THE NEEDS AND ATTITUDES OF SCIENCE STUDENTS TO ESP: A CASE STUDY OF TAIF UNIVERSITY IN KHURMA, Saudi Arabia

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Abstract: *This study investigates the needs and attitudes of science students at Taif University in Khurma to ESP. The main aim of the study is to identify and classify these needs and attitudes of ESP students particularly regarding their importance to better their academic performance at the present and in the future. The problem this research probes is whether the ESP courses offered to science students at Taif University in Khurma are designed with reference to students' needs and attitudes. The main question the study is carried out to answer is the extent to which ESP science students are aware of their needs, lacks, wants and necessities to learning the language for science purposes. In addition, the study also tackles the questions of ESP learners' needs and attitudes and their implications for practicing ESP teachers, syllabus designers and materials writers. The instrument of data collection for the study is a 22-item questionnaire comprising three sections concerning ESP students' needs and attitudes. The researcher administered the questionnaire to a group of 100 first-year science students at Taif University in Khurma. The method the study uses is the descriptive method. Results of data analysis showed that the majority of respondents indicated that their needs for studying ESP courses rests with the four language skills of listening, speaking, reading and writing together with grammar and vocabulary.*

Key words: ESP, needs, needs analysis, attitudes, motivation, syllabus and materials.

احتياجات واتجاهات طلاب العلوم بجامعة الطائف فرع الخرمة بالمملكة العربية السعودية نحو تعلم اللغة الانجليزية لأغراض خاصة

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الملخص: تبحث هذه الدراسة في احتياجات واتجاهات طلاب العلوم بجامعة الطائف بالخرمة نحو دراسة اللغة الانجليزية لأغراض خاصة. الهدف من الدراسة هو التعرف على وتصنيف اتجاهات الطلاب لدراسة اللغة الانجليزية لأغراض خاصة اضافة الى اتجاهات هؤلاء الطلاب نحو أهمية اللغة الانجليزية في التحصيل الاكاديمي بالنسبة لتخصصاتهم المختلفة حالياً وفي المستقبل. تقوم مشكلة الدراسة على ما إذا كانت مقررات اللغة الانجليزية لأغراض خاصة التي تُدرس لطلاب العلوم بفرع جامعة الطائف بالخرمة تؤسس على نتائج استطلاع آراء هؤلاء الطلاب بغية التعرف على احتياجاتهم واتجاهاتهم نحو تعلُم اللغة الانجليزية وأهميتها في تحصيلهم الاكاديمي. السؤال الرئيسي الذي تحاول الدراسة الاجابة علية هو الى اي مدى يُدرك طلاب العلوم احتياجاتهم ونواقصهم وضروراتهم لتعلُم اللغة الانجليزية لأغراض خاصة وتأثير ذلك على مُدرسيّ ومصممي مناهج وكتب اللغة الانجليزية لأغراض خاصة الي أهمية الاخذ في الاعتبار احتياجات واتجاهات الطلاب الذين يدرسون اللغة الانجليزية لأغراض خاصة. لجمع بيانات الدراسة قام الباحث بتصميم واستخدام استبانة تحتوى على ٢٢ سؤال لتحديد احتياجات واتجاهات طلاب العلوم نحو دراسة اللغة الانجليزية لأغراض خاصة، العينة التي استهدفتها الدراسة شملت ١٠٠ طالب من طلاب السنة الاولى من أقسام كلية العلوم والتربية بجامعة الطائف بالخرمة تم اختيارهم عشوائيا.

الكلمات المفتاحية: اللغة الانجليزية لأغراض خاصة، الاحتياجات، تحليل الاحتياجات، اتجاهات، دوافع، المقرر والمواد التعليمية

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Introduction

This study explores the needs and attitudes of science students of Taif University in Khurma to ESP. (English for Specific Purposes) which is a programme of instruction in which the content and aims of the course are determined by the specific needs of a particular group of learners.

The study was set out to answer a number of questions pertaining to a sample of 100 science students who participated in the study. When the researcher first started teaching ESP courses to science students in the Khurma branch of Taif University, he noticed the insufficiency of these courses to meet students' expectations of studying ESP. These insufficiencies could be attributed to factors such as the following:

1. The syllabus and course content

2. Classroom contact hours

3. The number of courses offered

4. Students' proficiency level

5. Unavailability of modern teaching aids

6. The testing techniques followed

Since this study brings together science students' needs and attitudes in the context of ESP, it is important to make reference here to these two key words of the study to begin with. English for specific purposes, ESP for short, refers to the role English language is expected to play in a course of study or a programme of instruction in which both of the aims and content of the course are determined by the specific needs of a group of students at the tertiary level of education. That is, ESP is a way of designing learning-teaching materials to satisfy the needs of a specific group of learners in the context of their academic area of study.

