the questionnaire in class. Some classes had sixth-semester and eighth-semester students who re-took the English course. In Indralaya, one class of Economics/Accounting Education had 17 sixth-semester students; and one class of Guidance & Counseling Education had 2 eighth-semester students. In Palembang, the class of Biology Education had 6 sixth-semester students; one class of Health & Physical Education had 4 sixth-semester students and 1 eighth-semester student; the other class of Health & Physical Education had 5 sixth-semester students. All the sixth and eighth semester students were allowed to fill out the questionnaire; however, for the sake of data homogeneity, they were excluded from the data analysis.

Table 3.1 Number of Classes and Students

Campus	Study Program	Number of Classes	Number of Students
<b>Indralaya</b>	Mathematics Education	1	36
	History Education	1	38
	Economics/Accounting Education	2	15, 30
	Guidance & Counseling Education	2	17, 28
	Health & Physical Education	1	31
<b>Palembang</b>	Mathematics Education	1	33
	Biology Education	1	12
	History Education	1	8
	Economics/Accounting Education	1	34
	Civics Education	1	8
	Guidance & Counseling Education	1	20
	Health & Physical Education	2	33, 35
<b>Total Number</b>		15	378

The students participating in this study were 378 second-semester students of 7 study programs in 15 classes. Besides the students, some stakeholders involved in the English course were included as the research participants. There were 10 language instructors, 7 heads of study programs, 2 heads of departments, 2 faculty's heads, and the head of the university's language institute.

Although there were altogether 15 classes, only 10 language instructors taught the classes. Five instructors taught one class each whether in Indralaya or in Palembang. Five other instructors taught 2 classes each, whether two Indralaya classes or two Palembang classes or one Indralaya class and one Palembang class. Table 3.2 shows the distribution of instructor's teaching load.



Table 3.2 Distribution of Instructor's Teaching Load

No	Instructor's Initials	Sex (M/F)	Number of Classes	Classes (Study Programs)
1	AS	F	1	Health & Physical Education (Indralaya)
2	HWA	F	1	Guidance & Counseling Education (Indralaya)
3	RH	F	1	Guidance & Counseling Education (Palembang)
4	YV	F	1	Mathematics Education (Indralaya)
5	ZAN	M	1	Biology Education (Palembang)
6	Al	M	2	Civics Education (Palembang) Health & Physical Education (Palembang)
7	Er	F	2	Economics/Accounting Education (Indralaya) Health & Physical Education (Palembang)
8	Ev	F	2	History Education (Indralaya) Guidance & Counseling Education (Indralaya)
9	MY	M	2	History Education (Palembang) Mathematics Education (Palembang)
10	Zu	F	2	Economics/Accounting Education (Indralaya) Economics/Accounting Education (Palembang)
Total			15	

Besides the students and the instructors, the parties who should also be responsible for determining the objectives and designing the courses conceptually at the faculty are the faculty's head, the heads of departments, the head of study programs, and the head of language institute (in case of language courses). The persons in the faculty's management included in this study as the participants are as follows:

- Dean of the Faculty of Teacher Training and Education
- Associate Dean for Academic Affairs
- Head of the University's Language Institute
- Head of Social Sciences Education Department
- Secretary of Mathematics & Natural Sciences Education Department
- Head of Mathematics Education Study Program
- Head of Biology Education Study Program

- Head of History Education Study Program
- Head of Economics/Accounting Education Study Program
- Head of Civics Education Study Program
- Head of Guidance & Counseling Education Study Program
- Head of Health & Physical Education Study Program

### 3.2 Methods of Data Collection

Qualitative research method was selected for this study. Questionnaire, interviewing, observation, and review of documents were the research tools for data collection, as suggested by Johnson (1992), Nunan (1992), Marshall & Rossman (1995), Maxwell (1996), McDonough & McDonough (1997), Bogdan & Biklen (1998), Creswell (1998), Wray *et al.* (1998).

