Developing an ESP Speaking Course Framework for the Foreign Postgraduates in Science and Technology at National University of Malaysia

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Abstract

ESP Needs analysis leads to design a language course, which is more accommodating in the meeting of learners' needs. The paper aims to investigate language needs to develop an ESP speaking course framework for the foreign postgraduates in the fields of science and technology of three faculties (1. Faculty of Science and Technology, 2. Faculty of Engineering and 3. Faculty of Information Science and Technology) at National University of Malaysia. The theoretical aspects of the needs analysis are

based on the needs analysis model by Dudley-Evans and St John (1998). Questionnaire and Semi-structured interviews, as the instruments for data collection, are used for the language needs analysis. The samples of questionnaires include 252 foreign postgraduate students in the fields of science and technology of these three faculties in the university. In addition, the samples of interviews include 10 foreign postgraduate students and 5 academics in the fields of science and technology of these three faculties in the university. This paper reviews literature on some fundamental features of ESP, EAP, language needs analysis, components of needs analysis and ESP speaking skills. In fact, the findings of the needs analysis determine some important speaking tasks and skills for the proposed ESP speaking course. To sum up, the paper contributes to introduce an ESP speaking course framework development, necessary for these foreign postgraduates in the concerned fields of the three faculties in the university.

Keywords: ESP; EAP; Needs Analysis; ESP Speaking Course

1 INTRODUCTION

'English for Specific Purposes' (ESP), which is part of a more general movement of teaching 'Languages for Specific Purposes' (LSP), was pioneered in the 1950s and 1960s. In fact, ESP became a vital and innovative activity within the teaching of English in the 1970s. According to Dudley-Evans and St. John (1998: 2), for much of its infancy, ESP was dominated by the teaching of English for Academic Purposes (EAP). English for Academic Purposes (EAP), a branch of ESP, is offered for many reasons: to expose students to the expectations and requirements of the faculties in terms of target situation needs and academic culture (Jordan, 1997: 80), to help international students reach their full academic potential (Dudley-Evans and St. John, 1998: 36). Today, the teaching of ESP is gaining popularity throughout the world. Malaysia, today, stresses the importance of English in higher learning institutions. Some universities in Malaysia offer ESP/EAP courses to equip the undergraduate students in terms of specific needs of English language. Based on literature in language needs analysis, we have come to know that there are no ESP courses in postgraduate studies based upon the language needs analysis in public universities of the country. Language needs analysis is prerequisite for designing a language course in the ESP setting. Munby (1978) stresses the importance of needs analysis of learners to design ESP courses. According to Munby (1978: 2), "ESP courses are determined in all essentials by the prior analysis of the communication needs of the learners". Robinson (1991) emphasizes the primacy of needs analysis to design a language course (Robinson, 1991: 3). Dudley-Evans and St John

(1998: 122) argue that "needs analysis is the corner stone of ESP and leads to a very focused language course".

In line with the advancement of higher education in science and technology in Malaysia, there are a number of foreign postgraduate students studying in the science related fields in public universities in the country. Like other public universities in Malaysia, there are quite a large number of foreign postgraduate students in the fields of science technology at National University of Malaysia. These foreign students are mainly from the three faculties in the university: 1. Faculty of Science and Technology, 2. Faculty of Information Science and Technology and 3. Faculty of Engineering. These students are from the following regions such as Southeast Asia, East Asia, South Asia, Africa and Middle-East. The medium of instruction in their studies is mainly in English in the university. In fact, these students are from non-English backgrounds. Speaking for academic purposes is very necessary for these foreign postgraduates in the concern fields in the university. Therefore, an ESP (English for Specific Purposes) speaking course should be designed to prepare these foreign postgraduate students so that they can cope with the extent of English used in the concerned fields in the university in terms of speaking for academic purposes. Hence, the paper is concerned with investigating language needs for developing an ESP speaking course framework for the foreign postgraduates in the fields of science and technology at National University of Malaysia.

2 LITERATURE REVIEW

In line with the objective of the article, some essential fundamental aspects, which can provide information on characteristics and theoretical aspects of some terms related to the study, need to be highlighted in this section. In this concern, the section provides description and characteristics of ESP, classifications of ESP, notions of needs analysis, approaches to needs analysis and speaking skills in EAP.

2.1 English for Specific Purposes (ESP)

The original flowering of English for Specific Purposes (ESP) movement resulted from general developments in the world economy in the 1950s and 1960s, growth of science and technology, the increased use of English as the international language of science, technology and business, the

increased economic power of certain oil-rich countries and increased numbers of international students studying in UK, USA, and Australia (Dudley-Evans and St John, 1998). Hutchinson and Waters (1987: 6) state that in ESP context, the effect of the historical occurrences resulted from a mass of people across the globe who wanted to learn English language because of the key language for the fields of science, technology and commerce. The emergence of English for Specific Purposes (ESP) teaching movement resulted from the English language needs of the learners for specific purposes in accordance with their professions or job description.

Hutchinson and Waters (1987: 19) define that ESP is an approach to language learning and it is based on learners' need. What they mean is that ESP does not involve a particular kind of language, teaching material or methodology. They suggest that the foundation of ESP involves the learners, the language required and the learning context, which are based on the primacy of need in ESP.

Strevens (1988) formulates a definition of ESP, which makes a distinction between four absolute characteristics and two variable characteristics. The absolute characteristics are that ESP consists of English Language Teaching, which is:

1. designed to meet specified needs of the learners;

2. related in content (that is in its themes and topics) to particular disciplines, occupations and activities;

3. centred on language appropriate to those activities in syntax, lexis, discourse, semantics and so on, and analysis of the discourse;

4. in contrast with ' General English'.

The variable characteristics are that ESP:

1. may be restricted as to the learning skills to be learned (for example reading only);

2. may not be taught according to any pre-ordained methodology.

Robinson (1991) emphasizes the primacy of needs analysis in defining ESP. Her definition is based on two key defining criteria and a number of characteristics that are important aspects for ESP. Her key

criteria are that "ESP is normally goal-directed' and that ESP courses develop from a needs analysis, which aims to specify as closely as possible what exactly it is that students have to do through the medium of English" (Robinson, 1991: 3). Her characteristics are that ESP courses are generally constrained by a limited time period in which their objectives have to be achieved, and are taught to adults in 'homogeneous classes' in terms of the work or specialist studies that the students are involved in. Robinson (1991: 1) delineates ESP as an enterprise, which involves education, training and practice, and drawing upon three major realms of knowledge: language, pedagogy and the students' specialist areas of interest.

Dudley-Evans and St John (1998) provide their definition of ESP. They also use absolute and variable characteristics of ESP as Strevens (1988) centres on defining ESP (Dudley-Evans and St John (1998).

Absolute characteristics:

1. ESP is designed to meet specific needs of the learner;

2. ESP makes use of the underlying methodology and activities of the disciplines it serves;

3. ESP is centred on the language (grammar, lexis, and register), skills, discourse and genres appropriate to those activities.

Variable characteristics:

1. ESP may be related to or designed for specific disciplines;

2. ESP may use, in specific teaching situations, a different methodology from that of 'General English';

3. 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 used for learners at secondary school level;

4. ESP is generally designed for intermediate or advanced students. Most ESP courses assume basic knowledge of the language system, but it can be used with beginners.

The definition that Dudley-Evans and St John (1998) offer is clearly influenced by that of Strevens

(1988) and they have included more variable characteristics. Their division of ESP into absolute and variable characteristics, in particular, is very helpful in resolving arguments about what is and is not ESP.

ESP has traditionally been divided into two classified main branches such as English for Academic Purposes or EAP and English for Occupational Purposes or EOP (Dudley-Evans & St John, 1998; Hutchinson and Waters, 1987; Munby, 1978; Robinson, 1991). Dudley-Evans & St John (1998: 6) devise a tree diagram for ESP, which divides EAP and EOP according to discipline or professional area, is illustrated in Figure 2.1 below.
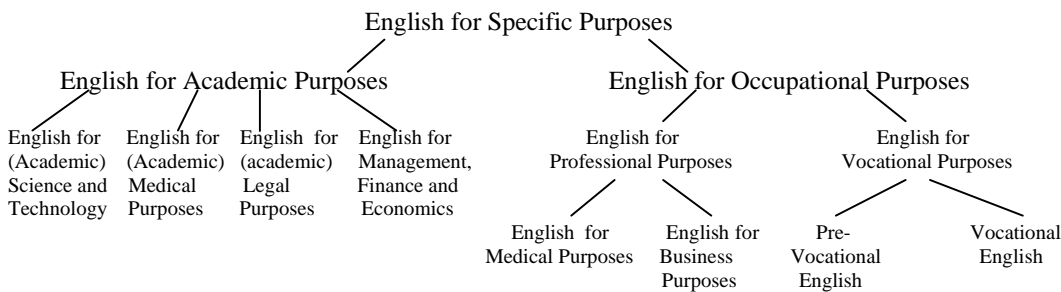
English for Specific Purposes

English for Academic Purposes — English for Occupational Purposes

English for (Academic) Science and Technology | English for (Academic) Medical Purposes | English for (academic) Legal Purposes | English for Management, Finance and Economics

English for Professional Purposes | English for Vocational Purposes

English for Medical Purposes | English for Business Purposes | Pre-Vocational English | Vocational English

Figure 2.1: ESP classification by professional area by Dudley-Evans & St John (1998)

EAP (English for Academic Purposes) refers to any English teaching that relates to academic study needs (Dudley-Evans & St. John, 1998; Robinson, 1991; Hutchinson & Waters, 1987: 2). Dudley-Evans & St John (1998: 7) argue that in EAP, English for Science and Technology (EST) has been the main area, but English for Medical Purposes (EMP) and English for Legal Purposes (ELP) have always had their place. More recently, English for Management, Finance, and Economics (EMFE) has increasingly been important to Master of Business Administration (MBA) courses. According to Robinson (1991: 21), EOP (English for Occupational Purposes) involves work-related needs and training. EOP includes professional purposes in administration, medicine, law and business, and vocational purposes for non-professionals in work or pre-work situations (Dudley-Evans & St. John, 1998: 7).

2.2 Needs Analysis in ESP Setting

The key stage in ESP (English for Specific Purposes) is needs analysis. Needs analysis is the corner

stone of ESP and leads to a vary focused course (Brown, 1995; Chambers, 1980; Dudley-Evans & St. John, 1998; Ellis & Johnson, 1994; Jordan, 1997; West, 1994). According to Robinson (1991: 7), "needs analysis is generally regarded as critical to ESP, although ESP is by no means the only educational enterprise which makes use of it". Strevens (1977) suggests that needs analysis is a necessary first step for specific purposes language teaching; it is more concerned with the nature of scientific discourse. Hutchinson and Waters (1987: 53) argue that any language course should be based on needs analysis. Needs analysis is fundamental to an ESP/EAP approach to course design (Hamp-Lyons, 2001: 127).

