

Chapter II

Review of Literature

A review of pertinent literature will be considered under two subheadings corresponding to the major areas of interest in the study: (1) theoretical background of needs analysis and problems in teaching and studying ESP, and (2) related research on needs analysis and problems in teaching and studying ESP.

2.1 Theoretical Background of Needs Analysis and Problems in Teaching and Studying ESP

2.1.1 Needs Analysis in ESP

2.1.1.1 Definitions of Needs and Needs Analysis

Many ESP practitioners have defined the terms "needs" and "needs analysis." West (1994) declares that the term "needs analysis" was first used in India in the 1920s. According to Richterich (1983), Porcher (1983), and Hutchinson and Waters (1987) cited in West (1994), the term "needs" is often perceived as an umbrella term with multiple interpretations. Furthermore, Mountford (1981) quoted in Robinson (1991) discussed different meanings and types of needs. First, needs can refer to student ability to master the language at the end of their language course. Second, needs can mean "what the user-institution or society at large regards as necessary or desirable to be learnt from a program of language instruction" (1981 cited in Robinson, 1991, p.7). Third, what learners need to do to actually acquire the language can be considered a process oriented definition of needs according to Widdowson (1981) cited in Robinson (1991). Robinson (1991) also mentioned that the view of needs in so far as what the students themselves

would like to obtain from their language courses implies that they may have personal goals. Finally, Robinson (1991) interprets needs as lacks indicating what the learners are unaware of or can not do in English.

According to Hutchinson and Waters (1993), approaches to course design are the language-centered approach, the skill-centered approach, and the learning-centered approach. In the language-centered approach of relevance to this study, needs mean "the ability to comprehend and/or produce the linguistic features of the target situation" (Hutchinson & Waters, 1993 p.54). Hutchinson and Waters also mention that the target needs, meaning what learners need to do in a target situation, are related to the terms, necessities, lacks, and wants of the students.

Necessities can be called the type of needs determined by the demand of target situation; in other words, what learners must know to effectively function in the target situation. Richterich (1980) cited in West (1994) describes necessities as objective needs. The objective needs can be diagnosed by teachers, based on an analysis of learners' personal data, as well as information about their language proficiency and areas of language use (Brindley, 1984 cited in Nunan, 1994). ESP practitioners also need to know learners' existing knowledge, so they can later decide which of the necessities the learners lack. "The target proficiency, in other words, needs to be matched against the existing proficiency of the learners. The gap between the two can be referred to as the learners' lacks" (Hutchinson & Waters, 1993 p.56). However, the learners usually have their own view about their needs. The learners' view or want may conflict with the perceptions of the ESP practitioners (Hutchinson & Waters, 1993). What the learners want or feel they need is personal. Richterich labels these as subjective needs which are totally unforeseeable and often indefinable (1980 cited in West, 1994). Brindley (1984) cited in Nunan (1994) states that subjective needs are wants, desires, expectations, or other psychological manifestations of a lack. Very often, teachers will perceive

the objective needs whereas the learners perceive their subjective needs (Robinson, 1991).

The establishment of needs for particular students in a particular group will be the result of a needs analysis influenced by the analyst's ideological preconception (Robinson, 1991). In general, needs analysis can be described as "the process of determining the needs for which a learner or group of learners requires a language and arranging the needs according to priorities...(it) makes use of both subjective and objective information" (Richard et al, 1992, cited in Jordan, 1997 p.20). Nunan (1989) defines needs analysis as a family of procedures for gathering information regarding the learners themselves, as well as communication tasks for use in syllabus design. In planning a learner-centered curriculum, needs analysis means a set of processes for designating the parameters of a course, including the criteria and rationale for grouping learners, the selection and sequencing of course content, methodology, and course length, intensity, and duration (Nunan, 1994). When the term "needs analysis" is used in the context of language teaching, it usually refers to the collection and evaluation of information to answer the question "What language areas do learners in some particular groups need to know?" (Yule & Tarone, 1991, p.31).