Triangulation refers to collecting information from a diverse range of individuals and settings, using a variety of methods to corroborate each other (Denzin, 1978; Patton, 1990; Glense & Peshkin, 1992; Cohen & Manion (1994); Marshall & Rossman, 1995; Mason, 1996; Bogdan & Biklen (1998). The term which originally comes from the application of trigonometry to navigation and surveying was first borrowed in the social sciences to convey the idea that to establish a fact you need more than one source of information. Typically, this process involves corroborating evidence from different sources to shed light on a theme or perspective (Creswell, 1998: 202). Many sources of data are better in a study than a single source because multiple sources lead to a fuller understanding of the phenomena being studied. According to Alwasilah (2006), triangulation of interview and observation is needed to provide a complete and accurate account of an event. Furthermore, Maxwell (1996: 76) states:

Observation often enables you to draw inferences about someone's meaning and perspective that you couldn't obtain by relying exclusively on interview

data. This is particularly true of getting at tacit understandings and theory-in-use, as well as aspects of the participants' perspective that they are reluctant to state directly in interviews. ... Conversely, interviewing can be a valuable way (the only way, for events that took place in the past or ones to which you cannot gain observational access) of gaining a description of actions and events. These can provide additional information that was missed in observation and can be used to check the accuracy of the observation.

In this research, the triangulation of different data-collection techniques (questionnaire, interviewing, observation, and review of documents) was used to mutually corroborate or verify the data obtained from the different instruments in order to answer the research questions. Denzin (1978) calls this type of triangulation as methodological triangulation, the use of different methods on the same object of study.

With regard to the first research question, the techniques of data collection were questionnaire, interviewing, non-participant observation, and review of documents. The questionnaire was used to collect some data of the present conditions of the English course. The participants, including the head of the language institute, the course coordinator, the dean of the faculty, the associate dean for academic affairs, the heads of departments, the heads of study programs, and the course instructors, were interviewed individually to find out further necessary information of the present English course in terms of such aspects as institutional goals, class management, instructional materials, instructors, teaching methodology, and evaluation. Furthermore, he observed the teaching and learning process in the classroom to obtain additional information and/or to verify the data obtained from the questionnaire and interview. The researcher also reviewed some documents, such as the course syllabi, course books, and tests, in order to support the data obtained from the other instruments.



With regard to the second research question, the techniques of data collection were questionnaire and interviewing. The questionnaire was used to collect the data related to the students' needs analysis which includes target situation analysis, present situation analysis, strategy analysis, and deficiency analysis. The participants (the head of the language institute, the course coordinator, the dean of the faculty, the associate dean for academic affairs, the heads of departments, the heads of study programs, and the course instructors) were interviewed individually to find out their expectations of the course.

In sum, the data were collected through (a) a questionnaire given to 378 students in 15 classes, (b) interviews with the instructors, the heads of departments/study programs, the faculty's heads, the language institute head, (c) observations in the classroom, and (d) review of the documents. The following subsections describe the research instruments in detail

### **3.2.1 Questionnaire**

Questionnaires are any written instruments that present respondents with a series of questions or statements to which they are to react either by writing out their answers or selecting from among existing answers (Brown, 2001: 6). Questionnaire is used to learn about the distribution of characteristics, behaviors, attitudes, or beliefs (Marshall & Rossman, 1995; Dörnyei, 2003). Questionnaire typically entails several questions that have structured response categories and may include some that are open-ended (Marshall & Rossman, 1995: 96). The questionnaire used in this present study has closed-ended questions in which the respondent is provided with ready-made response options to choose from, normally by encircling or ticking one of them or by putting an X in the appropriate

slot/box. The answers from the fixed-choice questions may lend themselves to simple tabulation. The present questionnaire is a modification from the one designed by Papageorgiou (2007) for the respondents of Hellenic Air Force Officers at the School of Foreign Languages, in the Hellenic Air Force Academy, Greece, in order to find out their English language needs. Some items in the previous questionnaire were deleted, added, and/or modified to suit the conditions of the present study. For example, the items in the previous questionnaire on nationality, English language certification, mastery of other foreign languages, social relations within occupational contexts, and briefing/debriefing of flights, were deleted in the present questionnaire. The items on the present English course were added in the present questionnaire. In some items, *promotion* was changed into *examination requirement*, *understanding foreign pilots on the radio* into *understanding English broadcasting* in the present questionnaire.