Dudley-Evans and St John (1998: 121) state that "needs analysis is the process of establishing the *what* and *how* of a course". They argue that "needs analysis is neither unique to language teaching-needs assessment, for example, is the basis of training programmes and aid-development programmes-nor, within language training, is it unique to LSP and thus to ESP". Dudley-Evans and St John (1998: 126) stress three aspects of needs analysis. Dudley-Evans and St John (1998: 126) state as:

> First, needs analysis aims to know learners as people, as language users and as language learners. Second, needs analysis study also aims to know how language learning and skills learning can be maximized for a given learner group. Third, needs analysis study aims to know the target situations and learning environment so that data can appropriately be interpreted.

It is obvious that needs analysis is a very crucial first step prior to designing and developing a language course, producing materials for teaching and learning, and developing language test. West (1994) states that language needs analysis is essentially a pragmatic activity focused on specific situations, although grounded in general theories, such as the nature of language and curriculum. Therefore, in the ESP/EAP context, needs analysis is crucial in determining the aspects of language that are crucial for a particular area of teaching. As Robinson (1991: 8) suggests, needs analysis is not only just for determining the "*what and how of a language of teaching*". Robinson (1991) also suggests that needs analysis study should be repeated so that it can be built into the formative process. This would lead to a very informative database of learners, sponsors, subject-specialists and above all ESP practitioners' view and opinions of English language. The main sources for needs analysis are the learners, people working or studying in the field, ex-students and documents relevant to the field, clients, employers, colleagues and ESP research in the field (Dudley-Evans and St John, 1998: 132).

One of the most recent needs analysis theoretical frameworks was introduced by Dudley-Evans and St. John (1998: 125). The theoretical framework of the study is based on this model. The model is illustrated below:
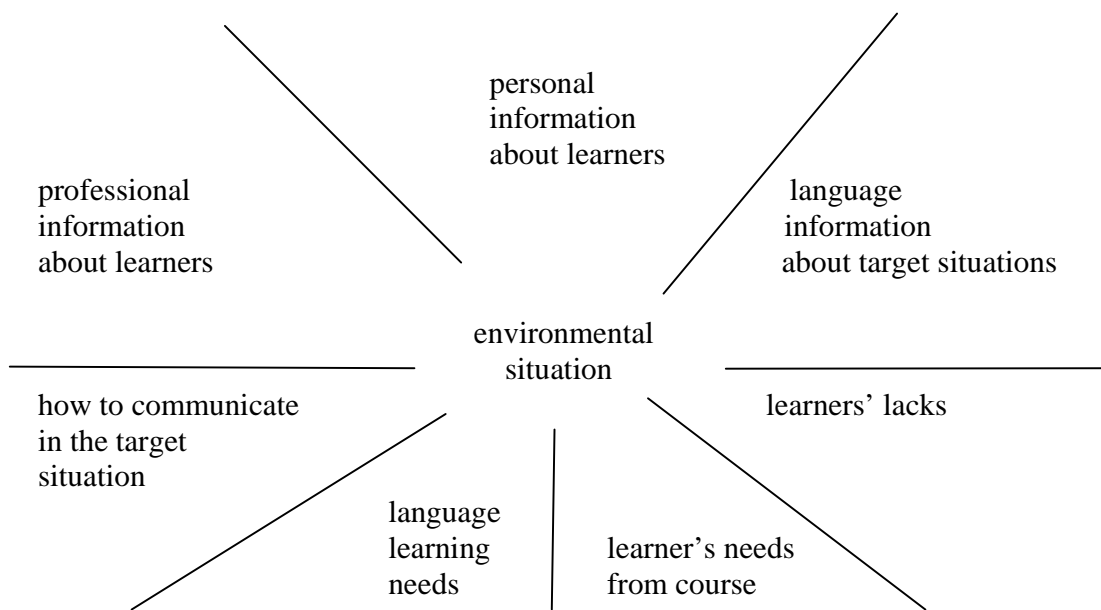

personal
information
about learners

professional
information
about learners

language
information
about target situations

environmental
situation

how to communicate
in the target
situation

learners' lacks

language
learning
needs

learner's needs
from course

FIGURE 2.1: What needs analysis establishes (Dudley-Evans and St John 1998: 125)

Figure 2.6 illustrates the theoretical framework suggested by Dudley-Evans and St John (1998). This model can be viewed as the most comprehensive model for ESP needs analysis. This model of ESP needs analysis formulated by Dudley-Evans and St John (1998: 125) focuses on (1) learners' professional information, (2) learners' personal information, (3) learners' language information about the target situations, (4) learners' lacks, (5) learners' needs from course, (6) language learning needs, (7) communication information in the target situation, and (8) environmental information. These aspects of language needs analysis are defined by Dudley-Evans and St John (1998: 125) are as follows:

A. professional information about the students: the tasks and activities students are/will be using English for-*target situation analysis (TSA)* and *objectives needs*

B. personal information about the students: factors which may affect the way they learn such as previous learning experiences, reasons for attending the course and expectations of it, attitude to

English-*wants*, *means subjective need*s

C. English language information about the students: what their current skills and language use are-*present situation analysis* (*PSA*)-this could allow us to assess (D). PSA determines strengths and weakness in language skills.

D. The students' lacks: the gap between (C) and (A)-*lacks*

E. Language learning information: effective ways of learning skills and language in (D)-*learning needs-Learning Situation Analysis (LSA)*

F. Knowledge of how language and skills are used in target situation-*linguistic analysis, discourse analysis and genre analysis*.

G. Students' needs from the course: what is wanted from the course?

H. Environmental situation: information about the environment in which the course will be run-*means analysis*

2.2.1   Components of Needs Analysis

Different components to language needs analysis are employed to investigate different focuses and issues in language planning, development, teaching and learning. Many ESP scholars suggest that TSA (Target Situation Analysis) and PSA (Present Situation Analysis) are the fundamental components for assessing language needs of learners. The theoretical aspect of the needs analysis is based on PSA and TSA components. So, it is necessary to inform the readers concerning the definitions and discussions of TSA and PSA.

2.2.1.1   Target Situation Analysis (TSA)

The term, 'Target Situation Analysis' (TSA) was introduced by Chambers (1980). Target Situation Analysis (TSA) is a form of needs analysis, which focuses on identifying the learners' language requirements in the occupational or academic situation they are being prepared for (West, 1994). Robinson (1991: 8) argues that a needs analysis, which focuses on students' needs at the end of a language course, can be called a TSA (Target Situation Analysis). Munby (1978) formulates the best-

known framework of TSA type of needs analysis. He presents a communicative needs processor, comprising a set of parameters within which information on the students' target situation can be plotted. The model formulated by Munby has, widely, been studied and discussed. Comprehensive data banks are among its useful features. For example, micro-skills and attitudes can be used as checklists for the resultant syllabus. A helpful insight, codified by Munby, relates to target-level performance: for certain jobs students may require only a low level of accuracy. The TSA may thus pinpoint the stage at which 'good enough' competence for the job is reached.

TSA refers to task and activities learners are/will be using English for target situation. TSA generally uses questionnaire as the instrument (Dudley-Evans and St. John (1998: 125). According to Dudley-Evans and St. John (1998: 124), TSA includes objective, perceived and product-oriented needs. They explain that the objective and perceived needs are derived by outsiders from facts, from what is known and can be verified. Therefore, "to be able to spell English words correctly" is an objective/perceived need. Product-oriented needs are derived from the goal or target situation.

2.2.1.2   Present Situation Analysis (PSA)

According to Robinson (1991: 8), "PSA (Present Situation Analysis) seeks to establish what the students are like at the start of their language course, investigating their strengths and weaknesses". Dudley-Evans and St. John (1998: 124) state that PSA estimates strengths and weaknesses in language, skills and learning experiences. Richterich and Chancerel (1980) formulate the most extensive range of devices for establishing the PSA. They suggest that there are three basic sources of information: the students themselves, the language-teaching establishment, and the 'user-institution', for example the students' place of work. For each of these, an ESP practitioner seeks information regarding their respective levels of ability; their resources; and their views on language teaching and learning. ESP practitioners might also study the surrounding society and culture: the attitude held towards English language and towards the learning and use of a foreign language. Munby (1978) argues that PSA represents constraints on the TSA. According to McDonough (1984), PSA involves 'fundamental variables', which must be clearly considered before the TSA. In practice, one is likely to seek and find information relating to both TSA and PSA simultaneously. Thus, needs analysis may be seen as a combination of TSA and PSA.

2.3 Speaking for Academic Purposes in English

According to Jordan (1997), speaking for academic purposes is used to describe spoken language in various academic settings. Speaking for academic purposes refers to participation in tutorials and seminars, asking questions in lectures, oral presentations, verbalizing data and giving oral instructions in seminars and laboratories and social interaction with other students (Jordan, 1997; Robinson, 1991). Jordan (1997) lists some important speaking skills in oral presentation such as organising information into coherent structure, using 'signals' to facilitate task of listeners, speaking from notes and achieving greater phonological, grammatical and lexical accuracy. Ostler (1980) lists some specific oral/aural tasks in descending order of importance: asking questions, discussing issues, giving talks, participating in panel discussions and receiving interviews.

Robinson (1991) sates that speaking in EAP is a relatively neglected area. She notes that in needs analysis it normally emerges, as the least needed skills. But, others oppose it. For example, Ostler (1980: 501) states, "the ESL university students' needs for improved academic speaking abilities are considered more important than other skills". Ostler (1980) further suggests that graduate ESL/ESP classes might need to include one aspect on preparing and giving talks and another on preparing for participation in panel discussions. Ferris and Tagg's (1996) investigation demonstrates that the academic speaking needs of EAP learners have significantly increased in recent years.

Jordan (1997: 201) suggests the important aspects of oral presentation: 1. general introduction, 2, statement of intention, 3. information in detail, 4. conclusion and 5. participation and invitation in discussion. According to Jordan (1997: 199), there are some aspects of seminar presentation and participation skills:

Seminar Skills

Presentation (as main speaker)	Participation (audience)
-sequencing	-indicating non-comprehension
-signposting	-asking for clarification
-delivery (speed/clarity)	-questioning
-visual aids	-disagreeing
-body language	
-concluding	

It is obvious that seminar skills are important for speaking for academic purposes. Jordan further (1997: 202) focuses on structuring and signaling of presentation:

1. Introduction

   1.1 Content: what the presenter will do

   1.2 Procedure: how the presenter will do it

2. Body

   2.1 List of points

   2.2 Focus each point

3. Conclusion

   3.1 Summary

3   RESEARCH METHODOLOGY

The methodology of a study is concerned with how the study is carried out. The paper, first, focuses on conducting needs analysis for these students in the concerned fields in the university. Second, an ESP speaking course framework for these foreign postgraduates will be developed on the basis of the outcomes of the language needs analysis.

