

## **CHAPTER II**

### **THEORETICAL FOUNDATION**

The previous chapter explained about the introduction of this research. This chapter discusses the English as a foreign language, definitions of English for specific purposes, characteristics of ESP, ESP course design, and the teaching of English for science and technology. All of those theories are used to analyze data obtained in this study.

#### **2.1 English as a Foreign Language**

Since English becomes the language that is used in teaching and learning process, English is increasingly being used as a tool for interaction among non-native speakers. “Over one half of the one billion English speakers of the world learned English as a second (or a foreign) language. Most English language teacher across the globe are nonnative English speakers, which means that the norm is not monolingualism, but bilingualism” (Brown, 2001: 118).

The explanation above relevant to Brown (2001: 118) that “English is not frequently learned as a tool for understanding and teaching United States (US) or British cultural values, instead, English has become a tool for international communication in transportation, commerce, banking, tourism, technology, diplomacy and scientific research”. It indicates that people need language to express their variety purposes in their activity.

Based on the data above, people should consider the language policies and programs in education that are different in every country. Certain country has an official policy toward English such as English as a Mother Tongue (EMT) like in the United Kingdom (UK), English as a Second Language (ESL) found in Singapore, Malaysia, etc, and English as a Foreign Language (EFL) that is now applied in Japan, Indonesia, Thailand, etc.

In Second Language Acquisition (SLA), people need to acquire the English language through the relevant setting. It is pointed out that “SLA is not intended to contrast with the foreign language it used a general terms that embraces either untutored (or ‘naturalistic’) acquisition and tutored (or ‘classroom’) acquisition” (Ellis, 1987: 5).

In line with the practice of English in the classroom, Brown (2001: 116) defines that:

Second language learning contexts are those in which the classroom target language is readily available out there... 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.

On the contrary, some people do not agree with making a distinction between ESL and EFL. As shared by Krashen (1985: 8) cited in Setiyadi (2006: 21) “Differentiates the two different ways of gaining a target language: “acquisition” and “learning”. Acquisition defined as a subconscious process that is identical to the process used in first language acquisition in all important ways, while learning defined as conscious knowing about the target language”.

English is not a first language for the EFL learners so the learners find it rather difficult to learn another language besides their mother tongue because it needs more practice.

Afterwards the students find it difficult to motivate them in learning English because they did not get used to it in daily life, as Brown (2001: 117) states “Intrinsic motivation is a big issue, since students may have difficulty in seeing the relevance of learning English. Their immediate use of language may seem far removed from their own circumstances, and classroom hours may be the only part of the day when they are exposed to English”. Gardner and Lambert (1972) as cited in Setiyadi (2006: 28) classify motivation in learning a foreign language under two types, first is integrative motivation (motivation to integrate to another culture), and the second is instrumental motivation (motivation to acquire a language as a mean for attaining instrumental goals: furthering career, getting a job, and so forth. The above motivation is the reason why people need ESP to relate their needs and purpose in learning English.

In addition, Brown (2001: 117) puts forward some guidelines to help the EFL practitioners balance the lack of really communicative situations outside the classroom as follows:

- (1) Use class time for optimal authentic language input and interaction
- (2) Don't waste class time on work that can be done as homework
- (3) Provide regular motivation-stimulating activities
- (4) Help students to see genuine uses for English in their own lives
- (5) Play down the role of tests and emphasize more intrinsic factor
- (6) Provide plenty of extra-class learning opportunities, such as assigning an English-Speaking movie, having them listen to an English-Speaking TV or radio program, getting an English-Speaking conversation partner, doing outside reading (news, magazine, books), writing a journal or diary in English on their learning process
- (7) Encourage the use of learning strategies outside class
- (8) Form a language club and schedule regular activities.

It concludes that English is being used as a tool for interaction among non-native speakers so people should consider the language policies and programs in education that are different in every country. Because of EFL learning is different from ESL in the way of getting the target language in term of some varieties in learning purposes; the learners at least have the motivation in learning English.