The present questionnaire (Appendix 3.1) has 4 main parts and consists of 8 pages of A4 size paper. The main parts of the questionnaire are as follows:

- General Instruction, which gives the title of the study, the purposes of the questionnaire, and the request to give brief but clear answers
- Time and Venue, which asks the respondents to fill in the day/date, time and venue, when and where they are asked to fill out the questionnaire
- Questions, which consist of six categories: respondent's profile, English course, target situation analysis, present situation analysis, learning needs analysis, deficiency analysis
- Final 'thank you', which thanks the respondents for their time and information, and requests the respondents to spare their time for further information if needed.

There are altogether 49 questions in the questionnaire: 9 items for the respondent's profile, 15 items about the English course, 5 items for the target situation analysis, 8 items for the present situation analysis, 10 items for the learning needs analysis, and 2 items for

the deficiency analysis. The respondent's profile includes the name, age, sex, study program, department, semester, senior high school, TOEFL prediction score, and interest to learn English. The English course subsection includes 5 items about what the instructor did at the beginning of the course, 5 items about the instructional materials, and 5 items about the teaching and learning activities. All the questions on the English course are true-false items. The target situation analysis subsection has 3 rating-scale items and 2 checklist items, asking about the students' reasons to study English for the future, their perception of the importance of English, the importance of oral accuracy, how often they need to write reports/technical documents/papers in English, and their immediate future needs. The present situation analysis subsection has 2 true-false items, 1 multiple-choice item, 3 rating-scale items, 1 checklist item, and 1 rank-order item, asking about the students' assessment of their language skills, language aspects, reading skills, their perception of important language skills, how they like to participate in the English course, whether the English course gives them some new knowledge, how they like the instructional materials, their reasons to study English at present. The learning needs analysis subsection has 1 true-false item, 2 multiple-choice items, 3 rating-scale items, 2 checklist items, and 2 rank-order items, asking about the students' learning preferences of place, activity, instructor, language skills, feedback, media, and time. The deficiency analysis subsection has 1 rating-scale item and 1 checklist item, asking about the students' learning difficulties and their needs for practice.

The respondent's profile, target situation analysis, present situation analysis, learning needs analysis, and deficiency analysis subsections aim at finding out the students' language needs in order to answer the second research question, while the English course

subsection aims at partly finding out the present practice of the course in order to answer the first research question. Table 3.3 shows the structure of the questionnaire.

Table 3.3 Structure of the Questionnaire

No	Main Parts		
1	General Instruction		
2	Time and Venue		
3	Questions	Subsections	Item Types
			Number of Items
		Respondent's Profile	Fill-in 9
		English Course	True-False 15
		Target Situation Analysis	Rating-Scale 3
			Checklist 2
		Present Situation Analysis	True-False 2
			Multiple-Choice 1
			Rating-Scale 3
			Checklist 1
			Rank-Order 1
		Learning Needs Analysis	True-False 1
			Multiple-Choice 2
			Rating-Scale 3
			Checklist 2
			Rank-Order 2
		Deficiency Analysis	Rating-Scale 1
			Checklist 1
		Total Items	49
4	Final 'thank you'		

The questionnaire and the interview guides (in Subsection 3.2.2) had been consulted to and verified by the academic supervisors and the advisor Kathleen A. Romstedt, Ph.D. of the Ohio State University during the Doctoral Sandwich-Like Program funded by the Directorate General of Higher Education (DGHE), the Ministry of National Education, the Republic of Indonesia through a financial scheme of the National Development Budget and the Department of National Education. She is a clinical educator and M.Ed. program

manager at the School of Teaching and Learning, College of Education and Human Ecology, the Ohio State University, Columbus, U.S.A.

The students filled out the questionnaire in the classroom during the class. Some instructors allowed this data collection at the beginning of the class and continued the teaching and learning activities afterwards, while the other instructors preferred to have class first and then allocated some time for this activity towards the end of the class. The time needed for the students to fill out the questionnaire was 30 minutes on the average.

### **3.2.2 Interview**

An interview is a purposeful conversation, usually between two people but sometimes involving more, that is directed by one in order to get information from the other (Bogdan & Biklen, 1998: 93). The interview used in this study is the structured interview. In this type of interview, “the agenda is totally predetermined by the researcher, who works through a list of set questions in a predetermined order” (Nunan, 1992: 149). The data collection through questionnaire and interview was administered with a high degree of explicitness which involved the use of formal and structured types of questions formulated in advance (Seliger & Shohamy, 1989; Sommer & Sommer, 1991). Although an interview guide is employed, the interviewer has considerable latitude to pursue a range of topics and offer the subject a chance to shape the content of the interview.