2.1.1.2 The Importance of Needs Analysis in ESP

Many educators have stated that needs analysis is useful in maximizing teaching and learning potentials in both the fields of EAP and ESP. Richards (1984) cited in Nunan (1994) declares that needs analysis serves three main objectives: providing a way of obtaining wider input into the content, design, and implementation of a language program; being used in goal, objective, and content development; and, finally, providing data for reviewing and evaluating an existing program. The general theoretical basis of curriculum development, according to Rogers (1980), Holec (1985), and Littlewood (1992) cited in West (1994), follows

three main tendencies: improving teaching methods, adapting the teaching to the type of learning public, and training the learner how to learn. Needs analysis is found in the second and third tendencies. Needs analysis is also beneficial in the learner-centered curriculum noted by Nunan (1994) who recommends that content in the learner-centered curriculum should be verified in relation to the relevance and motivational potential for learners so that it can serve learners with widely distinct needs.

Johns (1991) quoted in Benesch (1996) mentions one benefit of needs analysis. Johns stated that:

The rationale for needs analysis is that by identifying students' target English situations and using them as the basis of EAP/ESP instruction, teachers will be able to provide students with the specific language they need to succeed in their courses and future careers. (1996, p. 723)

Additionally, Mackay (1978) reveals that language teachers involved in planning courses for ESP learners have to be responsible for accurately determining the learners' specific purposes. Over time, the teachers become capable of translating those needs into linguistic and pedagogic terms in order to produce and teach an effective course. If learners, sponsors, and teachers know why the learners need English, it will influence the selection of reasonable content in a language course (Hutchinson & Waters, 1993, p.53)

2.1.1.3 Types of Needs Analysis

There are many types of needs analysis established by various educators. Nunan (1994) divides needs analysis into objective needs analysis and subjective needs analysis.

Objective needs analysis results in content specifications derived from an analysis of the target communicative situations in which learners are likely to find themselves. Being derived from an analysis of the target situation, they can be carried out in the absence of the learner. Subjective needs, on the other hand, are derived from the learners themselves... there is a tendency to equate objective needs with the specification of content, and subjective needs with the specification of methodology. (1994 p.44)

Tarone and Yule (1991) mention three types of needs analysis necessary for teachers to select aspects of the language to be taught.

1. Analysis in terms of communicative competence: To identify student needs, it is necessary to describe the communicative behavior of fluent speakers of the target language in terms of three interrelated dimensions.
 - 1.1 Grammatical competence: The mastery of the grammatical, lexical, and phonological forms of the language
 - 1.2 Sociolinguistic competence: The ability to use the language appropriately in typical cultural context
 - 1.3 Strategic competence: The ability to transmit information to particular addressees, including the use of problem-solving ability in the process of communication (Canale and Swain, 1980 quoted in Tarone and Yule, 1991)
2. Analysis from the 'inside' perspective: Tarone and Yule (1991) mention that classroom teachers may find some discrepancies between the curriculum and the needs of their particular learners. Those discrepancies may occur because traditional teachers are given a text with a communicative syllabus and then find that the students do not accept communicative methods and materials. Furthermore, discrepancies occur because of individual differences. Needs analysis may effectively develop the norm for a typical class, but every group of individual learners is distinct and likely to vary from the norm in unforeseen ways.

3. Analysis of needs at four levels of generality: Tarone and Yule's third type of analysis describes ways which teaching can be carried out at any of the following four different levels.

3.1 Global level: This level specifies the situations in which learners will need to use the language, as well as language-related activities required in those situations. Examples include lecturing, taking notes, and asking questions in university classes.

3.2 Rhetorical level: This level is related to the organization of information in any language related activity. An example is an initial transition from yesterday's university lectures, and an overview of points to be covered in class.

3.3 Grammatical-rhetorical level: The aim of the analysis is to convey the information structure of the language activity using the linguistic forms; for example, the use of the passive aspect as opposed to the active.