3.1 Questionnaire for the Foreign Postgraduate Students

A self-administered questionnaire for the foreign postgraduate students was designed as a quantitative technique for data collection method after conducting the semi-structured students' interviews. The findings of the students' interviews helped develop a comprehensive questionnaire for investigating the English language needs of the foreign postgraduate students of science and technology in the university. The focus of the questionnaire was to seek information based on theoretical framework of the study, which covers TSA (Target Situation Analysis), PSA (Present Situation Analysis) and LSA

(Learning Situation Analysis) as well as other aspects according to theoretical framework of the needs analysis of the study. Most of the questions in the questionnaire were the 4-point scale (likert scale type) with close-ended questions. But some open-ended questions were also formulated in the questionnaire. The 4-point scales included measuring agreement (1= strongly agree…4 = strongly disagree), importance (1= "very important"…4 = "not important"), quality (1 = "excellent"…4 = "weak"), relative quantity (1 = "a lot of difficulty"…4 = "no difficulty") and likelihood .The questions in the questionnaire were formulated based on the following components of theoretical framework of needs analysis of the study, adapted from the model by Dudley-Evans and St John (1998):

1. Target Situation Analysis (TSA) -objectives needs and target needs

2. Personal information about students-students' wants

3. Present Situation Analysis (PSA)-language information about students-present needs

4. Learning Situation Analysis (LSA)-learning needs

5. Students' needs from course

6. Academic culture

For the survey questionnaire in the quantitative research, the samples chosen for the purposes of conducting needs analysis of the study were the postgraduate foreign students in three faculties in the university namely, 1. Faculty of Science and Technology, 2. Faculty of Engineering and 3. Faculty of Information Science and Technology. There were a total of 482 foreign postgraduates in semester two (academic year 2006/2007) in the particular three faculties in the university. The number of 252 foreign postgraduates in semester two was selected for the questionnaire survey out of the total of 482 foreign postgraduates in the three faculties. This selection of percentage was 50% of the total foreign students. This half of the total population can reveal a significant representation. The sampling strategy was based on random sampling.

3.2 Semi-structured Interviews for the Foreign Postgraduate Students

The questions of semi-structured interviews were developed for the foreign postgraduate students. Mackay (1978) advocates the interview when investigating learners' needs. Dudley-Evans and St John (1998) also emphasize the interview, as one of the main data collection method of language needs analysis. The interview questions were individual type with open-ended form based on the theoretical

framework of needs analysis of the study. The questions in the interviews were formulated on the basis of PSA (Present Situation Analysis) component of the needs analysis of the study. In investigating the English needs, the questions in the interviews sought information regarding the following themes/aspects: 1. difficulties in writing, reading, listening and speaking for academic purposes and 2. differences and difficulties in academic culture.

The individual interviews were conducted over a period of one month. The interview questions were semi-structured with open-ended questions. Appointments were made with these students prior to interviews. Most interviews were conducted in the interviewees' respective faculties. On the other hand, few interviews were conducted in the university library. Every interview took at least half an hour.

For the semi-structured interviews for the postgraduates, the samples chosen for the purposes of needs analysis study were ten postgraduate foreign students in the fields of science and technology in semester one (academic year-2006/2007), who at least finished one semester of their academic studies at the selected three faculties (e.g., 1. faculty of engineering, 2. faculty of science and technology and 3. faculty of informational science and technology) at National University of Malaysia. The rationale of choosing these postgraduate students (who at least finished one semester of their academic studies) that they were able to provide the informed information on their English needs and the difficulty of the writing skill areas they have faced to study their postgraduate programmes in the university. Purposive sampling strategy was applied for the selection of the samples in the students' interviews.

3.3 Semi-structured Interviews for the Academics

Semi-structured interview for the academics of the three selected faculties in the university was finally constructed on the basis of the theoretical framework of the language needs analysis of the study. The interview questions were open-ended items. The questions in the interviews were constructed on the basis of target needs (TSA) and means analysis (information on how a language course can be run) on the basis of the theoretical framework of the study. The interview questions were constructed to further investigate and identify some important aspects of academic English: reading, writing, listening and speaking for academic purposes, which the foreign postgraduate students in the fields of science and technology require for academic purposes.

The interview questions of the academics sought the information concerning the following themes/aspects: 1. academics' perceptions concerning the importance of reading, writing, listening and speaking aspects/tasks for academic purposes and 2. their opinions and suggestions for an ESP (English for Specific Purposes) course for the foreign postgraduates in the fields of science and technology in the university.

A total of 5 academics from the same selected faculties in the university were invited to take part in the interview in terms of qualitative paradigm. Two academics were from FST (Faculty of Science and Technology) whereas two academics were from FE (Faculty of Engineering). On the other hand, one academic was from FIST (Faculty Information Science and Technology). Purposive sampling strategy was applied for the selection of the samples in the academics' interviews.

4 RESULTS OF STUDENTS' QUESTIONNAIRES

The section provides the results of students' questionnaires.

4.1 Foreign Students' Perceptions of Importance of Speaking Tasks in English for Academic Purposes

Table 4.24, foreign postgraduate students of FST (mean = 1.91), FE (mean = 2.00) and FIST (mean = 2.45) in the university considered that (2a) presenting reports and participating in seminars/conferences was an important speaking aspect for academic purposes. Foreign students of FST (mean = 2.51) and FIST (mean = 3.50) stated that (2b) discussing and participating in tutorial classes was fairly important speaking aspect for academic purposes. But, foreign students of FE (mean = 2.27) felt that this was important for academic purposes.

Foreign students of FST (mean = 2.50) and students of FE (mean = 2.26) felt that (2c) giving oral instructions in seminars and laboratories was an important speaking aspect or task for academic purposes. But, FIST (mean = 3.25) noted that this speaking aspect was fairly important for academic purposes. Three groups, FST students (mean = 2.88), FE students (mean = 2.86) and FIST students (mean = 2.80) felt that (2d) asking and answering questions in lectures and tutorial classes was fairly important speaking aspect for academic purposes. Foreign students of FST (mean = 2.04), FE (mean = 2.01) and FIST (mean = 2.05) felt that (2e) expressing ideas and views well in any academic situation' was an important speaking aspect for academic purposes.

FST students (mean = 2.31), FE students (mean = 2.20) and FIST (mean = 2.10) felt that (2f) participating in a group discussions was an important speaking aspect. FE students (mean = 2.59) and FIST students (mean = 2.60) felt that (2g) interacting with lecturers confidently in academic discussion was fairly important speaking aspect whereas FST students (mean = 1.76) stated that this speaking aspect was important for academic purposes. Finally, FST students (mean = 2.42), FE students (mean = 2.37) and FIST students (mean = 1.75) noted that (2h) expressing counter arguments to points raised by lecturers in discussions was an important speaking aspect for academic purposes.

TABLE 4.1: Foreign Students' Perceptions of Importance of Speaking Tasks in English for Academic Purposes

Items/Questions	Faculties	N	Mean	Std. Deviation	Students' Responses of Importance
2a. Presenting reports and participating in seminars/conferences	FST	119	1.91	1.13	Important
	FE	113	2.00	.91	Important
	FIST	20	2.45	1.09	Important
	Total	252	2.00	1.04	
2b. Discussing and participating in tutorial classes	FST	119	2.51	1.02	Fairly important
	FE	113	2.27	.99	Important
	FIST	20	3.50	.88	Fairly important
	Total	252	2.48	1.04	
2c. Giving oral instructions in seminars and laboratories	FST	119	2.50	1.04	Important
	FE	113	2.26	.84	Important

	FIST	20	3.25	.87	Fairly important
	Total	252	2.45	.97	
2d. Asking and answering questions in lectures and tutorial classes	FST	119	2.88	1.06	Fairly important
	FE	113	2.86	1.06	Fairly important
	FIST	20	2.80	.95	Fairly important
	Total	252	2.86	1.05	
2e. Expressing students' ideas and views well in any academic situation	FST	119	2.04	1.21	Important
	FE	113	2.01	.93	Important
	FIST	20	2.05	.75	Important
	Total	252	2.03	1.06	
2f. Participating in group discussions	FST	119	2.31	1.22	Important
	FE	113	2.20	1.18	Important
	FIST	20	2.10	.30	Important
	Total	252	2.25	1.15	
2g. Interacting with lecturers confidently in any academic discussion	FST	119	1.76	.98	Important
	FE	107	2.59	1.26	Fairly important
	FIST	20	2.60	1.50	Fairly important

	Total	246	2.19	1.22	
2h. Expressing counter arguments to points raised by lecturers in discussions	FST	119	2.42	1.10	Important
	FE	113	2.37	1.05	Important
	FIST	20	1.75	.96	Important
	Total	252	2.34	1.08	

* Mean category:

1.00 - 1.50 = very important

1.51 - 2.50 = important

2.51 - 3.50 = fairly important

3.51 - 4.00 = not important

* FST= Faculty of Science and Technology

*FE= Faculty of Engineering

*FIST=Faculty of Information Science and Technology

4.1.1   Interpretation of Findings

The foreign postgraduate students of FST, FE and FIST in the university considered (2a), (2e), (2f) and (2h) as essential. On the other hand, as for (2b), (2d) and (2g), the foreign students of two faculties out of the three faculties considered as unessential. Finally, FST and FE students considered (2c) as essential whereas FIST students considered it as unessential.

4.2 Foreign Students' Difficulty in Speaking Tasks in English for Academic Purposes

Foreign students of FST (mean = 2.00) and FIST (mean = 2.30) stated that they had fair amount of difficulty in (2a1) presenting reports and participating in seminars/conferences whereas students of FE (mean = 2.60) noted that they had little difficulty in this speaking aspect. FST students (mean = 2.91)

and FE students (mean =2.61) in the university felt that they faced little difficulty in (2b1) discussing and participating in tutorial classes. But, FIST students (mean = 1.85) noted that they faced fair amount of difficulty in this speaking aspect. FST students (mean = 2.09) and FIST students (mean = 2.30) responded that they found fair amount of difficulty in (2c1) giving oral instructions in seminars and laboratories whereas FE students (mean = 2.64) faced little difficulty in this speaking aspect. FST students (mean = 2.78), FE students (mean = 2.76) and FIST students (mean = 3.05) felt that they faced little difficulty in (2d1) asking and answering questions in lectures and tutorial classes.

FST students (mean = 1.94), FE students (mean =2.48) and FIST students (mean = 2.30) in the university felt that they faced fair amount of difficulty in (2e1) expressing their ideas and views well in any academic situation. FE students (mean = 2.72) and FIST students (mean = 3.20) felt that they faced little difficulty in (2f1) participating in-group discussions. But, FE students (mean = 2.14) felt that they found difficulty in this speaking aspect. FE students (mean = 2.80) faced little difficulty in (2g1) interacting with lecturers confidently in any academic discussions while FIST students (mean =3.60) noted that they did face any difficulty in this speaking aspect. But, FST students (mean = 2.34) in the university felt that they faced fair amount of difficulty in this speaking aspect. Finally, FST students (mean = 1.85) and FE students (mean = 2.33) and FIST students (mean = 2.50) felt that they faced fair amount of difficulty in (2h1) expressing counter arguments to points raised by lecturers in discussions.