There are 2 forms of interview guides, one for the instructors of the English course (Appendix 3.2) and the other for the faculty’s management (the dean, associate dean for academic affairs, head of university’s language institute, heads of departments and study programs) (Appendix 3.3). These interview guides are a modification from those designed



by Kusni (2004) for his study. For example, the items in the previous interview guide for the instructors on technical vocabulary, language-skills focus, and instructor's professionalism, were deleted in the present interview guide. The items in the previous interview guide for the faculty's management on syllabus preparation and student assessment, were deleted; however, the item on whether the course should be ESP or EAP was added in the present interview guide.

The interview guide for the instructors has 4 main parts and consists of 4 pages of A4 size paper. The main parts of the interview guide for the instructors are as follows:

- Introduction, which gives the title of the study, the purpose of interview, and the request to give clear answers
- Time and Venue, which provides the day/date, time and venue, when and where the interview is taking place
- Questions, which consists of ten categories: respondent's profile, importance of the English course, students' proficiency, course objectives, needs analysis, course preparation, instructional materials, teaching and learning activities, evaluation, and facilitating/inhibiting factors and suggestions
- Final 'thank you', which thanks the respondent for the time and information, and requests the respondent to spare his/her time for further information if needed.

The questions on several topics in the interview guide provide some information about the respondents and their knowledge and opinions of the English course. The respondent's profile gives the name, sex, age, field of study, educational background (undergraduate/master/doctor, place and year of graduation), experience in teaching the course, and special training. The importance of the English course includes the process and the parties in deciding the course as compulsory, and the importance of the course for the students in terms of language skills and aspects. The students' proficiency includes the instructor's awareness of students' pre-course English mastery in terms of language skills

and aspects. The topic of course objectives provides the information of what the course objectives are, who determines the objectives, and whether 2 credit-hours is enough. The needs analysis includes, if there was one, who and how to conduct it, and what the results were. The course preparation includes who prepared the syllabus, whether the students had the syllabus at the beginning of the course, and whether the instructor reviewed or evaluated the syllabus. The topic of instructional materials includes the kinds of materials and the focus of the materials on certain language skills or aspects. The topic of teaching and learning activities gives the information of types of activities and assignments, and the students' participation. The evaluation includes the students' assessment and course evaluation (what aspects to evaluate, who evaluates, how to design the course). Finally, in the facilitating/inhibiting factors and suggestions, the instructors give their personal opinions and suggestions for the course at the implementation level.

The interview guide for the faculty's management has a similar format as that for the instructors. Similarly, the interview guide for the faculty's management has four main parts (Introduction, Time and Venue, Questions, and Final 'thank you'); however, some topics and questions in the section 'Questions' are different. The questions in the interview guide for the faculty's management include nine categories: respondent's profile, importance of the English course, students' proficiency, course objectives, needs analysis, *instructors*, instructional materials, evaluation, and facilitating/inhibiting factors and suggestions. Apart from the importance of the English course, students' proficiency, instructional materials, and facilitating/inhibiting factors and suggestions (which have the same questions as those for the instructors), the course objectives and the needs analysis have additional questions. In the course objectives, the possibility of ESP or EAP course is

also included; and the needs analysis also includes who should design the course and why. In the respondent's profile, teaching experience and special training are excluded, but employee's rank and position are included. In the evaluation, the students' assessment is excluded as it is within the discretion of the instructors. The topic of instructors gives the information on the types and choice of instructors and the possibility of team teaching.

Apart from the respondent's profile, there are 32 questions altogether in the interview guide for the instructors, and 30 questions in the interview guide for the faculty's management. However, it should be noted that not all the questions might be asked in the actual interview. For example, in some instances, when asked whether a needs analysis had been conducted for the course and the respondent answered 'No', then the next questions ('How was it conducted? What were the results?') would not be asked. When the respondent answered 'No' to the question 'Has the course ever been evaluated before?', then he/she would not be probed more deeply with the questions 'What aspects were being evaluated? Who were involved in the evaluation?'. In other instances, another respondent might answer a question at great length so that he/she would actually answer the next questions that would be asked to him/her.