3.4 Grammatical level: This level relates to the frequency with which speakers use grammatical forms in particular communicative situations. An example is the relative percentages of active and passive verb forms heard in engineering lectures.

Additionally, there are many types of needs analysis recommended by Robinson (1991) and Jordan (1997) which can be effectively used for gathering information about the needs of people involved in ESP teaching and learning. Robinson discusses three approaches to needs analysis as follows:

1. Target Situation Analysis (TSA): This is a needs analysis focusing on student needs at the end of a language course. The best known framework for TSA is done by Munby (1978) who presents a helpful insight related to target-level performance: for certain jobs, students may require only a low level of accuracy, of native-speaker ability, etc.
2. Present Situation Analysis (PSA): A PSA is used to establish what the students are like at the beginning of a language course, and investigates their strengths

and weaknesses. Richterich and Chancerel (1980) suggest that there are three basic sources of information for PSA: the students themselves, the language-teaching establishment, and the students' place of work.

3. The Language Audit: This is a combination of TSA and PSA. The language audit is used to plot the foreign language role in a commercial or industrial enterprise. The first step is to determine language skills for a specific job in order to establish a target profile of language skills. The auditor then has to find out tasks and activities people perform in their jobs, and decide on the language performance level required for those tasks. Then, a profile of present ability is established. Finally, the auditor determines the time and facilities required for language training to bridge a gap between the employee's present ability profile and the company's target profile.

Jordan (1997) divides the analysis of needs into six categories.

1. Target Situation Analysis: The focus is on student needs at the end of a language course, as previously stated.
2. Present Situation Analysis: The PSA, as previously defined by Robinson (1991)
3. Learning-Centered Approach: Hutchinson and Waters (1987) cited in Jordan (1997) differentiate between learner-centered and learning-centered approaches. Learning is totally determined by the learner in the learner-centered approach. However, the learning-centered approach includes learning as " a process of negotiation between individual and society" (Hutchinson and Waters, 1987 cited in Jordan, 1997, p.25). Hutchinson and Waters also compared target needs, including the kind of information the course designer must obtain from students, with learning needs which concern what students need to do in order to learn.
4. Strategy Analysis: In the 1980's, the focus of needs analysis was more on the methodology used to implement language programs (Nunan, 1988 cited in Jordan, 1997). This analysis includes observing the preferred learning styles and strategies of students. Jordan states that Allwright (1982) is a pioneer in this kind

of analysis. Allwright's concerns are to assist students to identify skill areas and their preferred strategies for achieving the skills. Preferences in group size, correction procedures, and methods of assessments are related areas in a strategy analysis.

5. Means Analysis: An important point in the needs analysis development is the attempt to adapt language courses to local situations. In other words, it is necessary to accommodate what are seen as constraints, such as cultural attitudes, resources, materials, equipment, and methods. This is called a means analysis (Halliday and Cooke, 1982 cited in Jordan, 1997), that is to say a study of the local situation to see how a language course may be implemented.
6. Language Audits: Language audits are used in defining language needs carried out for companies, regions or countries as formerly stated by Robinson (1991).

2.1.1.4 Methods in Doing Needs Analysis

The first task in establishing a needs analysis is to decide what data need to be collected, when, by whom, by which means, and for what purposes. Information which can be gathered from learners on subjective factors might be the preferred length of a course, preferred learning arrangement, preferred methodology, learning styles, and general purposes in coming to class. This information can be collected at the beginning of the course by either the teacher or an educational counselor through an interview with less proficient students. The data gathered can be used for initial grouping (Nunan, 1994).

In planning a needs analysis, Robinson (1991) suggests that the analyst needs to scrutinize carefully how much time is available for the collecting of information, processing, and, finally, analyzing data. It is necessary to consider the likelihood of obtaining the requisite data. For example, if the students have not yet arrived at the ESP content in a language course, they will not be ready to respond to a questionnaire regarding their ESP study. Richterich and Chancerel (1980) and

Halliday and Cooke (1983) cited in Robinson (1991) recommend that a needs analysis has to be repeated during the life of a course because the PSA may change. As students become more involved in the course, their attitudes and approaches may change. The analyst has to do a review of literature and, finally, conduct a needs analysis. From the result of the needs analysis, the analyst should be able to draw up ESP course objectives and eventually design a syllabus (Robinson, 1991).