As the expansion of EFL teaching and learning process, ESP continuous to develop into various specialization subjects, whereas EST is one of the expansion which hold mainly important role in the development of ESP.

## **2.2 The Definitions of English for Specific Purposes**

Based on Hutchinson and Waters (1994: 19), English for Specific Purposes (ESP) is defined as follows “ESP is an approach to language teaching in which all decisions as to content and method are based on the learner’s reason for learning”. Several other definitions of ESP offered by the experts in the field of this branch of ELT, among others are:

Hutchinson and Waters (1994: 19):

ESP must be seen as an approach not as a product. ESP is not a particular kind of language and methodology, nor does it consist of a particular type of teaching material. Understood properly, it is an approach to language learning, which is based on the learner need.

In line with definition before, Coffey (1985: 79) in his article states:

ESP is intended above all to be clear and particular usefulness to the student, his actual need having been the subject of careful analysis. There is no special language, only a principle of selection from the language to meet the purpose defined (Strevens’ restriction).

Based on the definitions above, it could be concluded that ESP is an approach designed to meet the students' needs that are appropriate with the learning field which consists of principle selection from the language to meet the purpose defined.

### **2.3 The Characteristics of ESP**

ESP should have its own characteristics in order to distinguish with the other programmes. Hutchinson and Waters (1994), Coffey (1985), McDonough (1984), and the other ESP theorists, conclude that ESP consists of English language teaching which is; designed to meet specified needs of the learner, related in content (i.e. in its theme and topics) to particular disciplines, occupations, and activities, centred on the language appropriate to those activities in syntax, lexis, discourse, semantics, etc., and analysis of this discourse, the last is in contrast with General English.

Based on the definition before, people conclude that ESP has its own purposes in course designed process. That is why some theorist classified ESP into the characteristics itself in order to make the differentiation with the General English.

As cited in Gatehouse's article (retrieved in 2009), theorist of Dudley-Evans and St John (1998) modified Strevens' original definition of ESP to form their own. He defines ESP by identifying its absolute and two variable characteristics. Strevens'(1988) definition makes a distinction between absolute and variable characteristics;

### **2.3.1. Variable**

ESP may be, but is not necessarily; restricted as to the language skills to be learned (e.g. reading only), not taught to any pre-ordained methodology. Anthony (1997) notes that there has been considerable recent debate about what ESP means despite the fact that it is an approach which has been widely used over the last three decades. At a Japan Conference on ESP, Dudley-Evans offered a modified definition. The revised definition he and St John postulate is as follows:

ESP may be related to or designed for specific disciplines, ESP may use, in specific teaching situations, a different methodology from that of General English, ESP is likely to be designed for adult learners, either at a tertiary level institution or in a professional work situation. It could, however, be for learners at secondary school level, ESP is generally designed for intermediate or advanced students, most ESP courses assume some basic knowledge of the language system, but it can be used with beginners (1998: 4-5).

### **2.3.2 Absolute**

ESP is defined to meet specific needs of the learner. ESP makes use of the underlying methodology and activities of the discipline it serves. ESP is centred on the language (grammar, lexis, register), skills, discourse and genres appropriate to these activities.

On the other words, the concept of the variable and absolute characteristics of ESP relate to the usage itself. On the variable characteristics, ESP is something that pointed out on the language skills that need by the learners based on their area knowledge. While on the absolute characteristic, the use of ESP more specifically on the language.

## **2.4 The ESP Course Design**

The phase in establishing ESP language program namely Course Design. Based on Hutchinson and Waters (1994: 65) “Course Design is the process by which the raw data about a learning need is 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.” In practical terms 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.

### **2.4.1 The Approaches to ESP Course Design**

There are a variety of approaches to ESP course design. According to Hutchinson and Waters (1994: 65), there are three major types of approaches to ESP course design: Language Centred, Skills Centred, and Learning Centred.