TABLE 4.2: Foreign Students' Difficulty in Speaking Tasks in English for Academic Purposes

Items/Questions	Faculties	N	Mean	Std. Deviation	Students' Responses of Difficulty
2a1. Presenting reports and participating in seminars/conferences	FST	119	2.00	1.02	Fair amount of difficulty
	FE	113	2.60	1.08	Little difficulty
	FIST	20	2.30	1.08	Fair amount of difficulty
	Total	252	2.29	1.09	
2b1. Discussing and	FST	119	2.91	.82	Little difficulty

participating in tutorial classes	FE	113	2.61	1.09	Little difficulty
	FIST	20	1.85	.93	Fair amount of difficulty
	Total	252	2.69	1.00	
2c1. Giving oral instructions in seminars and laboratories	FST	119	2.09	1.08	Fair amount of difficulty
	FE	113	2.64	1.06	Little difficulty
	FIST	20	2.30	1.08	Fair amount of difficulty
	Total	252	2.35	1.10	
2d1. Asking and answering questions in lectures and tutorial classes	FST	119	2.78	.91	Little difficulty
	FE	113	2.76	1.04	Little difficulty
	FIST	20	3.05	.99	Little difficulty
	Total	252	2.80	.98	
2e1. Expressing your ideas and views well in any academic situation	FST	119	1.94	1.04	Fair amount of difficulty
	FE	113	2.48	1.08	Fair amount of difficulty
	FIST	20	2.30	1.08	Fair amount of difficulty
	Total	252	2.21	1.09	
2f1. Participating in group discussions	FST	119	2.14	.97	Fair amount of difficulty
	FE	113	2.72	1.07	Little difficulty

	FIST	20	3.20	1.10	Little difficulty
	Total	252	2.48	1.08	
2g1. Interacting with lecturers confidently in any academic discussion	FST	119	2.34	.75	Fair amount of difficulty
	FE	113	2.80	.81	Little difficulty
	FIST	20	3.60	.82	No difficulty
	Total	252	2.65	.85	
2h1. Expressing counter arguments to points raised by lecturers in discussions	FST	119	1.86	1.06	Fair amount of difficulty
	FE	113	2.33	1.13	Fair amount of difficulty
	FIST	20	2.50	1.46	Fair amount of difficulty
	Total	252	2.12	1.15	

* Mean category:

1.00 - 1.50 = a lot of difficulty

1.51 - 2.50 = fair amount of difficulty

2.51 - 3.50 = little difficulty

3.51 - 4.00 = no difficulty

* FST= Faculty of Science and Technology

*FE= Faculty of Engineering

*FIST=Faculty of Information Science and Technology

4.2.1 Interpretation of Findings

The foreign students of three faculties (FST, FE and FIST) in the university considered (2e1) and (2h1) as sufficiently difficult. As for (2a1) and (2c1), FST and FIST students considered these two speaking tasks as sufficiently difficult whereas FE students considered these two speaking aspects as relatively easy. As for (2b1), (2f1) and (2g1), two groups considered them as relatively easy whereas one group considered these three speaking tasks as sufficiently difficult. Finally, the three groups considered (2d1) as relatively easy.

4.3 Foreign Students' Perceptions of Importance of Speaking Skills in English for Academic Purposes

Foreign students of FST (mean = 1.98), FE (mean = 2.15) and FIST (mean = 2.40) in the university felt that (3a) giving the general introduction in oral presentation was an important speaking skill for academic purposes. FST students (mean = 1.68), FE students (mean = 1.99) and FIST students (mean = 2.40) also felt that (3b) giving the statement of intention in oral presentation was an important speaking skill for academic purposes. These three groups of students also stated that (3c) giving the information of topics in details in oral presentation was an important speaking skill for academic purposes according to the mean scores shown in Table 4.26.

FST students (mean = 2.31), FE students (mean = 2.23) and FIST students (mean = 1.65) admitted that (3d) summarising and concluding on topics in oral presentation was an important speaking skill for academic purposes. FE students (mean = 1.93) and FIST (mean = 2.25) stated that (3e) organising information into coherent structure in oral presentation was an important speaking skill. But, FST students (mean = 2.67) noted that that this was fairly important speaking skill. Foreign students of FST (mean = 1.88), FE (mean = 1.99) and FIST (mean = 2.45) stated that (3f) having knowledge of seminar presentation skills was an important speaking skill for academic purposes. Two groups, FST students (mean = 2.04) and FE students (mean = 2.06) stated that (3g) speaking from notes in oral presentation was an important speaking skill whereas FIST students (mean = 2.65) admitted that this skill was fairly important.

Students of FST (mean = 2.00), FIST (mean = 2.04) and FIST (mean = 2.45) stated that (3h) recognizing key items of topics in oral presentation was an important speaking skill. FE students (mean = 2.55) stated that (3i) recognising similarities and differences on topics in oral presentation was fairly important for academic purposes while FIST students (mean = 3.51) admitted that this speaking skill was not important for academic purposes. But, FST students (mean = 2.24) noted that this was important speaking skill. The three groups, FST students, FE students and FIST students admitted that (3j) having knowledge of formality in speaking language in presentation was an important speaking skill for academic purposes according to the mean scores shown in Table 4.26. Finally, foreign students of FST (mean = 2.40), FE (mean = 2.15) and FIST (mean = 2.03) all stated that (3k) achieving proper phonological, grammatical and lexical accuracy in oral presentation was an important listening skill for academic purposes.

TABLE 4.3: Foreign Students' Perceptions of Importance of Speaking Skills in English for Academic Purpose

Items/Questions	Faculties	N	Mean	Std. Deviation	Students' Responses of Importance
3a. Giving the general introduction in oral presentation of a topic in your field in seminar/conference	FST	119	1.98	1.09	Important
	FE	113	2.15	1.04	Important
	FIST	20	2.40	1.50	Important
	Total	252	2.09	1.11	
3b. Giving the statement of intention in oral presentation of a topic in your field in seminar/conference	FST	119	1.68	.77	Important
	FE	113	1.99	.97	Important
	FIST	20	2.40	1.50	Important
	Total	252	1.88	.96	

3c. Giving the information of a topic in your field in details while oral presentation in seminar/conference	FST	119	1.99	.97	Important
	FE	113	1.69	.90	Important
	FIST	20	2.05	1.23	Important
	Total	252	1.86	.97	
3d. Summarising and concluding on a topic of your field while oral presentation in seminar/conference	FST	119	2.31	1.24	Important
	FE	113	2.23	1.24	Important
	FIST	20	1.65	1.08	Important
	Total	252	2.23	1.24	
3e. Organising information into coherent structure in oral presentation in seminar/conference	FST	119	2.67	1.05	Fairly important
	FE	113	1.93	.93	Important
	FIST	20	2.25	1.37	Important
	Total	252	2.30	1.08	
3f. Having knowledge of seminar presentation skills (e.g., sequencing ideas and information, delivery of speech in speed and clarity, visual aids, body language and conclusion, etc.)	FST	119	1.88	1.10	Important
	FE	113	1.99	.89	Important
	FIST	20	2.45	1.09	Important
	Total	252	1.97	1.02	
3g. Speaking from notes in oral	FST	119	2.04	1.03	Important

presentation in seminar/conference	FE	113	2.06	.81	Important
	FIST	20	2.65	1.18	Fairly important
	Total	252	2.09	.96	
3h. Recognizing key items of subject/topic while oral presentation in seminar/conference	FST	119	2.00	1.16	Important
	FE	113	2.04	.88	Important
	FIST	20	2.45	1.09	Important
	Total	252	2.05	1.04	
3i. Recognising similarities and differences, comparing and contrasting on your topic while oral presentation in seminar/conference	FST	119	2.24	.87	Important
	FE	113	2.55	.94	Fairly important
	FIST	20	3.51	.94	Not Important
	Total	252	2.48	.96	
3j. Having knowledge of formality in speaking language while presentation on a topic of your field in seminar/conference	FST	119	1.68	.77	Important
	FE	113	1.99	.97	Important
	FIST	20	2.40	1.50	Important
	Total	252	1.88	.96	
3k. Achieving proper phonological (pronunciation), grammatical and lexical accuracy while oral presentation	FST	119	2.03	1.50	Important
	FE	113	2.15	1.04	Important

in seminar/conference	FIST	20	2.40	1.09	Important
	Total	252	2.11	1.11	

* Mean category:

1.00 - 1.50 = very important

1.51 - 2.50 = important

2.51 - 3.50 = fairly important

3.51 - 4.00 = not important

* FST= Faculty of Science and Technology

*FE= Faculty of Engineering

*FIST=Faculty of Information Science and Technology

4.3.1 Interpretation of Findings

The foreign students of FST, FE and FIST in the university regarded a number of speaking skills as essential (3a, 3b, 3c, 3d, 3f, 3h, 3j and 3k). As for (3e) and (3g), two groups regarded these two skills as essential whereas one group regarded them as unessential. Finally, FE and FIST students considered (3i) as unessential whereas FST students considered it as essential.

4.4 Foreign Students' Difficulty in Speaking Skills in English for Academic Purposes

As presented in Table 4.27, foreign students of FST (mean = 3.17) and FE (mean = 2.61) in the university felt that they faced little difficulty in (3a1) giving the general introduction in oral presentation whereas FE students (mean = 3.85) did not face any difficulty in this speaking skill. FST students (mean = 2.00) and FIST students (mean = 2.30) stated that they faced fair amount of difficulty in (3b1) giving the statement of intention in oral presentation whereas FE students (mean = 2.60) felt that they faced little difficulty in this speaking skill. FST students (mean = 2.65) and FIST students (mean = 3.50) stated that they faced little difficulty in (3c1) giving the information of topics in details in oral presentation. But, FE students (mean = 1.75) faced fair amount of difficulty in this skill. FST students (mean = 2.33) faced fair amount of difficulty in (3d1) summarising and concluding on topics

in oral presentation. FE students (mean = 2.64) noted that they found little difficulty in this skill. On the other hand, FIST (mean = 3.65) noted that they did not face any difficulty in this skill. Students FST (mean = 2.03) stated that they found fair amount of difficulty in (3e1) organising information into coherent structure in seminar/conference. But, students of FE (mean = 2.63) and FIST (mean = 3.45) stated that they faced little difficulty in this speaking skill.

Foreign students of FST (mean = 2.67) and FIST (mean = 3.50) stated that they faced little difficulty in (3f1) having knowledge of seminar presentation skills. But, FE students (mean = 1.96) noted that they faced fair amount of difficulty in this skill. FST students (mean = 2.34) and FIST students (mean = 1.75) stated that they faced fair amount of difficulty in (3g1) speaking from notes in oral presentation in seminars/conferences whereas FE students (mean = 2.68) faced little difficulty in this speaking skill. Students of FST (mean = 2.04), FE (mean = 2.38) and FIST (mean = 2.05) all stated that they faced fair amount of difficulty in (3h1) recognizing key items of topics in oral presentation. FE students (mean = 3.00) faced little difficulty in (3i1) recognising similarities and differences, comparing and contrasting on topics in oral presentation whereas FIST students (mean = 3.51) admitted that they did not find any difficulty in this speaking. But, FST students (mean = 2.01) noted that this was difficulty area for them. As shown in Table 4.27, FST students (mean = 1.96) faced fair amount of difficulty in (3j1) having knowledge of formality in speaking language in presentation whereas FIST students (mean = 1.35) responded that they faced a lot of difficulty in this speaking skill. But, FE students (mean = 2.92) stated that they faced little difficulty in this speaking skill. Finally, FST students (mean = 2.20), FE students (mean = 2.20) and FIST students (mean = 2.00) all stated that they found fair amount of difficulty in (3k1) achieving proper phonological, grammatical and lexical accuracy in oral presentation.