Jordan (1997, p.23) lists ten steps in doing a needs analysis as follows.

1. Purpose of Analysis
2. Delimit student population
3. Decide upon the approach(es)
4. Acknowledge constraints/limitations
5. Select methods of collecting data
6. Collect data
7. Analyze and interpret results
8. Determine objectives
9. Implement decisions (i.e. decide upon syllabus, content, materials, methods, etc.)
10. Evaluate procedures and results

Robinson (1991) suggests that there are seven possible means to investigate needs: questionnaires, interviews, observation, case studies, tests, authentic data collection, and participatory needs analysis. Furthermore, Jordan (1997) elaborates methods for gathering data about learners in 14 categories.

1. Advance Documentation: The information is gleaned from learners' educational background, previously attended courses, and any other relevant aspects.

2. **Language Test at Home:** The test can be taken in the students' home country before being accepted by the overseas university or joining a language course. The test should indicate student strengths and weaknesses as well as the length and type of language course needed.
3. **Language Test on Entry:** This entry test can indicate the students' language learning priorities for short courses or part-time classes. An entry or proficiency test can be developed in order to construct a profile of learning difficulties and needs.
4. **Self-Assessment:** There are many ways of doing self assessment, but the questionnaire is widely used for students to indicate their ability and to list language areas requiring further practice.
5. **Observation and Monitoring:** The analyst can observe an English class, as well as student written assignments. This method is appropriate for perceiving speaking and listening difficulties, and for noting students with low self-confidence who may need extra help. Monitoring in a language laboratory can help identify particular oral and aural difficulties.
6. **Class Progress Tests:** Class progress tests are a feature of many courses of more than four weeks' duration. These tests are designed to motivate students and provide some feedback on learning difficulties.
7. **Survey:** Questionnaires given to the learners can be used to survey student use of language skills and difficulties. If a survey is done for a large number of students, an overall picture of the students' perceived needs will emerge.
8. **Structured Interview:** This is comprised of prepared questions allowing follow-up of points arising. Mackay (1978) cited in Jordan (1997) highlights an advantage of the interview in that the interviewer can clarify misunderstood questions for the interviewee. An interview can indicate student listening and speaking abilities, together with information about skills, attitudes, expectations, etc.
9. **Learner Diary:** These can be used to obtain information about student learning experiences. Learner diaries can make tutors aware of the items which students utilize, find difficult, do not understand, etc.

10. **Case Studies:** Case studies may be beneficial for obtaining in-depth information. Even though case studies are seen to be very time-consuming, they can be very illuminating.
11. **Final Tests:** Final tests provide information on student strengths and weaknesses for both the course designer and the students themselves.
12. **Evaluation/Feedback:** Evaluation or feedback are often in the form of questionnaires given to both students and staff. There may be a discussion among students and tutors on the main features of the course.
13. **Follow-up Investigations:** These can be carried out when a course has ended. Students are given questionnaires on which they can indicate which parts of the course they found most and least useful. For staff, a questionnaire, a letter, or an interview can also be used to see what their perceptions are of student performance.
14. **Previous Research:** In examining previous research, the analyst has to consider the methods of data collection. It may save time if the research is relevant to the present students and course under consideration.

Richterich and Chancerel (1980, p.17) mention that a needs analysis can be done by means of identification by the learner of his/her needs before the course starts and during the course. Richterich and Chancerel categorize the identification into four types based on factors which affect the learning of a foreign language.

1. Identification by the learner of his needs in relation to his resources
2. Identification by the learner of his needs in relation to his objectives
3. Identification by the learner of his needs in relation to methods of assessment
4. Identification by the learner of his needs in relation to curricula

Hutchinson and Waters (1993, p.59) identify methods of gathering information about learner needs based on the target needs and learning needs.