Language centred approach is the simplest kind of course design process and particularly common in ESP. This process aims to draw as direct connection as possible between the analysis of the target situation and the content of the ESP course. It starts with the learner, proceeds through various stages of analysis to a syllabus, thence to materials in use in the classroom and finally to evaluate mastery of the syllabus items.

Skills centred approach is founded on two fundamental principles; theoretical and pragmatic. In theoretical principle, a skill centred approach aims

to get away from the surface performance data and look at the competence that underlies the performance. Therefore, a skills centred approach presents its learning objective in terms of both performance and competence. On the other hand, the pragmatic basis for the skills centred approach derives from distinction between goal oriented courses and process oriented courses.

Learning centred approach looks beyond the competence that enables someone to perform because this approach intended to discover not only the competence itself also the way someone acquires the competence. Traditionally the target situation analysis has had a direct determining influence on the development of syllabus, materials, methodology, and tests. Indeed, the course design process should be much more dynamic and interactive. In particular, factors concerned with learning must be brought into play at all stages of the design process and it can be found in the learning centred approach, an approach with the avowed aim of maximizing the potential of the learning situation.

That is why the ESP is classified into an approach to language learning, because it has three major types of approach in designing a course which focused on the learners needs. No matter what types used in designing the course, it has one aimed. It designed to meet the learners' needs with the appropriate course.

#### **2.4.2 The Stages of ESP Course Design**

There are some stages in designing ESP courses which is developed into some analyses as Hutchinson and Waters (1994: 9) states:



First, the Register Analysis dealing with sentence level. They try to analyze grammar and vocabularies. The principle is that the certain field/work of study has its own register. Basically register is concerned with the levels of politeness and formality` to be found in language and the attitudes or values conveyed by certain words and phrases. Within each field, there will be specific registers to be learned. Speaking and writing in different social and cultural contexts require language with different levels of formality and politeness. Register is very complex and highly developed in English and includes not only certain forms of grammatical structure, also specific kinds of vocabulary.

Second, the Discourse Analysis. The analysis is intended to show how sentences are organized in discourse to convey the meaning. The principal is the learners understand how to extract the meaning and to convey the discourse.

Third, Target Situation Analysis dealing with language feature (identifying and analyzing). The purpose and the principle of this analysis are to enable the learner to function adequately in the target situation, and the thing that was going to achieve is a clearly identifiable.

Fourth, the Skills and Strategies. In this point, the principle is that there are common interpreting and reasoning process underlying language use.

Fifth, Learning Centred Approach. It is an approach to language learning of which the focus is on the learning process, rather than on the language.

Those analysis above, are the analysis of the language before it reach to the learners mind. The language itself has to be processed in those way to get a good language course design.

## 2.5 The Teaching of English for Science and Technology

As it has been mentioned before, the second key of tremendous impact on the emergence of ESP was the revolution in linguistics. Whereas traditional linguists set out to describe the features of language, revolutionary pioneers in linguistics began to focus on the ways in which language is used in real communication.

Hutchinson and Waters (1994) point out that one significant discovery was in the ways that spoken and written English vary. In other words, if it was given a particular context, the variant of English would be changed. This idea was taken one step farther. If language in different situations varies, then tailoring language instruction to meet the needs of learners in specific contexts is also possible. Hence, in the late 1960s and the early 1970s there were many attempts to describe English for Science and Technology (EST).

Hutchinson and Waters (1994) identify Ewer and Latorre, Swales, Selinker and Trimble as a few of the prominent descriptive EST pioneers. Therefore, the EST has paramount position in ESP development in the same way as Hutchinson and Waters (1994: 9) states, "...one area of activity has been particularly important of ESP. This is the area usually known as EST".

Coffey (1985) that focused on the EST approach, covers that the EST areas of English written for academic and professional purposes and of English written for occupational (and vocational) purposes, including the often informally written discourse found in trade journals and in scientific and technical materials written for the layman.