TABLE 4.4: Foreign Students' Difficulty in Speaking Skills in English for Academic Purpose

Items/Questions	Faculties	N	Mean	Std. Deviation	Students' Responses of Difficulty	ANOVA Sig (*P*) at .05 level
3a1. Giving the general introduction in oral presentation of a topic in your field in	FST	119	3.17	1.07	Little difficulty	.00
	FE	113	2.61	1.03	Little difficulty	

seminar/conference	FIST	20	3.85	.48	No difficulty	
	Total	252	2.97	1.08		
3b1. Giving the statement of intention in oral presentation of a topic in your field in seminar/conference	FST	119	2.00	1.02	Fair amount of difficulty	.00
	FE	113	2.60	1.08	Little difficulty	
	FIST	20	2.30	1.08	Fair amount of difficulty	
	Total	252	2.29	1.09		
3c1. Giving the information of a topic in your field in details while oral presentation in seminar/conference	FST	119	2.65	1.17	Little difficulty	.00
	FE	113	1.75	.94	Fair amount of difficulty	
	FIST	20	3.50	.51	Little difficulty	
	Total	252	2.31	1.17		
3d1. Summarising and concluding on a topic of your field while oral presentation in seminar/conference	FST	119	2.33	.71	Fair amount of difficulty	.00
	FE	113	2.64	.80	Little difficulty	
	FIST	20	3.65	.74	No difficulty	
	Total	252	2.57	.83		
3e1. Organising information into coherent structure in oral presentation in seminar/conference	FST	119	2.03	.86	Fair amount of difficulty	.00
	FE	113	2.63	.75	Little difficulty	
	FIST	20	3.45	1.14	Little difficulty	

	Total	252	2.41	.93		
3f1. Having knowledge of seminar presentation skills (e.g., sequencing ideas and information, delivery of speech in speed and clarity, visual aids, body language and conclusion, etc.)	FST	119	2.67	1.17	Little difficulty	00
	FE	113	1.96	.94	Fair amount of difficulty	
	FIST	20	3.50	.51	Little difficulty	
	Total	252	2.42	1.13		
3g1. Speaking from notes in oral presentation in seminar/conference	FST	119	2.34	.79	Fair amount of difficulty	.00
	FE	113	2.68	1.01	Little difficulty	
	FIST	20	1.75	1.11	Fair amount of difficulty	
	Total	252	2.44	.95		
3h1. Recognizing key items of subject/topic while oral presentation in seminar/conference	FST	119	2.04	.81	Fair amount of difficulty	.00
	FE	113	2.38	.97	Fair amount of difficulty	
	FIST	20	2.05	.22	Fair amount of difficulty	
	Total	252	2.19	.87		
3i1. Recognising similarities and differences, comparing and contrasting on your topic while oral presentation in seminar/conference	FST	119	2.01	1.14	Fair amount of difficulty	.00
	FE	113	3.00	.85	Little difficulty	
	FIST	20	3.51	1.10	No difficulty	
	Total	252	2.57	1.15		

3j1. Having knowledge of formality in speaking language while presentation on a topic of your field in seminar/conference	FST	119	1.96	.95	Fair amount of difficulty	.00
	FE	113	2.92	.88	Little difficulty	
	FIST	20	1.35	.67	A lot of difficulty	
	Total	252	2.34	1.05		
3k1. Achieving proper phonological, grammatical and lexical accuracy while oral presentation in seminar/conference	FST	119	2.20	1.35	Fair amount of difficulty	.72
	FE	113	2.20	.73	Fair amount of difficulty	
	FIST	20	2.00	.79	Fair amount of difficulty	
	Total	252	2.18	1.07		

* Mean category:

1.00 - 1.50 = a lot of difficulty

1.51 - 2.50 = fair amount of difficulty

2.51 - 3.50 = little difficulty

3.51 - 4.00 = no difficulty

* FST= Faculty of Science and Technology

*FE= Faculty of Engineering

*FIST=Faculty of Information Science and Technology

4.4.1   Interpretation of Findings

The foreign students of the three faculties (FST, FST and FIST) in the university considered (3h1) and (3k1) as sufficiently difficult. For (3b1) and (3g1) and   (3j1), FST and FIST students considered as sufficiently difficult whereas FE students considered these three speaking skills as relatively easy. As for (3d1), (3e1) and (3i1), FE and FIST students considered as relatively easy whereas FST students considered these three skills as

sufficiently difficult. FST and FIST considered (3c1) (3f1) as relatively easy whereas FE students considered these two speaking skills as sufficiently difficult. Finally, three groups (FST, FE and FIST students) considered (3a1) as relatively easy.

5   DISCUSSIONS OF FINDINGS OF STUDENTS' QUESTIONNAIRES

In the discussion of findings all speaking aspects and skills that are considered "essential" and "sufficiently difficult" by at least students of two faculties will be considered for inclusion in the ESP course. Here are the speaking aspects and skills, which should be considered for inclusion in the course:

Speaking Tasks	FST Students		FE Students		FIST Students		To be considered for inclusion = INC
Presenting reports and participating in seminars/conferences	Essential	Sufficiently difficult	Essential	Relatively easy	Essential	Sufficiently difficult	INC
Discussing and participating in tutorial classes	Unessential	Relatively easy	Essential	Relatively easy	Unessential	Sufficiently difficult	
Giving oral instructions in seminars and laboratories	Essential	Sufficiently difficult	Essential	Relatively easy	Unessential	Sufficiently difficult	INC
Asking and answering questions in lectures and tutorial classes	Unessential	Relatively easy	Unessential	Relatively easy	Unessential	Relatively easy	

Expressing students' ideas and views well in any academic situation	Essential	Sufficiently difficult	Essential	Sufficiently difficult	Essential	Sufficiently difficult	INC
Participating in group discussions	Essential	Sufficiently difficult	Essential	Relatively easy	Essential	Relatively easy	INC
Interacting with lecturers confidently in any academic discussion	Essential	Sufficiently difficult	Unessential	Relatively easy	Unessential	Relatively easy	
Expressing counter arguments to points raised by lecturers in discussion	Essential	Sufficiently difficult	Essential	Sufficiently difficult	Essential	Sufficiently difficult	INC
Speaking skills						
Giving the general introduction in oral presentation of a topic in students' fields in seminars/conferences	Essential	Relatively easy	Essential	Relatively easy	Essential	Relatively easy	
Giving the statement of intention in oral presentation of a topic in your field in seminar/conference	Essential	Sufficiently difficult	Essential	Relatively easy	Essential	Sufficiently difficult	INC

Giving the information of topics in students' fields in details while oral presentation in seminar/conference	Essential	Relatively easy	Essential	Sufficiently difficult	Essential	Relatively easy	
Summarising and concluding on topics of students' fields while oral presentation in seminars/conferences	Essential	Sufficiently difficult	Essential	Relatively easy	Essential	Relatively easy	
Organising information into coherent structures in oral presentation in seminars/conferences	Unessential	Sufficiently difficult	Essential	Relatively easy	Essential	Relatively easy	
Having knowledge of seminar presentation skills (e.g., sequencing ideas and information, delivery of speech in speed and clarity, visual aids, body language and conclusion, etc.)	Essential	Relatively easy	Essential	Sufficiently difficult	Essential	Relatively easy	
Speaking from notes in oral presentation in seminars/conferences	Essential	Sufficiently difficult	Essential	Relatively easy	Unessential	Sufficiently difficult	**INC**
Recognizing key items of subjects/topics while oral presentation in seminars/conferences	Essential	Sufficiently difficult	Essential	Sufficiently difficult	Essential	Sufficiently difficult	**INC**
Recognising similarities and differences, comparing and	Essential	Sufficiently difficult	Unessential	Relatively easy	Unessential	Relatively easy	

contrasting on your topic while oral presentation in seminar/conference						
Having knowledge of formality in speaking language while presentation on a topic of your field in seminar/conference	Essential	Sufficiently difficult	Essential	Relatively easy	Essential	Sufficiently difficult	**INC**
Achieving proper phonological, grammatical and lexical accuracy while oral presentation in seminar/conference	Essential	Sufficiently difficult	Essential	Sufficiently difficult	Essential	Sufficiently difficult	**INC**

5.1 Speaking Tasks in English for Academic Purposes

According to the findings, three groups (FST, FE and FIST students) considered the speaking aspects as essential and sufficiently difficult (2e/2e1 expressing students' ideas and views well in any academic situation and 2h/2h1 expressing counter arguments to points raised by lecturers in discussions). Thus, these underlined speaking tasks should be considered for inclusion in the ESP course.

Two groups out of three groups considered the three speaking tasks as essential and sufficiently difficult (2a/2a1 presenting reports and participating in seminars/conferences, 2c/2c1giving oral instructions in seminars and laboratories and 2f/2f1 participating in group discussions). Thus, these underlined three speaking aspects should be included in the course.

The speaking tasks, which should not be included in the course, are 2b/2b1 discussing and participating in tutorial classes, 2d/2d1 asking and answering questions in lectures and tutorial classes, and 2g/2g1 interacting with lecturers confidently in any academic discussions. It is because these two tasks were not considered both of essential and sufficiently difficult by at least two groups out of three groups (FST, FE and FIST students)

5.2 Speaking Skills in English for Academic Purposes

According to the findings, three groups (FST, FE and FIST students) considered the two speaking skills as essential and sufficiently difficult (3h/3h1 recognizing key items of subjects/topics while oral presentation in seminars/conferences and 3k/3k1 achieving proper phonological, grammatical and lexical accuracy while oral presentation in seminars/conferences). Thus, these underlined speaking skills should be considered for inclusion in the ESP course.

Two groups out of three groups considered the three speaking skills as essential and sufficiently difficult (3b/3b1 giving the statement of intention in oral presentation of a topic in students' fields in seminars/conferences, 3g/3g1 speaking from notes in oral presentation in seminars/conferences and 3j/3j1 having knowledge of formality in speaking language while presentation on topics of students' fields in seminars/conferences). Hence, these underlined three speaking skills should be considered for inclusion in the ESP course.

The speaking skills, which should not be included in the course, are 3a/3a1 giving the general introduction in oral presentation of a topic in students' fields, 3c/3c1giving the information of topics in students' fields in details while oral presentation, 3d/3d1 summarising and concluding on topics of students' fields while oral presentation, 3e/3e1 organising information into coherent structures in oral presentation, 3f/3f1 having knowledge of seminar presentation skills and 3i/3i1 recognising similarities and differences, comparing and contrasting on your topic while oral presentation. It is because these six underlined speaking skills were not considered both of essential or sufficiently difficult by at least two groups out of three groups (FST, FE and FIST students).