They also pose several questions necessary for analyzing the target needs:

- Why is the language needed ?
- How will the language be used ?
- What will the content areas be ?
- With whom will the learner use the language ?
- Where will the language be used ?
- When will the language be used ?

Hutchinson and Waters similarly pose questions for analyzing learning needs:

- Why are the learners taking the course ?
- How do the learners learn ?
- What resources are available ?
- Who are the learners ?
- Where will the ESP course take place ?
- When will the ESP course take place ?

Richterich and Chancerel (1978) cited in Chambers (1980, p.27) point out that learner needs may change during the course. This may occur due to the following factors:

1. Extraneous to the language learning situation (e.g., shortage of funds from the sponsors)
2. Inherent to the learner (e.g., lack of ability or change of interests)
3. Resulting from misjudgment/error in the original analysis.

Drobnic (1978) cited in Chambers (1980) provides two possible solutions to the changing needs. By recognizing that needs change over time, the first solution is to establish short-term, medium-term, and long-term needs. The second solution is to do off-line and on-line research according to Sinclair (1978) cited in Chambers (1980). Off-line research means needs established by research prior to the course. On-line research is a more or less continuous assessment of the needs developed by off-line research, ensuring that they are suitable and being met.

Robinson (1980) mentions that of all the methods recommended by Richterich and Chancerel (1980), the most commonly applied is likely to be the questionnaire. Many educators advocate the administration of the questionnaire at the beginning of a course in order to identify student needs and wants.

If a questionnaire is used, the questionnaire writer should determine specific points regarding teaching and learning situations before the questionnaire is developed. Asking numerous questions, and then settling down to extract relevant information from the results, is uneconomical and time-consuming for both the information providers and the gatherers. A pilot run of the questionnaire is highly recommended as this will indicate poorly and ambiguously organized questions (Mackay and Mountford, 1978).

Knowles (1980) cited in Maurice (1986, p.1) points out four advantages of questionnaires.

1. They can reach many people in a short time
2. They are relatively inexpensive to use
3. They allow people to respond without fear or embarrassment
4. Data can be summarized and reported easily.

Finally, Dickinson (1987) cited in West (1994, p.14) mentions eight considerations which questionnaire writers should keep in mind.

- Is the questionnaire to be used by the learner or by a specialist (teacher, helper, counselor) ?
- Is the questionnaire complete in itself or is it designed to act as the basis of an interview with a specialist ?
- Is it designed to elicit needs irrespective of whether facilities exist for meeting them or only to the level for which teaching/learning facilities and materials exist ?
- Should it elicit information on learners' preferred learning strategies, etc. ?
- Will the questionnaire be concerned with identifying the time available ?
- Should the questionnaire endeavor to analyze needs into short-term objectives ?
- Will the questionnaire attempt to suggest appropriate materials to meet objectives ?
- Will the questionnaire attempt to guide the learner in ways of assessing the achievement of objectives ?

2.1.2 Problems in Teaching and Studying ESP

Many educators state that numerous problems occur in the teaching and learning of ESP. Candlin et al cited in Mackay and Mountford (1978, p.190) declare that problems in learning and teaching ESP may initially deal with the design and implementation of study skills in English which are related to the following problems:

1. Deciding on syllabus content
2. Designing a course program
3. Assessing students' ability
4. Working within the constraints of time and available resources

Robinson (1991) mentions that a number of aspects of ESP teaching are seen as problematic. Robinson lists five problems which usually occur in language teaching. The first problem has to do with large classes. Large classes can be the norm for students beginning to study English for general purposes and university students studying EAP courses. Second, the classes may contain mixed ability of students. Therefore, grouping students by specialty may be a problem particular to ESP course organizers. The third problem, found in both general English and ESP courses, is motivation. In many parts of the world, university students, for instance, may not realize the value of their ESP course. This may be because they do not choose to study their specialty, or know they can pass their subject exams without a knowledge of English. The fourth problem is related to status, pay, and conditions. The questions of "what is an appropriate teaching load ?" and "how much preparation time is realistic ?" are considered. Lack of sufficient preparation is a common problem among ESP teachers. The final problem is in language training in that short intensive courses are being seen as more cost effective for the company than longer more extensive courses.