The individual interviews with the respondents were usually based on an appointment. The interviews with the instructors took place outside the class in the lecturer room in Indralaya and/or Palembang, and the interviews with the faculty's management took place in their respective offices during the office hours. As the researcher knows the respondents, we generally got right down to business when we met. During the interview, the respondent also had the interview guide to look at so that he/she knew the topics of interview. No video/audio recorder was present during the interviews, intending to put the

respondents at their ease to express themselves. The researcher took notes during the interview and completed the notes after the session. The time needed for the interview was 30 minutes on the average.

### 3.2.3 Observation

Observation refers to the collection of data without manipulating it; “the aim is to gather first-hand information about social processes in a naturally occurring context” (Silverman, 1993: 11); “the researcher simply observes ongoing activities, without making any attempt to control or determine them” (Wray *et al.*, 1998: 186). Observation entails the systematic noting and recording of events, behaviors, and artifacts (objects) in the social setting chosen for study (Marshall & Rossman, 1995: 79). The observation used in this study is the non-participant observation in which the researcher makes no effort to have a particular role, or the researcher is to be tolerated as an unobtrusive observer, ‘invisible’ to the subjects. In this respect, the researcher is expected to observe or gather data without interfering in the ongoing flow of everyday events.

There were 10 observations in this study as there were 10 instructors of the English course. The researcher observed the classroom activities one time for each instructor. Each class usually lasted 100 minutes as it is a 2-credit course. The observation procedure is as follows. First, the researcher asked permission to and made an appointment with each instructor to have an observation in his/her class. At the appointed time, the researcher waited for the instructor and we entered the class together. Some instructors might re-introduce the researcher to the students, but some other directly asked the researcher to have a seat. There was actually no need to have re-introduction as the students had known

the researcher in the questionnaire session. All the observations took place within weeks after the students filled out the questionnaire. The researcher usually sat at the back of the classroom in a theatre-seating arrangement or at one corner in a u-shaped seating arrangement. The researcher tried to be 'invisible' to the instructor and students. During the observation, the researcher took notes of what happened in the class. After the class, the researcher thanked the instructor and students, and completed the fieldnotes outside the class if necessary.

The results of observation are fieldnotes. Fieldnotes refer to the written account of what the researcher hears, sees, experiences, and thinks in the course of collecting and reflecting on the data in a qualitative study (Bogdan & Biklen, 1998: 107-108). Fieldnotes consist of two kinds of materials: descriptive and reflective. (Bogdan & Biklen, 1998; Creswell, 1998). The descriptive part of fieldnotes provides a word-picture of the setting, people, actions, and conversations as observed; the reflective part gives a more personal account of the course of the inquiry, which captures the observer's frame of mind, ideas, and concerns. The reflective part of fieldnotes is designated by the notation of "O.C.", which stands for *observer's comment*.

The fieldnotes in this study are in narrative form. The researcher focused on the description of classroom activities, which consists of the activity type, the participant organization, the content, the student modality, the materials, and the physical setting. The first five aspects are the principal features of Part A of the COLT (Communicative Orientation of Language Teaching) observation scheme developed by Long (1980), Chaudron (1988), Spada & Fröhlich (1995). The COLT consists of two parts: Part A which focuses on classroom activities and Part B which relates to classroom language. The



communicative features in Part B include the use of target language, information gap, sustained speech, reaction to code or message, incorporation of preceding utterance, discourse initiation, and relative restriction to linguistic form.

The fieldnotes, therefore, include the information about what the activity type was (lecture, discussion, roleplay, etc.), whether the teacher was working with the whole class and/or whether the students worked individually or in groups, whether the focus was on language form/function and who selected the topic, whether the students were involved in a certain language skill or a combination of skills, what types of materials were used, and what the seating arrangement was. The fieldnotes would partly answer the first research question on the present practice of the English course, especially on the aspects of teaching methodology, class management, and instructional materials. As the focus of the inquiry had been determined, the researcher would not seek to report ‘everything’ in the fieldnotes. Wolcott (1990: 35) states that “the critical task in qualitative research is not to accumulate all the data you can, but to ‘can’ (get rid of) most of the data you accumulate. This requires constant winnowing”. Winnowing the data refers to reducing the data to a small manageable set of themes to write into the final narrative.