Besides all speaking tasks and skills above for inclusion in the ESP course, the qualitative data will also be taken into consideration.

6   ANALYSIS OF FOREIGN STUDENTS' INTERVIEWS

The section delineates the analysis of students' interviews.

6.1 The Profile of the Interviewees: General Information

The interviewees were the ten foreign students in their postgraduate programmes in the fields of science and technology of the three faculties at National University of Malaysia: 1. Faculty of Science and Technology, 2. Faculty of Engineering and 3. Faculty of Information Science and Technology. The foreign postgraduate students had finished at least one semester. They were not new students. Four foreign students were in their PhD programmes while six students were in their masters' programmes in the fields of science and technology of the three faculties in the university. They were from different countries namely, Jordan, Libya, Oman, Bangladesh, India and Yemen. Out of the ten foreign postgraduate students, only two foreign postgraduate students of the three faculties studied their previous studies in the medium of English language. On the other hand, two foreign students possessed English language proficiency certificates such as IELTS. So, these four foreign postgraduate students of the three faculties were considered as high proficient in English language. On the other hand, six foreign students of the three faculties in the university were considered as low proficient in English language. Table 4.1 depicts the profile of the foreign postgraduates in the fields of science and technology of the three faculties in the university.

TABLE 6.1: Profile of the Foreign Postgraduate Students of Three Faculties in the University

Students	Genders	Countries	Programmes	Medium of instruction in previous bachelor	Medium of instruction in previous master	TOEFL/ IELTS	Faculties	Proficiency levels
A	Male	Libya	PhD	Arabic	Arabic	--	Engineering	Low
B	Male	Libya	Master	Arabic	--	--	Information Science and Technology	Low
C	Female	Yemen	Master	English	--	--	Science and Technology	High
D	Male	Bangladesh	Master	Bengali	--		Engineering	Low

E	Male	India	PhD	English	English	--	Science and Technology	High
F	Male	Jordan	Master	Arabic	--	--	Science and Technology	Low
G	Male	Jordan	Master	Arabic	--	IELTS	Engineering	High
H	Male	Yemen	PhD	Russian	Russian	IELTS	Engineering	High
I	Male	Oman	Master	Arabic	--	--	Information Science and Technology	Low
J	Male	Jordan	PhD	Arabic	--	--	Information Science and Technology	Low

- The foreign students, who were from English education backgrounds or who possessed IELTS/TOEFL scores, were considered as 'high proficient'

- The foreign students, who were from non-English education backgrounds or who did not possess IELTS/TOEFL scores, were considered as 'low proficient'

6.2 Analysis of Foreign Students' Interviews according to Themes

First, the section provides an analysis of interviews according to the different themes.

6.2.1 Theme Three: Foreign Postgraduate Students' Difficulties in Speaking in English for Academic Purposes

According to the results of the interviews, five foreign postgraduate students out of ten students faced difficulty in common oral presentations (Students A, B, F, I and J). Three students indicated that their main problems were in pronunciation. (Students B, I and J). These three students also stated that they

faced difficulty in oral presentation (speaking) due to their shyness (Students B, I and J). The five foreign students explained their difficulties in speaking in English for academic purposes as:

> "And I have also the problem in speaking and speech in seminar and conference and what else". (Student A).

> "I have many problems in my speaking. I can't fluently speak to my lectures for my study. I cannot speak fluently in my study discussion. I can't speak fluently when I present my topic for seminar. It is difficult when I present my topic individually. "Yes…yah"…I feel shy. I have also pronunciation problems. My lecturers cannot understand me when I talk to me…this is the problem. (Student B)

> "But you know…in seminar, presentation, problem.. you can imagine what other will ask you the questions. Sometimes, I feel…complicated". (Student F)

> "Also problem…speaking. I cannot speak to my lectures…also to my friends. I have pronunciation problem…I face many problems in presenting in class. I feel shy. I don't know many words for my study". (Student I)

> "Yes, about speaking I have also problem. I cannot speak fluently. Sometimes, I feel shy. I face problem in pronunciation…. When I presented my proposal, I was so shy. I faced many problems during my presentation". I think, speaking is very important for expressing something". (Student J)

Three foreign postgraduate students in the fields of science and technology of the three faculties in the university did not find any difficulty in oral presentations in seminar/conference (Students C, E and G). However, one student indicated that she faced some difficulty in understanding local accent in English when she was pursuing her bachelor degree (Student C). One student stated that he did not face difficulty in presenting in classes or any academic discussion (Student D). Here are the transcriptions of these four students to state as:

> "No, I don't think that I have a problem in speaking in seminar presentation or any other study discussions. I faced a bit difficulty in understanding local accents in English when I was pursuing bachelor degree. But now it is ok for me". (Student C)

> "In speaking, I don't face any problem. I can speak in any academic matter. I can easily speak in English with my lectures when I have problem in my study topic. I also presented many class works. So, I did not face any problem in speaking". (Student D)

"For speaking, I can fluently speak and deliver speech in seminar. I can speak fluently with my lectures and other friends in academic situation. In terms of presentation, I presented few papers. In addition, I served as a lecturer in India. I spoke well during presentation sessions". (Student E)

"Ok, Speaking is easy for me. I used to speak in seminars in my university in Jordan. I used to present academic works in seminars. I used to make presentations to many students in my university. I have presentation and communication skills". (Student G)

7 DISCUSSION OF FINDINGS OF STUDENTS' INTERVIEWS

In investigating English language needs for the foreign postgraduates in the fields of science and technology of the three faculties (FST, FE and FIST) in the university, the interview focused on looking into foreign postgraduate students' difficulty in reading, writing, speaking and listening in English for academic purposes. These four language areas are so vital for assessing language needs. Academic culture is the important aspect, which can influence academic study (Jordan, 1997). Hence, in addition to four language areas for academic purposes, the interview also focused on identifying differences and difficulties in academic culture between this university and foreign students' home universities.

7.1 Foreign Postgraduate Students' Difficulty in Speaking for Academic Purposes

As revealed by the interviews, in speaking for academic purposes, five of the total ten foreign postgraduate students claimed to experience difficulty in common oral presentations in seminars/conferences or academic discussions in the university. The findings from the students' questionnaires also support this finding. According to the findings of the students' questionnaires, foreign students of two faculties had sufficiently difficult with presenting reports and participating in seminars/conferences. A study by Jordan (1997) is related to this finding of interviews. Oral presentation in seminars or academic discussions has been noted as an area of major difficulty faced by foreign students in UK universities (Jordan, 1997). A study by Ferris and Tagg (1996) also support this finding of students' interviews. Their study revealed that international postgraduate students of science related fields in a university in UK found most problems in oral presentations in seminars and classes. According to the findings, some of these five students experienced their main difficulties in pronunciation. It is assumed that these students did not practise oral presentations in seminars or academic discussion in English language in their previous education. It could be that they were from

non-English education backgrounds in their previous studies and were considered as low proficient in English. According to their profile, these five students were from non-English backgrounds and were considered as low proficiency level. In addition, it is assumed that these students did not come across presentations in their education systems. Therefore, it would appear that they found difficulty in oral presentations. In conclusion, it is obvious that accurate pronunciation is prerequisite for delivering oral presentations. According to the findings of students' interviews, some students also could not perform presentations because of bashfulness. Many international ESL students in university content classrooms in English-speaking countries feel inadequacy and frustration while participating in formal oral presentations (Leki, 2001; Liu, 2001; Morita, 2002). Thus, according to the findings of students' interviews, it is suggested that 'oral presentation in seminars/conferences' should be included in the ESP course. The findings of students' questionnaires also suggested 'oral presentation in seminars/conferences' to be included in the course.

On the other hand, a number of students (four out of total ten students) found no difficulty in oral presentations in seminar/conference or classes. Based on the findings of the interviews, it would seem that these four students practised presentations in English language. It is because three students of these students were from English education backgrounds in their previous studies whereas one had IELTS score as the interviewees' profile revealed'. So, the four foreign postgraduate students of the three faculties in the university were considered as highly proficient in English according as the foreign students' profile depicted. Therefore, it is assumed that they did not claim to experience any difficulty in speaking in English for their academic studies such as oral presentations or any academic discussions.

7.2 Suggestions of Speaking Tasks for Inclusion in the ESP Speaking Course

Based on the discussion of the findings of students' interviews, some tasks in speaking in English for academic purposes should be included in the ESP course. Here are the tasks in speaking in English for academic purposes:

8   ANALYSIS OF ACADEMICS' INTERVIEWS

The section delineates the analysis of academics' interviews.

8.1 The Profile of the Interviewees: General Information

The interviewees were five academics, who were selected from the three faculties in the university: 1. FST (Faculty of Science and Technology), 2. FE (Faculty of Engineering) and 3. FIST (Faculty of Information Science and Technology) at National University of Malaysia. Two interviewees were selected from FST while two were from FE. One interviewee was selected from FIST. Academically, one interviewee was professor while three were associate professors. But, one interviewee was lecturer. Table 4.34 depicts the profile of the five academics from the three faculties in the university.

TABLE 8.1:   Profile of the Academics of Three Faculties in the University

Academics	Gender	Position	Department/Area	Faculty
A	Male	Professor	Food Technology	FST
B	Female	Assoc. Professor	Electrical and System Eng.	FE
C	Male	Lecturer	Computer Science	FIST
D	Male	Assoc. Professor	Environmental Science	FST
E	Male	Assoc. Professor	Applied Mechanics	FE

8.2 Analysis of Academics' Interviews according to Themes

8.2.1   Theme Four: Academics' Perceptions of Importance of Speaking Tasks in English for Academic Purposes

According to the analysis of the five academics, all (five academics) stated that oral presentation in seminars was an important speaking task for the foreign postgraduate students in the fields of sciences and technology for academic purposes (Academics A, B, C, D and E). The majority of the respondents (three out of five respondents) admitted that speaking with supervisors/lecturers in any academic discussion was also important for the foreign postgraduate students in the concerned fields for academic purposes (Academics B, D and E). In addition, the majority of the academics (three out of five academics) noted that speaking in group discussions was also important for the foreign postgraduate students in the concerned fields (Academics A, D and E). According to one respondent, presenting research proposal was also important for academic purposes (Academic A). The five academics stated as:

> "For speaking tasks, they are required to present their proposal in English. In addition, group discussion in classes is also very important. Oral presentation in seminar is also important for local and foreign students". (Academic A)

> "Oral presentation is very important speaking task. All postgraduate students in this faculty, either locals or foreigners, have to present orally in seminars. Speaking with supervisors is very important". (Academic B)

> "I think, the main speaking task is oral presentation in classes or seminars". (Academic C)

> "Regarding speaking, speaking in seminar is very important. I think, speaking in group discussions is also important speaking task for academic purposes. In addition, speaking with supervisors for academic matters is important aspect". (Academic D)

> "I think, seminar presentation is very important. In addition, speaking with lecturers is also very important. Speaking in group discussions is also important for academic purposes". (Academic E)

9.   DISCUSSION OF FINDINGS OF ACADEMICS' INTERVIEWS

In investigating English language needs for the foreign postgraduates in the fields of science and technology of the three faculties (FST, FE and FIST) in the university, the academics' interview focused on looking into their perceptions of importance of speaking and listening tasks in English for academic purposes. The interview also focused on looking into information such as course semester (when the proposed course will be run), course lectures (who will be teaching the course), teaching methodology and teaching materials.