Robinson (1991) also recommends a variety of possible solutions to the above mentioned problems. Robinson suggests that:

A real solution to the problem of large classes requires both political and economic change at government level. The problems of impossibly mixed classes and very short preparation time also derive from economic, and perhaps also political causes relating to the situation of the institution offering the courses. ESP teachers need to take a tougher attitude towards their conditions of employment, but the realities of the job market can make this a risky step to take. (1991, p. 83)

Masaeng (1989, p.3) mentions problems arising in teaching and learning English in Thailand. The problems can be put into five categories as follows.

1. Problems regarding teachers
2. Problems regarding students
3. Problems regarding texts
4. Problems regarding teaching methods and administration
5. Problems regarding the lack of teacher cooperation in teaching different levels of students

1. Problems regarding teachers: English teachers can be divided into three types.

1.1 Experienced teachers: There is an insufficient number of experienced teachers to meet the needs of many institution administrators. Most of the experienced teachers are located in the bigger cities in Thailand.

1.2 Inexperienced teachers: Because of the shortage of experienced teachers, the government hopes that inexperienced teachers can replace the experienced teachers. However, some inexperienced English teachers are not proficient in English and unaware of teaching methods.

1.3 Student-Teachers: Problems with these teachers deal with the preference for using Thai in teaching English, a lack of awareness of the use of teaching aids, poor ability in managing classroom activities, and difficulty in selecting supplementary materials to suit student levels.

2. Problems regarding students: Student problems can be divided into four items as follows:

2.1 Lack of enthusiasm and motivation in studying English

2.2 Lack of practice of English skills and lack of good time management outside classrooms

2.3 Poor background in English

2.4 Negative attitude toward English

3. Problems regarding texts: These problems elaborately deal with the following.
 - 3.1 Lack of budgets
 - 3.2 Having no standard library
 - 3.3 Having minimal supplementary materials
 - 3.4 Teacher unawareness of how to develop in-house materials
 - 3.5 Overuse of texts
 - 3.6 Student inability to afford the texts
4. Problems regarding teaching methods and administration: Some English teachers' aim is merely to have their students complete courses without concentrating on the students' learning process and outcomes. Different teachers employ distinctly different teaching methods and styles. Therefore, the effectiveness of the teaching will vary, depending on the methods and styles practiced. Because the Thai educational system is considered centralized, based on the policies of the Ministries of Education and University Affairs, it is sometimes difficult to manage the teaching and learning of subjects, as well as the administrative systems in institutions.
5. Problems regarding the lack of teacher communication in teaching different levels of students: Some students have to study the content which has been taught to them several times in their previous levels. To solve this problem, teachers teaching different levels should study the entire curriculum carefully and discuss with each other the appropriate proportion of content to be repeated.

2.2 Related Research on Needs Analysis and Problems in Teaching and Studying ESP

There are numerous studies on needs analysis and problems in teaching and studying ESP done by both Thai and foreign researchers. The studies are summarized and presented chronologically as follows.

Ongskul (1984) conducted a needs analysis in order to study and compare the engineering students' and teachers' needs and problems in studying and teaching Technical English at King Mongkut's Institute of Technology. Two different sets of questionnaires were developed and given to English teachers and second and third year engineering students. The dominant result was that the teachers preferred teaching by explaining the texts to students and motivating them to participate in class discussions. However, the students wanted the teachers to teach by explaining the texts to them without class discussions.