EST covers that area of written English that extends from the peer writing of scientist and technically oriented professionals to the writing aimed at skilled technicians. In between are shown several of the types of instructional discourse that could be thought of as intermediate between the two extremes.

The application of the approach to the construction of syllabus, teaching strategies, and students' responses to the given tasks in one of the branches of ESP namely EST would be presented on this section.

### **2.5.1 Syllabus**

Syllabus is generally things that should do before decide a classroom activity. Hutchinson and Waters (1994: 80) defines a syllabus as a document which says what will (or at least what should) be learnt.

Moreover, Brown (1994: 16) defines syllabus as “design for carrying out a particular language program. Features include a primary concern with the specification of linguistic and subject-matter objectives, sequencing, and materials to meet the needs of a designated group of learners in a defined context.”

Ur (2006: 175) states that “Syllabus is a document which consists, essentially, of a list. This list specifies all the things that are to be taught in the course(s)”. She makes differentiates types of language syllabus, there are Grammatical, Lexical, Grammatical-Lexical, Situational, Topic-based, Notional, Functional-Notional, Mixed or ‘multi-strand’, Procedural, and the Process.

Hutchinson and Waters (1994: 80) classify syllabus into some different stages before it reaches its destination in the mind of the learners. There are:

- (a) The Evaluation Syllabus. This kind of syllabus will be most familiar as the document that is handed down by ministries or other regulating bodies. It puts on record the basis on which success or failure will be evaluated. It reflects an official assumption as to the nature of language and linguistic performance.
- (b) The Organisational Syllabus. Is the most familiar in the form of contents page of a textbook, and it is this form of syllabus that most people would think of when asked: ‘what is a syllabus?’ The organisational syllabus, therefore, is an implicit statement about the nature of language and of learning.
- (c) The Materials Syllabus. Because of syllabuses need to be interpreting, it called Material Syllabus because the first person to interpret the syllabus is usually the materials writer. The author decides the context in which the language will appear the relative weightings and integration of skills, the number and type of exercise to be spent on any aspect of language, the degree of recycling or revision.
- (d) The Teacher Syllabus. The second stage of interpretation usually comes through the teacher. The great majority of students are the world learn language trough the mediation of a teacher.
- (e) The Classroom Syllabus. Breen (1984) as cited in Hutchinson and Waters (1994: 82) states that “The classroom thus generates its own syllabus.”
- (f) The Learner Syllabus. It is the network of knowledge that develops in the learner’s brain and which enables that learner to comprehend and store the

later knowledge. Because the learners must be taken into account on a continuing basis through every stage of the course design process.

Regarding to the syllabus design toward ESP, Richards (2007:157) states “The role of the situations in syllabus design has recently re-entered language teaching, albeit in a different form from traditional situational syllabuses, with the emergence of communicative approach to syllabus design and ESP.”

Kinds of syllabus above based on the data that has to be interpreted by the course designer. The references of the syllabus are developed until it can be a syllabus that could be applied for the materials development later.

#### **2.5.1.1 The Criteria of the Syllabus**

The syllabus has certain criteria based on the usefulness. Based on Hutchinson and Waters (1994: 85) “...the main purposes of a syllabus is to break down the mass of knowledge to be learnt into manageable units”. The syllabus are a) Topic Syllabus, b) Structural/Situational Syllabus, c) Functional/Notional Syllabus, d) Skills Syllabus, e) Situational Syllabus, f) Functional/task-based Syllabus, g) Discourse/Skills Syllabus, h) Skills and Strategies Syllabus.

Hutchinson and Waters (1994: 88) state that “Each of the syllabuses shown represents a valid attempt to break down the mass of a particular area of knowledge into manageable units. Each carries assumptions about the nature of language and learning”.

Furthermore, Munby (1978) and Feez (1998) cited in Richards (2007: 157) mention that “ESP approaches to curriculum development attribute a central

role to the situation or setting in which communication take place and to the following elements of the situation: (i) the participants, (ii) their role relations, (iii) the transaction their engage in, (iv) the skills or behaviors involved in each transaction, (v) the kinds of oral and written texts that are produced, (vi) the linguistic features of the texts.