Talking about ESP as a language teaching-learning programme, whose main purpose is to cater for learners' needs, wants and lacks to learning English, it is essential to point out that ESP is to be seen as a method of approach to teaching English rather than materials, syllabi and techniques. According to Hutchinson and Waters, ESP, thus, is "an approach to language in which all decisions as to content and method are based on the learners' reasons for learning."(1987:19).

Setting ESP as a separate entity within the larger field of general English language teaching begs the question as to how different the two are. To many, ESP is considered different from teaching English for general purposes for these reasons:

1. In ESP courses, the language is studied instrumentally based on learners' perceived needs.

2. The linguistic content of an ESP course is organized around topics pertaining to the learners' academic area of study.

3. ESP students are probably more conscious of why they are studying English for owing to the fact that they are mature learners with clearly set utilitarian purposes of learning the language.

4. Linguistically, ESP learning-teaching materials are purpose-specific in terms of vocabulary, grammar and discourse.

5. The learning skills in an ESP course are precisely stated in the syllabus; for instance, technical vocabulary and report writing for university chemistry students.

Brief historical background to ESP

Following the end of the Second World War and with the emergence of the victorious Euro-American Alliance led by the United States of America, and given that English is the official language of the States, the Anglo-American model of education- amongst others of course- began to be in a commanding position across the entire world. When so many countries in the world, especially in the under-developed world, wanted to copy the Anglo-American educational system they realized that mastery of the English language is key to the success of their secondary and tertiary levels of education. Hence, tremendous efforts were devoted to that end. The countries which did achieve better results attributed their success to adopting an English-medium of instruction partially in their secondary level of schooling and wholly in the tertiary one.

On the other hand, some other countries decided to teach English only as part of their school and university curricula. Of course, some university disciplines such as science and technology paid more attention to the English; therefore, English was made part and parcel of these disciplines' instructional programmes.

ESP came into being following radical changes in the field of English language teaching methods wherein greater emphasis was beginning to be put on the learner; hence, the needs, lacks and wants of specific groups of learners became the focus. The factors that led to the development of ESP are:

1. Increasing demand for English to meet learners' needs.

2. Developments in linguistics

 (Hutchinson and Waters, 1987)

Linguistically, ESP, which emerged in the 1960s, matured over time in five stages according to Hutchinson and Waters (1987):

1. Stage one: Hutchinson and Waters refer to this stage as the "special language concept". In this stage of ESP development, the focus was on languages' different registers in relation to specific academic disciplines.

2. Stage two: The so called "the discourse analysis" stage is seen as a reaction to the previous stage whose concern was specific sets of sentences and expressions for a particular academic discipline. So, the linguistic focus in stage one was at the sentence level whereas in the second stage of the maturation of ESP the concern was with units of connected language, such as full texts.

3. Stage three: This stage of the development of ESP is called the "target situation analysis". This stage of the history of ESP refers to the efforts made by some language teaching-learning experts to analyze the English language for the purpose of making its teaching and learning easy. The work done by John Munby (1978) is often cited as an example of, among other things, target situation analysis.

4. Stage four: Hutchinson and Waters (1987) call the fourth stage of the development of ESP the "skills and strategies" stage, which, according to them, was of more importance in comparison to the previous ones. Here, the ESP learner's attention and level of priorities shift from focusing on language per se to the skills he/she is expected to gain from an ESP course of study.

5. Stage Five: The last stage in the ESP development is called "a learning-centred approach." Rather than putting the learner at the receiving end of the educational process, this fifth stage of the coming of age of ESP firmly establishes the learner as the centre of the whole learning process, especially in relation to the content to be taught. As stated by Hutchinson and Waters "a truly valid approach to ESP must be based on an understanding of the process of language learning" (1987:14).