Siriwong (1984) did a survey of the needs, wants, and expectations for the use of English by nurses by using four sets of questionnaires and structured interviews with nursing students and nursing teachers at Mahidol University, and nurses and nurse coordinators at Ramathibodi Hospital. The needs, wants, and expectations for the use of English of each group varied greatly between clinical nursing work and academic nursing work.

Wanasiree (1985) investigated the English needs and problems, as well as the types of preferred English courses, based on the opinions of medical students at Mahidol University, in order to provide guidelines for the design of an appropriate English course in the future. 176 residents from all three year of classes were interviewed and given questionnaires. The questionnaire results indicated the residents wanted English classes with both medical and general English content in the first year study, with an emphasis on listening and speaking skills.

Pleansaisurb (1985) also investigated the needs, wants, and problems of medical students at Mahidol University as to the use of the four basic English skills in their present studies and in their future occupation. The first and third year students, interns, and some lecturers were given different sets of questionnaires while structured interviews were done with the administrators and the rest of the lecturers. The result indicated that reading was the skill most needed for all groups

of subjects. However, speaking and listening were the skills most wanted by the medical students.

Chaikitkosi (1986) pointed out that nursing students at Kuakarun Nursing College generally had English language needs ranging in degree from little to great according to her needs analysis based on questionnaires. Reading and translating skills were greatly needed by the nursing students and nursing teachers whereas the nursing teachers considered listening and writing as a moderate need and speaking as a minimal need.

Yeethong (1986) also conducted a needs analysis for use as a guideline for English elective courses, syllabuses, and materials for learners at a Vocational Diploma level at Khon Kean Campus of the King Mongkut's Institute of Technology. Based on the questionnaire and interview responses, the subjects regarded writing skills as very important. The finding also indicated that in order to design ESP courses, not only the target situation needs, in terms of necessities, lacks, and wants, but also learning situation needs should be taken into account.

Chirapan (1987) investigated English language needs, wants, and expectations of graduate students at the Faculty of Science of Mahidol University by using questionnaires. Based on her findings, reading was ranked first, followed by writing, listening, and, finally, speaking. As for wants and expectations, the students usually preferred practicing the aural-oral skills whereas their teachers demanded skills and activities which were more likely to be relevant to the needs in the target situation.

Classroom-centered research was carried out in the course, "English for Doctors" at Siriraj Hospital. Doctors taking the "English for Doctors" course during the 1987-1988 academic year were surveyed by using questionnaires at the beginning of the course. Most of the respondents thought that English was

moderately useful in their daily lives and ranked reading as the most important skill (Rongsard, 1988).

A needs analysis of the English used by taxi drivers in Bangkok was done by Jungsatidkul (1988) in order to identify their English skills as well as indicate problems in communicating with foreigners. Structured interviews and questionnaires were developed, and the finding was that the English skills most needed were speaking and listening skills. The taxi drivers wanted to improve speaking skills the most.

Uraisakul (1988) investigated the problems, wants, and needs in learning and using English of undergraduate computer students at the University of the Thai Chamber of Commerce. Questionnaires were given to the computer students and computer instructors were interviewed. The findings indicated that students wanted speaking skills to be highly emphasized. Regarding the use of the four English skills in studying computer subjects, the students reported they had a high need for reading skills whereas the computer teachers thought students had only a moderate need for reading skills.

Pholsward (1989) conducted a survey for the English language skills most needed by the computing professionals at the University of Thai Chamber of Commerce in the Thai context in order to obtain information to validate the type of language use and skills. Structured interviews and questionnaires were administered to 25 subjects. Speaking skills were ranked of greatest importance, followed by reading, and writing, respectively.

Khamnungsook (1989) did a survey of problems and wants in learning and teaching English for Communication Arts at Bangkok University with reference to curriculum, materials, teachers, students, and measurements. Two forms of questionnaires were given to English for Communication Arts teachers and third year

Communication Arts majors. The result revealed that most of the students could not apply English learned to the study of Communication Arts. Learning and teaching aids were regarded as insufficient for use.