The choice of a syllabus is a major decision. Even though there are some criteria of the language syllabus, there are combinations of two or more of the criteria discussed above.

#### **2.5.1.2 Lesson Plan**

On the materials design, a teacher needs lesson plans. Lesson is popularly considered to be unified set of activities that cover a period of classroom time, usually ranging from forty to ninety minutes (Brown, 2001: 149). In addition, Ur (2006: 213) defines lesson as type of organized social event that occurs in virtually all cultures.

While Shambaugh and Magliaro (2006: 26) present a definition of planning "...is an important activity for teachers that serves many functions. The predominant function of planning is to transform school curriculum to classroom instruction." In addition Shambaugh and Magliaro (2006: 26) explain that "lesson plan may include teacher- or student-led activities as well as learning objectives, procedures, materials and technology needed, time requirements, areas for enrichment or reteaching, and assessment."

Brown (2001: 149) mentions the format of a lesson plan such as Goal(s), Objectives, Materials and Equipment, Procedures, Evaluation, and Extra-class work.

### **2.5.1.3 Materials Development**

One of the processes in designing a course is developing the materials that given to the learners'. It presented in front of the class in order to give more knowledge to the learners'. The materials development involved the process of choosing which materials that appropriate to the learners' needs. Therefore, the decision is based on the course designer, teacher, or the lecturer.

Tomlinson (2005: 2) defines materials development as

Anything which is done by writers, teacher, or learners to provide sources of language input and to exploit those sources in ways which maximise the likelihood of intake: in other words the supplying of information about and/or experience of the language in ways designed to promote language learning.

Heard materials people would be familiar with the textbook and the other sources that teach to the learners. Regarding to the material, Brown (2001: 136) states that the most obvious and most common form of material support for language instruction comes through textbook.

Brown mentions the tips for the new teacher to not just concern into the textbook but rather to find creative use for the textbook that has been handed by our supervisor. Because to be a teacher who already handed appropriate textbooks just need to prepare a lesson, carry it out, monitor it's unfolding, and manage the dynamics of a classroom full of students. Johns (1990) as cited in Gatehouse's article comments that "...no one ESP text can live up to its name".

“The only real solution is that a resources bank of pooled materials be made available to all ESP instructors.”

As cited in McDonough (1984: 66) materials should be:

Includes both the glossy publication and the typed, printed and often re-cycled class hand-out that so many language teachers are familiar with. It also includes much more ephemeral phenomena, such as the task for the lesson written on the blackboard by the teacher, and even the way in which a question by a student is handled.

Dudley- Evans and St. John (1998: 170-171) as cited in Richards (2007: 251) suggest that for teachers of ESP courses, Materials serve the following function: as a source of language, as a learning support, for motivation and stimulation, and for reference.

Richards (2007: 252) states that:

ESP materials may therefore seek to provide exposure to the specialized genres and registers of ESP, to support learning through stimulating cognitive processes and providing a structure and progression for learners to follow, to motivate learners through providing achievable challenges and interesting content, and to provide a resource for self-study outside of the classroom.

So the materials are the important part of the course that should be considered whether the topic, theme, target of the knowledge, skills, etc.

### **2.5.2 Teaching Strategies**

On the teaching strategies, there must be a teacher/lecturer that has some roles on it. Richards and Rodgers (2007: 166) cited in Breen and Candlin (1980: 99) give statement, about the teacher's roles that:

It has two main roles: the first role is to facilitate the communication process between all participants in the classroom, and between these participants and the various activities and texts. The second role is to act as an independent participant within the learning-teaching role-group. The latter role is closely related to the objectives of the first role and arises from it.