ESP Syllabus Design

Ideally, the ESP syllabus has to meet the language and skills needed by a certain group of learners, given that it is designed to satisfy these learners' needs (Munby, 1978). The process of designing an ESP course brings together the learner and the teacher to achieve the aims of the ESP course whose characteristic features are:

1. Selecting the course materials

2. Making adaptation in the materials selected

3. Writing the materials

4. Developing a methodology to teach these materials

5. Establishing an evaluation mechanism to measure progress in relation to learning outcomes

(elaborated from Hutchinson and Waters, 1987)

For the ESP syllabus, there are three possible sources of materials:

1. Ready-made materials

2. Tailored materials

3. Adapted materials

According to Nation (2010:24) "the content of language courses consists of language items, ideas, skills and strategies that meet the goals of the course". Of course, the syllabus has its own goals which are formulated in line with learners' needs. In addition, the order of presentation of the syllabus content can be according to learning tasks, learning skills, topics and /or themes.

Basturkmen (2010:72) perceives the process of designing an ESP syllabus as "narrow-angled" by which she refers to meticulously tailored course content to meet the specific needs of a group of learners. The idea of a 'narrowed-angled ESP syllabus makes it clear that a distinction has to be made between 'real' content on the one hand and 'carrier' content on the other. Real content is to do with the language and skills features of the course whereas the carrier content component is concerned with the tools by which the real content is delivered to the learners.

As for Harding, the process of designing an ESP syllabus is based on the following:

1. The intensiveness vs. the extensiveness of the course

2. Assessment vs. non-assessment

3. Immediate needs vs. delayed needs

4. Homogeneity vs. heterogeneity of the group for whom the course is meant

5. Teacher–designed vs. institution prescribed course (2007:26)

Aims of the study

This study aims at achieving the following:

1. Helping science students to discover their academic needs of studying ESP.

2. Encouraging science students to have positive attitudes towards ESP.

3. Taking the initiative to make ESP students have positive attitudes to ESP.

4. Helping practicing ESP teachers select materials for their students.

5. Experimenting with new techniques to do needs analysis.

Limitation of the study

This research work is limited to first year ESP science students of Taif University in Khurma during the academic year 2010-2011. The topic of the study is limited to the sample's needs and attitudes to studying English for specific purposes.

The ESP Syllabus of Taif University in Khurma

The materials currently used to teach ESP courses at Taif University in Khurma come in the form of a package whose contents are:

1. Student's textbook(two parts)

2. CD (audio material)

Before the current textbook, which is more like general English than ESP, was introduced, teachers who teach ESP courses to science students at Taif University in Khurma used their own experiences and expertise to bring ESP Materials to the class. Hence, that is how the researcher got interested in investigating the needs and attitudes of science students to ESP. By so doing, the researcher hopes that proper ESP textbooks will be used by Taif University to teach the university's different students according to their academic disciplines.

The newly offered ESP programme, which is divided into two courses termed English1 and English2, aims at providing students with the language and academic skills they need for their university study. There are two modules to be taught in fourteen weeks. As for the method of approach used for teaching the programme, it appears like its designers had wanted it to be a notional-functional syllabus. This approach to syllabus design establishes language teaching on two principles:

1. Notions which are concepts and meanings the learner is thought to be needing in order to be able to use the language meaningfully and effectively.

2. Functions or language forms required in certain situations to execute specific functions or language acts such as greeting, describing and advising.

(Longman Dictionary of Language Teaching and Applied Linguistics, 2002)

However, to Hutchinson and Waters (1987:31), notions are "categories into which the mind and thereby language divides reality. Examples of such categories are: time, frequency, duration, etc". On the other hand, the same authors see functions as "approximately equated with the communicative acts that are carried out through language".

According to Al-Humaidi (2004), the situation of teaching ESP in Saudi universities is characterized by:

1. The dividing line between ESP and general English is not clearly specified.

2. ESP courses are more likely to be assigned to the junior members of the teaching staff (i.e. teaching assistants, language instructors and lecturers).

3. Course materials may not necessarily be selected on the basis of the findings of needs analysis and assessment surveys.

4. Different methods of approach are adapted to teach ESP courses.

Literature Review

a. Needs and Levels of Needs

It is generally understood that ESP learners' 'needs' is an inclusive term which can be categorized into learners' lacks, wants and necessities. As was pointed out earlier in the study, ESP is basically distinguished from general English owing to the fact that ESP learners are aware of why they are learning the language.