### **3.2.4 Review of Documents**

Review of documents is “an unobtrusive method, one rich in portraying the values and beliefs of participants in the setting” (Marshall & Rossman, 1995: 85). Documents may include minutes of meetings, formal policy statements, letters, archival records, logs, syllabi, lesson plans, textbooks, etc. Silverman (2005: 160) states that, in qualitative research, researchers use documents or texts to depict ‘reality’ and small numbers of texts

and documents may be analyzed to understand the participants' categories and to see how these are used in concrete activities.

The documents collected in the present study include policy documents, syllabi and lesson plans, instructional materials, and tests and student test records. The documents were obtained from the university's language institute as the coordinator of the English course. All these documents could be classified as official institutional documents. There were no personal documents and popular culture documents.

Bogdan & Biklen (1998) classify documents into three main types: personal documents, official documents, and popular culture documents. Personal documents are those produced by individuals for private purposes and limited use, such as letters, diaries, autobiographies, family photo albums and other audio/visual recordings. Official documents are produced by an organization for record-keeping and dissemination purposes, such as memos, minutes of meetings, newsletters, policy documents, proposals, students' records, brochures and the like. Popular culture documents are those produced for commercial purposes to entertain, persuade, and enlighten the public, such as commercials, TV programs, news reports and audio/visual recordings.

The official institutional documents collected are as follows:

- (a) the decree of the rector of the university on the organization and working hierarchy of University's Language Institute
- (b) the decree of the rector of the university on the minimal TOEFL scores which should be achieved by the students at the faculties/programs of the university
- (c) the syllabus for the students of natural sciences and the syllabus for the students of social sciences
- (d) lesson plans for reading materials
- (e) the two coursebooks used in the classroom
- (f) the TOEFL-like results of the students of the Faculty of Teacher Training and Education in the academic year 2009/2010, dated on September 4, 2009
- (g) the English mid-semester and semester tests in the even semester 2009/2010

(h) the students' final grades for the English course in the even semester 2009/2010

### 3.3 Methods of Data Analysis

Data analysis is the process of bringing order, structure, and meaning to the mass of collected data (Marshall & Rossman (1995: 111). Analysis involves working with data, organizing them, breaking them into manageable units, synthesizing them, searching for patterns, discovering what is important and what is to be learned, and deciding what you will tell others (Bogdan & Biklen, 1998: 157). In general, the data of this present study were analyzed in three phases of data transformation advanced by Wolcott (1994): description, analysis, and interpretation. Wolcott (1990: 28) believes that a good starting point for writing a qualitative report is to describe the setting:

Description is the foundation upon which qualitative research is built .... Here you become the storyteller, inviting the reader to see through your eyes what you have seen.... Start by presenting a straightforward description of the setting and events. No footnotes, no intrusive analysis — just the facts, carefully presented and interestingly related at an appropriate level of detail.

The analysis procedure is the search for patterned regularities in the data. Analysis involves highlighting specific material introduced in the descriptive phase or displaying findings through tables, charts, diagrams, and figures. In the interpretation, the researcher goes beyond the database and probes “what is to be made of them” (Wolcott, 1994: 36), and “draws inferences from the data or turns to theory to provide structure for his or her interpretations” (Creswell, 1998: 153). Interpretive act is a process of bringing meaning to raw, inexpressive data. Raw data have no inherent meaning; the interpretive act brings

meaning to those data and displays that meaning to the reader through the written report (Marshall & Rossman, 1995: 113).

The data analysis in this study was predominantly inductive and eclectic in nature. Inductive data analysis involves arguing from particular facts or data to a general theme or conclusion. The data analysis is eclectic in which the researcher analyzing the data employs an electric mix of the available analytical tools that best fit the data set under considerations. Teddie & Taskhakkori (2009: 252) state that researchers frequently gather information from a variety of sources; therefore, they often have to employ more than one type of analysis to accommodate the differences among the sources. Denzin & Lincoln (2005: 4) refer to qualitative researchers as bricoleurs, who employ a wide range of available data collection methodologies and analysis strategies.