Talking about teaching strategies there must be consisting of the way how to teach. To make it easier in observing those strategies, the writer should separate them into approaches, methods, procedures, and techniques. Harmer (2007: 62) defines those elements. First is approach. It refers to theories about the nature of language and language learning which are the sources of the way things are done in the classroom and which are provide the reasons for doing them. Second is method which the practical realisation of an approach. Procedure-is an ordered sequence of techniques. Technique-is a part of methods. That (Brown, 2001: 14) also defined that technique”...were the specific activities manifested in the classroom that were consistent with a method and therefore were in harmony with an approach as well.”

Brown (2001) on *Teaching by Principles* mentions that teaching methods consist of (1) The Grammar Translation Method; (2) Gouin and The Series Method; (3) The Direct Method; (4) The Audiolingual Method; (5) Cognitive Code Learning; (6) Community Language Learning; (7) Suggestopedia; (8) The Silent Way; (9) Total Physical Response; and (10) The Natural Approach. Moreover, those methods have their own Background, Principles, and Assumptions about Language, also their characteristics.

Besides methods, (Brown, 2001) presents the approaches there are: Eclectic approach, Communicative Language Teaching, Learner-Centered Instruction, Cooperative and Collaborative Learning, Interactive Learning, Whole Language Education, Content-Based Instruction, and Task-Based Instruction.

Based on the data above conclude that approach is the level of theories and method is the plan of language teaching that is consistent with the theories. Method should come after approach because the plan of language teaching should be developed from theories on the nature of the language and language learning.

### **2.5.2.1 The English for Science and Technology Classroom**

Classroom as the part in the teaching and learning process hold the most important placed. The teaching and learning process could be succeed or not, depend on the classroom whether the situation was comfortable or not, it was conducive or not, should be considered by the course designer.

Shambaugh and Magliaro (2006: 72) defines classroom as "...are part political, part physical, part personal, part social, and part psychological 'spaces' for learning." They thought that classroom cannot be separated from a school that "no classroom acts independently of the school."

On the classroom, McDonough (1984: 92) actually here is ESP classroom within any group of learners there will be a greater or less differential of pace of learning, amount of target language already known, subject/professional knowledge, type of subject or profession, status, time available for language learning, motivation and interest, and expectation of language learning.

McDonough (1984) convinces that the appropriate activities in ESP classroom are through simulations, pairs and small groups, One-to-One teaching, The Knowledge Factor, and Self-Access programmes.

He suggests more on the simulations that he states “ESP, claims to be ‘goal-oriented’, and the use of simulation as rehearsals for the learner’s target situation have come to be very popular as a consequence” (McDonough, 1984: 92). Moreover McDonough (1984: 92) mentions two essential features of a simulation. “Firstly, it is the aim of a simulation to set up a whole environment, to be as close as possible to the reality of a specific target context, and to provide ‘the appropriate ambience’. Within such a framework, it is argued, there can be approximations to ‘the real world’ in terms of roles, topics, language, and types of activity and procedure.

Secondly, the key pedagogical feature of a simulation is that it is based on the problem solving. Thus, the learners do not practice by rote a solution already presented by the teacher, but instead arrive at appropriate conclusions via an indirect and exploratory process.”

Brown (2001) mentions that for designing and implementing the classroom lessons there must be consist of techniques, textbooks, and technology. Talking about the implementing classroom lessons, the writer assume that will be finding a technology in the classroom. People must think about computer technology, but Brown (2001: 143) states that “...technology covers everything from audio-tape players to video to, yes, computers.”

Brown (2001: 144) suggests to considering what technological aids that can be use for the language teacher. There are “(1) Commercially produced audiotapes. (2) Commercially produced videotapes. (3) Self-made audiotapes. (4) Self-made videotapes. (5) Overhead projection.

### 2.5.3 Learner Roles

In order to make the comfortable teaching and learning process, the teacher should know the learner characteristic as Shambaugh and Magliaro (2006: 68) states “Learners characteristics is an educational psychological approach to describing your students. It can include age, sex, educational level, achievement level, socioeconomic background, learning preference, verbal ability, and relevant experience, attitudes toward subject, role perceptions, and perceived needs among other possibilities.”