By ESP learners' 'lacks' we refer to the fact that learners come to the task of learning ESP at university with some knowledge of the language already in their memory. However, it is the role of needs analysis to determine what they lack so as to incorporate it with what they need to know. According to Hutchinson and Waters "learners' real, preconceived needs may, in a way, conflict with the view of other parties such as course designers, sponsors and teachers" (1987:64).Therefore, when reference is made to ESP learners' needs, all other implications to the process of learning-teaching should be excluded so as to distinguish between actually perceived 'wants' of learners and the other parties who are involved in the process.

Regarding learners' 'necessities', another term subsumed under the general term of needs, it is understood that learners' necessities for studying ESP are part and parcel of their needs. Collectively, needs refer to what generally learners feel about wanting to learn the language; whereas, necessities are the kind of needs that each and every different situation requires. Thus, what ESP learners need to learn is determined by what they are going to do with the language to succeed in the various situations of their respective academic disciplines and, later, professions.

b. Needs Analysis

Needs analysis (NA) is a technique for identifying ESP learners' needs for learning English. When NA is carried out, the focus is usually on:

1. How to survey and find out about ESP Learners' needs (what NA tools to use).

2. How to classify these needs.

3. What syllabus or learning materials to use in order to successfully help learners to achieve their goals of learning the language.

In addition to the learner, needs analysis is also important to:

1. The institution the learner is studying at

2. Teachers/instructors

3. Researchers

4. Parents

5. Future employers

ESP learners' needs are surveyed through tools such as questionnaires and interviews. As to the question of what is expected to be collected regarding learners' needs, the NA process focuses on:

1. The ESP situation targeted

2. ESP learners' lacks

3. ESP learners' necessities

4. ESP learners' wants

Of course different ESP learners have different needs as to studying the language. As learning situations differ so do the types of language learners need which in turn guides syllabus designers and teachers as to what language content to teach. To discover this is the job of target situation analysis.

According to Jordan, (1997) the basic steps for doing NA are:

1. Setting the purpose of the analysis

2. Specifying the population to choose a sample from

3. Deciding on the approach to follow

4. Designing the data collection instrument(s)

5. Starting the data collection process

6. Data analysis and discussion

7. Interpreting of the results arrived at

8. Naming the syllabus objectives

9. Suggesting a syllabus based on the results of the data analyzed (Paraphrased from Jordan, 1997:23)

c. ESP Learners' Attitudes

Generally, language attitudes refer to the sum total of people's beliefs, feelings and ideas towards their own language (L_1) or other languages (second or foreign

languages, L_2 or FL respectively). According to the Longman Dictionary of Language Teaching and Applied Linguistics (2002:286) language attitudes are "expressions of positive or negative feelings towards a language [they] may reflect impressions of linguistic difficulty or simplicity, ease or difficulty of learning, degree of importance, elegance, social status, etc."

Many ELT, EFL and ESP researchers and practicing teachers have stated that learners' attitudes play an important role in the process of language learning. For instance, Gardner and Lambert (1972) indicated that positive attitudes will always enhance learning a second/ foreign language while the negative ones do not. Thus, favorably positive attitudes to the ESP Learning situation would:

1. Create in learners a desire to learn the language.

2. Make learners ready to exert whatever efforts needed to learn.

3. Give learners a sense of satisfaction and happiness in studying the language.

4. Preparing learners to take some responsibility of their learning.

According to Gardner (1985) learners' language attitudes, whether in the context of EFL, ESL or ESP include a number of variables important among them are:

1. The teacher

2. The textbook(s)

3. Classroom activities

4. Classmates

As for the intricate interrelationships between motivation on the one hand and attitudes on the other, Gardner (1985) considers attitudes as elements of motivation in the language learning context, which, according to him, require " the combination of effort plus desire to achieve the goal of learning the language"(p.10).