9.1 Academics' Perceptions of Importance of Speaking Tasks in English for Academic Purposes

According to the findings, all (five academics) stated that 'oral presentation in seminars' was an important speaking task for the foreign postgraduate students in the fields of sciences and technology for academic purposes. The findings of the students' questionnaires also support this finding. According to the findings of the students' questionnaires, the students of the three faculties considered 'presenting reports and participating in seminars/conferences' to be essential for academic purposes. Dooey's study (2006) supports this finding. According to a study by Dooey (2006), most of the international postgraduate students in a university in Australia regarded 'giving presentation' to be important. It would seem that 'oral presentation in seminars' was very necessary and common speaking task that all academics considered to be important for the foreign postgraduate students in the fields of sciences of the three faculties in the target situation. The majority of the respondents (three out of five respondents) admitted that 'speaking with supervisors/lecturers in any academic discussion' was also important for the foreign postgraduate students in the concerned fields for academic purposes. From the findings, it is assumed that 'speaking with supervisors/lecturers in any academic discussion' was useful task that many academics regarded to be important for the foreign postgraduate students in the concerned fields in the target situation. In addition, many of the academics (three out of five academics) noted that 'speaking in group discussions' was also important for the foreign postgraduate students in the concerned fields. The findings of the students' questionnaires also support this finding. Dooey's study (2006) and Mason's study (1995) are related to this finding. According to the study by Dooey (2006), lecturers at Curtin University in Australia seemed to consider 'participating and speaking in class/group discussions' as important for international postgraduates. Mason (1995) found that there is a necessity for international postgraduate students to take part in discussions and to participate in a range of activities. It would appear that 'speaking in group discussions' was necessary

task that the bulk of the academics considered to be important for the foreign postgraduate students in the concerned fields in the target situation. The findings of the students' questionnaires also support this finding. According to the findings of the students' questionnaires, the students of the three faculties considered 'participating in group discussions' to be essential. Finally, 'presenting research proposals' was considered as important by the findings of academics' interviews. Thus, from the findings of academics' interviews, it is suggested that 'oral presentation in seminars', 'speaking with supervisors/lecturers in any academic discussion', 'speaking in group discussions' and 'presenting research proposals' should be included in the ESP course. In fact, the findings of students' questionnaires suggested 'oral presentation in seminars' and 'speaking in group discussions' to be included in the course.

9.2 Suggestions of Speaking Tasks for Inclusion in the ESP Speaking Course: A Basis on the Findings

Based on the discussion of the findings of academics' interviews, some speaking tasks in speaking for academic purposes should be included in the ESP course. Here are the tasks in the four language areas for inclusion in the ESP course:

Speaking Tasks for Academic Purposes

1. Oral presentation in seminars

2. Speaking with supervisors/lecturers in any academic discussion

3. Speaking in group discussions

4. Presenting research proposals

10 DEVELOPING THE FRAMEWORK FOR THE PROPOSED ESP SPEAKING COURSE

The first stage of the study was to carry out the language needs analysis, which was discussed in the earlier sections. The chapter discusses the second stage of the study. The second stage of the study is concerned with developing the framework for the ESP (English for Specific Purposes) speaking course for the postgraduates in the fields of science and technology of the three faculties at National University of Malaysia on the basis of the outcomes of the needs analysis. Goals and objectives will be formulated before designing the syllabus of the course. Afterwards, the syllabus of the course will be designed on the basis of the results of the needs analysis. In fact, the results of the needs analysis have

determined a number of tasks and skills in speaking for academic purposes, which will be only components of the syllabus of the ESP speaking course.

10.1   Goals and Objectives of the ESP Speaking Course

Formulating goals and objectives for a particular course allows teachers to create a clear picture of what the course is going to be about. As Graves (1996) explains, goals are general statements or the final destination; the level students will need to achieve. Objectives express certain ways of achieving the goals. It is obvious that clear understanding of goals and objectives will help teachers to be sure what material to teach, and when and how it should be taught.

Goals:

By the end of the speaking course, the foreign postgraduates in the fields of science and technology in the university should be able to equip themselves with speaking skills and tasks for academic purposes as well as other study skills.

Objectives:

The objectives of the course are to provide the foreign postgraduate students in the concerned fields with clear understandings of important speaking skills for academic purposes so as to perform necessary speaking tasks for students' various academic programmes in the medium of English in the university based on foreign students' needs and wants.

10.2   Content of the ESP Speaking Course (In-sessional ESP Course)

Based on the results of the ESP needs analysis, a number of necessary tasks and skills in speaking for academic purposes will be included, emphasized, integrated in the course. The basic approach to teaching and learning in this ESP course is referred to the skills-centred approach. The basic fundamentals of this approach are to highlight the four language skills and sub-skills in designing the ESP syllabus (Jordan, 1997). The skills-centred approach to ESP has been widely applied in a number of countries, particularly in Latin America (Hutchinson and Waters, 1987).

Objective

The objective of speaking in English for academic purposes is to provide the foreign postgraduate students in the fields of science and technology in the university with the understandings concerning necessary speaking skills in English for academic purposes so as to perform speaking tasks in their postgraduate studies in their studies in the medium of instruction in English language. At the end of this ESP speaking course, students should be able to gain the various speaking skills and strategies and be able to apply such skills in speaking activities for academic purposes in accordance with speaking needs.

Speaking Tasks

Here are the following speaking tasks for academic purposes, which were identified by the needs analysis (e.g., the findings of students' questionnaires, students' interviews and academics' interviews), are devised for the syllabus of the ESP course. The data from these three sources (students' questionnaires, students' interviews and academics' interviews) are incorporated below.

Presenting reports and participating in seminars/conferences

1. Presenting works in classes
2. Expressing students' ideas and views well in any academic situation
3. Speaking with supervisors (lecturers) confidently on academic matters
4. Participating and speaking in group discussions
5. Expressing counter arguments to points raised by lecturers in academic discussions
6. Giving oral instructions in seminars and laboratories
7. Presenting research proposals

These above speaking tasks for inclusion in the ESP course, which were found by the findings of students' questionnaires, students' interviews and academics' interviews, are incorporated here:

Speaking Tasks based on the Findings from Students' Questionnaires

In the discussion of the findings from students' questionnaires in chapter 4, all speaking tasks that were considered as "essential" and "sufficiently difficult" by at least students of two faculties will be considered for inclusion in the ESP course. This tabulation of the findings of speaking tasks for academic purposes from students' questionnaires was also mentioned and described in chapter 4. Here is the tabulation of the findings of speaking tasks from students' questionnaires to be considered for inclusion in the course:

Speaking Tasks	FST Students		FE Students		FIST Students		To be considered for inclusion = INC
Presenting reports and participating in seminars/conferences	Essential	Sufficiently difficult	Essential	Relatively easy	Essential	Sufficiently difficult	INC
Discussing and participating in tutorial classes	Unessential	Relatively easy	Essential	Relatively easy	Unessential	Sufficiently difficult	
Giving oral instructions in seminars and laboratories	Essential	Sufficiently difficult	Essential	Relatively easy	Unessential	Sufficiently difficult	INC
Asking and answering questions in lectures and tutorial classes	Unessential	Relatively easy	Unessential	Relatively easy	Unessential	Relatively easy	

Expressing students' ideas and views well in any academic situation	Essential	Sufficiently difficult	Essential	Sufficiently difficult	Essential	Sufficiently difficult	INC
Participating in group discussions	Essential	Sufficiently difficult	Essential	Relatively easy	Essential	Relatively easy	INC
Interacting with lecturers confidently in any academic discussion	Essential	Sufficiently difficult	Unessential	Relatively easy	Unessential	Relatively easy	
Expressing counter arguments to points raised by lecturers in discussion	Essential	Sufficiently difficult	Essential	Sufficiently difficult	Essential	Sufficiently difficult	INC

Speaking Tasks based on the Findings from Students' Interviews

According to the results of the interviews, five foreign postgraduate students out of ten students faced difficulty in common oral presentations (Students A, B, F, I and J). Three students indicated that their main problems were in pronunciation. (Students B, I and J). These three students also stated that they faced difficulty in oral presentation (speaking) due to their shyness (Students B, I and J). Thus, according to the findings of students' interviews, it is suggested that 'oral presentation in seminars/conferences' should be included in the ESP course. The findings of students' questionnaires also suggested 'oral presentation in seminars/conferences' to be included in the course. The five foreign students explained their difficulties in these speaking tasks in English for academic purposes as:

> "And I have also the speaking problem such as speaking and speech in seminar and conference and what else". (Student A).

> "I have many problems in my speaking. I can't fluently speak to my lecturers for my study purposes. I cannot speak fluently in my study discussions. I can't speak fluently when I present my topic in seminar. It is difficult when I

present my topic individually. "Yes…yah"…I feel shy. I have also pronunciation problems. My lecturers cannot understand me when I talk to them…this is the problem. (Student B)

"But you know…in seminar, I have presentation problems. Sometimes, I feel…complicated". (Student F)

"I have also problem in speaking…. I cannot speak to my lectures…also to my friends. Regarding pronunciation problem…I face many problems in presenting in classes. I feel shy. I don't know many words for my study". (Student I)

"Yes, about speaking I have also problem. I cannot speak fluently. Sometimes, I feel shy. I face problem in pronunciation…. When I presented my proposal, I felt so shy. I faced many problems during my presentation". I think, speaking is very important for expressing something". (Student J)

Speaking Tasks based on the Findings from Academics' Interviews

According to the analysis of the five academics, all (five academics) stated that oral presentation in seminars was an important speaking task for the foreign postgraduate students in the fields of sciences and technology for academic purposes (Academics A, B, C, D and E). The majority of the respondents (three out of five respondents) admitted that speaking with supervisors/lecturers in any academic discussion was also important for the foreign postgraduate students in the concerned fields for academic purposes (Academics B, D and E). In addition, the majority of the academics (three out of five academics) noted that speaking in group discussions was also important for the foreign postgraduate students in the concerned fields (Academics A, D and E). According to one respondent, presenting research proposal was also important for academic purposes (Academic A). Thus, from the findings of academics' interviews, it is suggested that 'oral presentation in seminars', 'speaking with supervisors/lecturers in any academic discussion', 'speaking in group discussions' and 'presenting research proposals' should be included in the ESP course. In fact, the findings of students' questionnaires suggested 'oral presentation in seminars' and 'speaking in group discussions' to be included in the course. Here, the five academics emphasized these speaking tasks as important:

> "For speaking tasks, they are required to present their proposal in English. In addition, group discussion in classes is also very important. Oral presentation in seminar is also important for local and foreign students". (Academic A)

"Oral presentation is very important speaking task. All postgraduate students in this faculty, either locals or foreigners, have to present orally in seminars. Speaking with supervisors is very important". (Academic B)

"I think, the main speaking task is oral presentation in classes or seminars". (Academic C)

"Regarding speaking, speaking in seminar is very important. I think, speaking in group discussions is also important speaking task for academic purposes. In addition, speaking with supervisors for academic matters is important task". (Academic D)

"I think, seminar presentation is very important. In addition, speaking with lecturers is also very important. Speaking in group discussions is also important for academic purposes". (Academic E)

Speaking Skills

The following speaking skills are necessary for performing the aforementioned speaking tasks in English. The following speaking skills in English for academic purposes, which were identified by the needs analysis (e.g., the findings of students' questionnaires), are devised for the syllabus. The data from students' questionnaires are incorporated below.