In this research, on the age aspect the learners are adults or at tertiary level of education which Nunan (1995: 90) cited in Setiyadi (2006: 184) “Adults have superior cognitive abilities that can render them more successful in certain classroom endeavors and their need for sensory input can rely on a little more on their imaginations”

Rubin (1975: 43) as cited in Freeman&Larsen (2000: 159) classifies a good language learners into

...are willing and accurate guessers who have a strong desire to communicate, and will attempt to do so even at the risk of appearing foolish. They attend to both meaning and the form of their message. They also practice and monitor their speech as well as the speech of others.

Richards and Rodgers (2001: 28) cited in Setiyadi (2006: 19) suggest five possible learner roles that can make language learners more autonomous. They are: (1) Learners plan their own learning program and thus ultimately assume responsibility for what they do in the classroom (2) Learners monitor and evaluate their own progress (3) Learners are members of a group and learn by interacting

with others (4) Learners tutor other learners (5) Learners learn from the teacher, from other students, and from other teaching sources.

In line with the relation of the ESP, Richards (2007: 28) states that “In contrast to students learning English for General purposes for whom mastery of the language for its own sake or in order to pass a general examination is the primary goal, the ESP student is usually studying English in order to carry out a particular role, such as that of foreign student in an English-medium university, flight attendant, mechanic, or doctor”.

As the students of the ESP course, they have some roles as mention above. Some theorist already classify the good language learners so that the students' could applied the classification above in realized the succeed the teaching and learning process.

### **2.5.3.1 Task Based Learning**

Tasks is the activities in the classroom whether it is a test, simulations, work in pair, role play, etc. Tasks which could be the scaffolding in the teaching and learning process hold the important role as the evaluation of the materials given to the learners.

Task Based Learning (TBL) is the basic and initial point of organisation. “Class work is organised as a sequence of tasks, and it is task that generate the language to be used, not vice versa” (Estaire and Zanon, 1994: 12). Therefore, in TBL what teacher asks students is that they carry out a series of tasks, for which they will need to learn and recycle some specific items of language.

Estaire and Zanon (1994) defines task into two types, there are Communication Tasks and Enabling Tasks. Communication Task definition noted by author such as Breen, Candlin, Nunan, and Long five of them cited in Estaire and Zanon (1994: 13). The first is a piece of classroom work which involves all the learners in the comprehension of the foreign language (spoken or written), the production of the foreign language (spoken or written) and oral interaction in the foreign language. The second is a piece of classroom work during which learners attention is principally focused on meaning rather than form, that is, on what is being expressed rather than on the linguistic forms used for expressing it.

Third is a piece of the classroom work which, as far as possible resembles activities which our students or other people carry out in everyday life, thus reproducing processes of everyday communication. Fourth that the communication task is a piece of classroom work which has a structure consisting of a specified working procedure, appropriate data, materials, a communicative purpose, and a concrete outcome which is in certain cases can be different for different members of the class. The last definition that communication task is a piece of class work which is usually part of a sequence; this sequence often creates a context for the task.

Enabling Tasks act as support for communication tasks. Their purpose is to provide students with the necessary linguistic tools to carry out a communication task. Though they can be as meaningful as possible, their main focus is on linguistic aspects (grammar, vocabulary, pronunciation, functions, discourse) rather than on meaning. They are overt language learning experiences,

whose aim is to enable students to communicate as smoothly and effectively as possible (Estaire and Zanon, 1994: 15).

There must be many teachers or lecturers who usually use a textbook as a guideline or framework for making the tasks that given to the students. On this way, Estaire and Zanon (1994: 67) state that:

“...textbooks and the framework are perfectly compatible as long as certain conditions are met: that the textbook materials are used under a thematic umbrella and are seen as leading towards the achievement of specific final tasks which are closely related to students’ experiences. ...some of the materials in textbook might have to be left out or altered, or the order in which they appear might have to be changed. It may also mean that materials in the set textbook might need to be supplemented”.