A study of problems via questionnaires in the use of English by first year technical students studying at private institutions was conducted by Sakpimanporn (1989). Based on the questionnaire results, the respondents thought that they did not have a good background in English, and did not have a chance to maximize English skills outside the classrooms. English teachers rarely used teaching aids. English texts were considered difficult, and some texts did not cover all four English skills for practice by the students.

A needs analysis in English use by dramatic art students in Bangkok was developed by Buddharat (1991). Four sets of questionnaires were given to English teachers, learners, alumni, and administrators. The finding revealed that the English curriculum for dramatic arts students should include dramatic arts English along with general English. The language skills most needed were speaking and listening, especially in the context of presenting Thai dance and musical performance.

A study of needs for English of the officers at the counters of the post offices in the Bangkok metropolis was conducted by using three sets of questionnaires and interviews with officers at post offices in order to find out their specific needs. As for the results, it was quite evident that the language function most needed was "giving service information" (Boonjaipet, 1992).

Soranastaporn (1993) investigated the needs in the English language teaching and learning of nursing students and English teachers at nursing colleges under the Control of Nursing College Division, Ministry of Public Health, Thailand. Questionnaires were mailed to 23 nursing colleges in 22 provinces in Thailand. The findings revealed that nursing students and teachers wanted more English courses.

However, the teachers wanted the students to practice reading and writing, while the students wanted to practice listening and speaking.

Moody (1993) conducted a survey of Papua New Guinea Technical University graduates in the applied sciences, engineering fields, and forestry for the use of language skills and needs in the work place. Based on the results, appropriate syllabuses, materials, and methods for teaching language for special purposes (LSP) needed to be developed to accommodate existing language use patterns. Moreover, courses in language for occupational purposes and language for academic purposes should be offered to the technical students.

Oladejo (1993) did research on problems facing teachers and students in the teaching and learning of ESP in a multilingual nation, Papua New Guinea. Students recently admitted to the University of Technology in Papua New Guinea were surveyed. It was found that 49 percent expected to study English as a subject in some form as part of their curriculum. However, problems identified included the multilingual background of the learners, poor levels of language teacher training, and large class sizes.

Sangnark (1993) did a survey of the English needs of army cadets' needs studying at Chulachomklao Royal Military Academy. Questionnaires were given to army cadet graduates and English instructors. The finding revealed that listening and reading practice were the most wanted skills by both the army cadet graduates and the English instructors.

Sudthichai (1994) conducted a needs analysis of English for the naval cadets at the Naval Academy. Three sets of questionnaires were given to the cadets, English teachers, and officers. The results indicated that the cadets, the teachers, and the officers emphasized speaking skills the most, followed by reading skills.

A thorough needs analysis carried out in the College of Pharmacy of the University of Basque Country in the 1994-95 academic year showed student interest in improving their writing and speaking skills. Based on the questionnaire responses, it was significant to note that most of students wanted to become familiar with oral presentation and writing techniques (Pilar & Mayo, 1995).

Thananart (1996) studied the needs of Chulalongkorn University students in the use of English. The majority of students regarded listening and speaking as the most important skills. While a large number of respondents stated that their best skill was reading, the majority of students responded that they wanted their English courses to emphasize speaking and listening skills.

Price (1998) gathered information regarding the needs and problems of nursing and medical students at Kanazawa Medical University in Japan. He briefly summarized that the needs and aims of the students were different from those of the staff. Both the nursing and medical students' primary concern was to graduate. However, medical students sometimes needed to read journals written in English when they could not obtain information in Japanese. At the same time, all required information for nursing students was in Japanese. Therefore, knowledge of English was not as useful a tool for the nursing students as it was for the medical students.

Out of the 23 studies cited above, most of which have been done in the field of English for Science and Technology (EST), there are three done with nursing students. Additionally, it was found that no research on needs analysis with nursing students has ever been done in Northern Thailand. It is clear that most of the researchers use questionnaires as instruments of choice for carrying out research on needs analyses and problems in studying and teaching ESP.