Lesson-1:- Giving the statement of topics in the fields of science and technology in details while oral presentation in seminars/conferences
Lesson-2:-Speaking from notes in oral presentation in seminars/conferences

Lesson-3:- Recognising key items of topics in oral presentation in seminars/conferences
Lesson-4:- Having knowledge of formality in speaking language while presentation on a topic in the concerned fields in seminars/conferences
Lesson-5:- Achieving proper phonological, grammatical and lexical accuracy while oral presentation in seminars/conferences

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- The above speaking skills are categorized as lessons.

These above speaking skills for inclusion in the ESP course, which were found by the findings of students' questionnaires, are incorporated here:

Speaking Skills based on the Findings from Students' Questionnaires

In the discussion of the findings from students' questionnaires in chapter 4, all speaking skills that were considered as "essential" and "sufficiently difficult" by at least students of two faculties will be considered for inclusion in the ESP course. This tabulation of the findings of speaking skills for academic purposes from students' questionnaires was also mentioned and described in chapter 4. Here is the tabulation of the findings of speaking skills from students' questionnaires to be considered for inclusion in the course:

Speaking Tasks	FST Students		FE Students		FIST Students		To be considered for inclusion = INC
Giving the general introduction in oral presentation of a topic in students' fields in seminars/conferences	Essential	Relatively easy	Essential	Relatively easy	Essential	Relatively easy	
Giving the statement of intention in oral presentation of a topic in your field in seminar/conference	Essential	Sufficiently difficult	Essential	Relatively easy	Essential	Sufficiently difficult	INC
Giving the information of topics in students' fields in details while oral presentation in seminar/conference	Essential	Relatively easy	Essential	Sufficiently difficult	Essential	Relatively easy	
Summarising and concluding on topics of students' fields while oral presentation in seminars/conferences	Essential	Sufficiently difficult	Essential	Relatively easy	Essential	Relatively easy	
Organising information into coherent structures in oral presentation in seminars/conferences	Unessential	Sufficiently difficult	Essential	Relatively easy	Essential	Relatively easy	
Having knowledge of seminar presentation skills (e.g., sequencing ideas and information, delivery of speech in speed and clarity,	Essential	Relatively easy	Essential	Sufficiently difficult	Essential	Relatively easy	

visual aids, body language and conclusion, etc.)						
Speaking from notes in oral presentation in seminars/conferences	Essential	Sufficiently difficult	Essential	Relatively easy	Unessential	Sufficiently difficult	**INC**
Recognizing key items of subjects/topics while oral presentation in seminars/conferences	Essential	Sufficiently difficult	Essential	Sufficiently difficult	Essential	Sufficiently difficult	**INC**
Recognising similarities and differences, comparing and contrasting on your topic while oral presentation in seminar/conference	Essential	Sufficiently difficult	Unessential	Relatively easy	Unessential	Relatively easy	
Having knowledge of formality in speaking language while presentation on a topic of your field in seminar/conference	Essential	Sufficiently difficult	Essential	Relatively easy	Essential	Sufficiently difficult	**INC**
Achieving proper phonological, grammatical and lexical accuracy while oral presentation in seminar/conference	Essential	Sufficiently difficult	Essential	Sufficiently difficult	Essential	Sufficiently difficult	**INC**

10.3 Suggestion for Teaching Materials of the ESP Speaking Course

Materials play an important role in the design of any language course. If students do not find the materials interesting and the teaching methodology creative, they lose their motivation. It is the role of the teacher to set the track right for the learners by creating an environment that is conducive for learning. Selection of appropriate teaching materials is one of the most characteristic features of ESP in practice (Hutchinson and Waters, 1987). Actually, a language teacher or institution should provide teaching materials that will fit the specific subject areas of particular learners according to speaking needs for academic purposes. 'Materials provide a stimulus to learning. Good materials do not teach: they encourage learners to learn' (Hutchinson and Waters, 1987: 107).
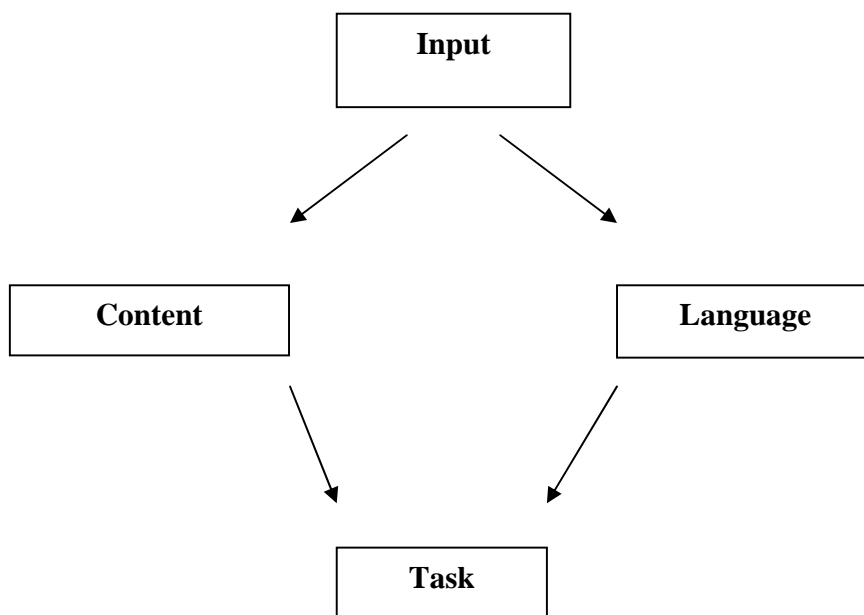
On the basis of the syllabus components of the ESP speaking course, language lecturers in the university can select speaking lessons as speaking tasks from the sources of the materials such as various topics of reference books and seminars/conferences in the field of science and technology. Language lecturers can select some English language books on seminar presentation skills to gain speaking skills for academic purposes. Many ESP writers emphasize that language specialists and subject specialists can look into and make discussions to select teaching materials or write in-house materials (Robinson 1991; Hutchinson and Water 1987; Jordan 1997). Hutchinson and Waters (1987) present a model which has helped them in producing their own materials for the speaking course. The model consists of four elements: input, content focus, language focus and task. They here describe the model:

1. **Input:** This may be a text, dialogue, video-recording, diagram or any piece of communication data, depending upon the needs defined in analysis. The input provides a number of things:

    - stimulus material for activities;

    - new language items;

    - correct models of language use;

    - a topic of communication;

    - opportunities for learners to use their information processing skills;

    - opportunities for learners to use their existing knowledge both of the language and the subject matter.

2. **Content focus**: Language is not an end in itself, but a means of conveying information and feelings about something. Non-linguistic content should be exploited to generate meaningful communication in the classroom.

3. **Language focus:** The main aim is to enable learners to use language, but it is unfair to give learners communicative tasks and activities for which they do not have enough of

the necessary language knowledge. In language focus learners have the chance to take the language to piece, study how it works and practice putting it back together again.

4. **Task:** the ultimate purpose of language learning is language use. Materials should be designed, therefore, to lead towards a communicative task in which learners use the content and language knowledge the have built up through the unit.

The model consists of these four elements as follows:

```
                  ┌──────────────┐
                  │    Input     │
                  └──────────────┘
                   ↙            ↘
  ┌──────────────┐              ┌──────────────┐
  │   Content    │              │   Language   │
  └──────────────┘              └──────────────┘
           ↘                    ↙
                  ┌──────────────┐
                  │     Task     │
                  └──────────────┘
```

10.4 Suggestion for Evaluation/Assessment of the Speaking Course and Students

We suggest evaluation of the ESP speaking course and students' progress. Evaluation is the last part of developing a language course. Evaluation is an essential part of learning and teaching. Evaluation applies to both students and to courses as a whole. The concepts 'evaluation' and 'assessment' are often used interchangeably. Assessment refers to the set of processes by which students learning is judged (Nunan, 1988). On the other hand, evaluation is a wider term, entailing assessment, but including other process as well (Nunan, 1988). The data resulting from evaluation assist course designers in deciding whether a course needs to be modified or altered in any way so that objectives may be achieved more effectively.

10.4.1 Course Evaluation

Course evaluation is the important stage of a language course. Language lecturers should evaluate their courses to improve and promote their effectiveness. Evaluation in ESP situations is concerned with the effectiveness and efficiency of learning; with achieving the objectives (Dudley-Evans and St John, 1998). Course evaluation can make use of quantitative and qualitative methods. We suggest summative evaluation for the speaking course. Summative evaluation takes place at the end of a course (Dudley-Evans and St John, 1997). At the end of the course, students will be invited to give their opinions of the course by answering a questionnaire.

10.4.2 Student Evaluation: Assessment

Evaluation also applies to students as assessment. English lecturers can adopt standard ESP speaking tests for students' evaluation. Any ESP speaking tests (IELTS or TOEFL or other designed ESP test) can be adapted for students' evaluation.

11 CONCLUSION

English for Specific Purposes (ESP) meets the needs of (mostly) adult learners for academic or professional purposes. Designing an appropriate ESP course that suits target groups in an academic setting is not easy task for course designers/ESP practitioners. Needs analysis determines to design a language course. The study focused on conducting needs assessment for designing the ESP speaking course framework for the foreign postgraduate students in the fields of science and technology of the three faculties in the university. In this concern, some fundamental aspects needed to be considered to propose the ESP speaking course framework. First, we conducted a comprehensive ESP needs analysis focusing on a number of tasks and skills in speaking for academic purposes. Then, we formulated goals and objectives of the speaking course in keeping with the course framework in an ESP aspect. Subsequently, we determined and constructed the content of the course based on the results of language needs analysis. In addition, we suggested teaching materials and evaluation of the speaking course and students' progress from the course. The ESP speaking course can be accommodating for these foreign postgraduate students in the concerned fields of the three faculties in the university. It is because the course is designed in relation to the foreign students' needs, expectations and wants in academic English based on the speaking concerns for academic purposes. This ESP speaking course is not a final

product that remains unchanged. Course development should be viewed as an on-going process. It can be revised and refined through course evaluation.

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