The textbook as the resources in developed the materials also to be resources in the chose which task that appropriate with the materials. There are some textbook that provide the materials complete with the choice of the tasks so it could simpler the course designer in the process chose the tasks.

#### **2.5.4 The Research on EST Teaching**

Since the development of ESP has been dominated by the linguistic factor, it brought an emphasis on the analysis of the future of specifics varieties of language use and it also emerge to various learners’ specialization subject such as English for Science and Technology (EST), English for Business and Economics (EBE), and English for Social Science (ESS). Actually, EST has been particularly important in the development of ESP. As Swales (1985) cited in Hutchinson and Waters (1994: 9) state the development of EST to illustrate the development of ESP in general: “With one or two exceptions...English for Science and Technology always set and continuous to set the trend in theoretical

discussion, in ways of analysing language, and in the variety of actual teaching materials.”

English for Science and Technology that the main focus of EST branch in this research, has a drawn of development in Indonesia that applied to the training department in a big company which is become a former in EST education. As Coffey (1985) mention on his article “...the work of language section of the training department of the large overseas firm or parastatal such as Aramco in Saudi Arabia, The Shell Company unit in Brunei and (formerly) the Pertamina school in Indonesia...”

The requirement that the learning materials be content-based means that they should focus on the specific problems that people are likely to encounter in their everyday working lives in the EST field. For instance, to develop fluency in a course on negotiating, a case study, which presents a real negotiating situation faced by actual companies, could be used. Within the context that learning materials should be authentic and content-based, many important linguistic items relevant to the EST field may be introduced and practiced.

According on this case, Venkatraman (2007) on his surveys in SASTRA University of India that reported on article mentions that

...students of Engineering and Technology need a specific set of language skills for their success in education and career. Industries are also voicing their concern about the need for better communication skills among students of Engineering. Therefore, English for Science and Technology programmes in Engineering colleges should be revamped to suit the requirements of the evolving curriculum and the world of work outside college.

The result of this methodology is that learning has greater relevance to the employment situation. In turn, this means that trainees will have greater interest in the course and greater learning will ensue. The extent of the authenticity of



learning materials will vary depending upon two related factors: the language level of the trainees, and the degree of linguistic complexity of the skills presented and practiced. If the language level is low, then perforce the degree of the authenticity becomes grater.

Related to Sysoyev (2000) research through a Russian experience towards teaching method, states that

With professional experience, views, teaching concepts, and methodological knowledge are continuously changing. Flexible teachers are open to making necessary changes while teaching. They can see what can or should be modified, added, or changed to make the course reflect students' interests and needs. Therefore, course development can be seen as an on-going process.

Techniques and principles continue to provide coverage of many diverse teaching methods in a condensed and engaging style. The terms 'method', 'approach' and 'technique' are used in the same way as Anthony (1963) introduced them: "...techniques carry out a method which is consistent with an approach".

The methods are Grammar Translation Method, The Direct Method, The Audiolingual Method, The Silent way, Desuggestopedia (the name of this method changed from Suggestopedia to Desuggestopedia to emphasize the importance on desuggesting limitations on learning), Community Language Learning, Total Physical Response, and Communicative Language Teaching.

In order to make an appropriateness of the teaching method and techniques with the students' responses, surveys of Venkatraman (2007) through 3 departments consist of first to final years of study students (Mechanical Engineering, Computer Science and Engineering, Chemical Engineering and Bio-Technology) 98, 9% of the students agree that teachers of English in Engineering

colleges need a specific set of competencies because of the skills they are expected to develop in their students. Also the fact that students want their English teachers to become facilitators and trainers in the classroom is a clear indication of the existing need to rethink the roles of English teachers at Engineering colleges and a sign that teachers have to change in tune with the demands of the modern rapidly transforming world.

The researches' on this study is important to facilitate the course designer or lecturer in make the decisions. They could consider the strength and the weaknesses of the method, or the other parts in course designing based on the experiments before.