The data obtained from the questionnaire were presented in tabulations. Dörnyei (2003: 14) states that the typical questionnaire, with most items either asking about very specific pieces of information or giving various response options for the respondent to choose from, will produce the data particularly suited for quantitative, statistical analysis. In this case, graphic formats such as frequency tables and graphs were used to display the descriptive statistics, as suggested by Strauss (1987), Miles & Huberman (1993 & 1994), and Creswell (1998). Marshall & Rossman (1995: 128) believe that data display could promote analysis and could also summarize the results of analysis.

To answer the first research question on the present practice of the English course, the researcher categorized the data in terms of such aspects as the institutional goals, class management, instructional materials, instructors, teaching methodology, and evaluation. The questionnaire data on the English course, the interview data, the classroom

observation data, and the data from documents were mutually corroborate to give a portrait of the present English course. Tables and graphs might be generated to display the data; however, the analysis would mostly be in descriptive narrative form. In the analysis, the researcher would also draw connections between the data and the theoretical framework.

As for the data collected to answer the second research question on the students' needs, the questionnaire data were described in terms of the subcategories of needs analysis, namely the target situation analysis, the present situation analysis, the learning needs analysis, and the deficiency analysis. The needs analysis would include the interview data from the instructors and faculty's management in order to find out the faculty's expectations of the English course. As the interviews were structured with a list of set questions in a predetermined order, the data obtained might be presented quantitatively in numbers and/or qualitatively in narrative form.

The results of analysis and interpretation would be used as the basis of a course design proposed for the English language teaching at the faculty. The course design was based on the principles suggested, among others, by Taba (1962), Dubin & Olshtain (1986), Hutchinson & Waters (1987), Robinson (1991), Brown (1995), Graves (1996, 2000), Jordan (1997), Diamond (2008), and Nation & Macalister (2010).

### **3.4 Limitations of the Study**

The present study has several limitations in some aspects. In terms of the student participants, this study did not include all the undergraduate students from all the study programs at the faculty. Out of 11 study programs (excluding the English Education Study Program) which have the compulsory English course in their curricula, this researcher took



seven study programs which offer the course in the second semester, namely Mathematics Education, Biology Education, History Education, Economics/Accounting Education, Civics Education, Guidance & Counseling Education, and Health & Physical Education Study Programs. Although not all the freshmen were included in the study, the student participants of the seven study programs had represented the students of social sciences and natural sciences.

The study is also limited in terms of the research site in which the data was collected, that is the Faculty of Teacher Training and Education, not including all the faculties of the university. The university has 10 faculties, namely Faculty of Economics, Faculty of Law, Faculty of Engineering, Faculty of Medicine, Faculty of Agriculture, *Faculty of Teacher Training and Education*, Faculty of Social and Political Science, Faculty of Mathematics and Natural Sciences, Faculty of Computer Science, and Faculty of Public Health. Besides the practical reasons of accessibility and institutional support for selecting the Faculty of Teacher Training and Education, the exclusion of other faculties was based on objective reasons. Each faculty has its own characteristics and its own perspectives on the importance of English for its students. For example, the Faculty of Medicine allocates 6-credit hours for the English course and the minimal TOEFL-score requirement for its graduates is 450, while the Faculty of Teacher Training and Education provides only a 2-credit-hour English course and requires its graduates to have the minimal TOEFL-score of 400.

Lastly, the main limitation of the present study concerns the practical application of the course design as the end-product of the study. As discussed in the previous chapter, ESP begins with identifying learners' needs, and then designing a course on the basis of the

needs, and finally the application of the course design. Following the stages in ESP, this study began with identifying the specific needs of the students through needs analysis. The needs analysis also included the faculty's views of the English course. Then, this study gave a portrait of the present English course. On the basis of the results of needs analysis, a new English course was designed to meet the specific needs of students. The course design includes the course rationale, goals, and objectives, the syllabus, the materials, the learning activities, the monitoring and assessment, and the course evaluation. All these stages are reflected in the research questions and purposes. However, because of the time constraint, this study stops at the course design, and does not continue to the implementation of the course design. This study, therefore, could not tell the effectiveness of the course in practice. However, the course has been designed on the basis of required data and process, and the course is intended for the students of the institution under the investigation, not for other institutions.