In the context of language learning, particularly regarding ESP learners' language attitudes, the following are the implications of attitudes for the process of ESP learning-teaching:

1. They give learners a sense of orientation/direction towards learning the language.

2. They, together with motivation, have a role in learners' success or failure to learning the language.

3. They shape the variety of English to be taught/learnt.

4. They determine the accent to be adopted.

5. They affect the method of approach to be used

6. They influence the selection of the learning materials for each course.

7. They specify the types of classroom activities and exercises.

8. They affect the degree and type of motivation learners have towards the courses they study.

9. They determine the degree of success and pace of learning the language.

10. They explain the way(s) teachers and learners interact with each other.

d. Previous Studies

Al-Tamimi and Shuib (2009) additionally researched the needs of petroleum engineering students at Hadhramout University in Yemen during the 2006-2007 academic year. A questionnaire was administered to collect data from the study's participants (n=191). According to the analysis of the data gathered, the two researchers have arrived at the result that the skills participants mostly needed are reading and its sub-skills, writing and writing skills, listening and its sub-skills, and speaking and speaking-related skills

Arslan and Saka (2010) carried out a study on a group of science students in Turkey. Participants were studying at a preparatory programme leading to majoring in Physics, Chemistry or Biology. The purpose of the study was to determine the language needs of the participants who were asked to fill in a questionnaire designed for gathering data for the study. Although the expectation was that students studying at this programme had to acquire specific academic language skills in addition to general ones, the findings of the study indicated their needs as follows: Listening 51.5%, Speaking 37.1%, Reading 30.9% and Writing 30.9%.

Harrbi (2010) investigated the perceptions of ESP courses by Tunisian science and technology students. His study aimed at analyzing students' perception of ESP courses at the Faculty of Sciences, Institute of Technology. Participants were second and third year science and technology students totaling 49. A questionnaire was used as a data collection instrument. The study's results highlighted that the majority of respondents 59% indicated that reading is the skill they are mostly interested in. It also pointed out that compared to writing and speaking activities, 53% of the sample of the study identified reading activities as the ones they find more attractive.

In the context of ESP, ALharby (2005) further investigated the communicative needs of health professionals working in health facilities in the Riyadh area, KSA. Participants' needs of ESP were surveyed via a questionnaire distributed to the respondents. The results of the study showed that:

-   With varying degrees of mastery, listening is the skill the majority of respondents indicated that they needed most in their job.

-   Speaking is the second most needed skill of the English language according to the respondents.

-   The need for the reading skill comes third due to the participants' responses.

-   Respondents' need for the skill of writing is ranked after reading as the results of the study's data analysis showed.

Methodology

a. **Questions of the study**

The study is carried out to provide answers to these questions:

1. To what extent are ESP science students aware of their needs, lacks, wants and necessities to learning the language?

2. How similar or dissimilar are the needs and attitudes of a particular group of ESP students?

3. In terms of language skills, do ESP students of the same academic discipline have the same order of priorities to learning these skills?

4. What do ESP students' needs and attitudes tell us about their expectations of learning the language?

5. What effects do the results of investigating ESP students' needs and attitudes have on the selection of the syllabus and learning materials offered? Is it likely that the pace and outcomes of learning are better when learners' needs and attitudes determine the selection of the syllabus and materials?

The method this study uses is the descriptive method with the purpose of finding out and describing participants' needs and attitudes to ESP. In this regard, Seliger and Shohamy (1989:125) state that "descriptive research may begin with a question or hypothesis; the phenomena it describes are not manipulated or artificially elicited any way."

b. **Participants**

A sample of 100 science students at Taif University in Khurma, The Kingdom of Saudi Arabia, was randomly selected to participate in the study .They were all freshmen just graduated from Saudi secondary schools and admitted with the same success rate. They had studied the same English course materials and the same amount of English contact hours during their secondary schooling. Participants are also similar in terms of characteristics such as age, English language proficiency, socio-cultural background and residential area.

c. **Data collection instrument**

To collect the data for the study, the researcher designed and administered a questionnaire of 22 items pertaining to participants' needs and attitudes to studying ESP courses. The items of the questionnaire are categorized into three sections. Section (A) has six items participants were asked to react to by indicating their

importance using a 3-point scale of very useful, useful and of limited use. Section (B) contains six items relating to the needs of ESP students. Participants were required to rank their needs for these items according to whether they are highly needed, very much needed or only sometimes needed. There are ten items in section (C) of the questionnaire to which the study's sample had to respond using Likert's 5-point scale of strongly agree, agree undecided, disagree and strongly disagree.

To validate the questionnaire, the researcher gave it to three colleagues who hold PhDs in either Applied Linguistics or English. These colleagues taught English language courses to English majors as well as ESP to science disciplines students. Some of their suggestions and modifications were incorporated into the final version of the questionnaire administered to the sample of the study.

The questionnaire's reliability, which "provides information on whether the data collection procedure is consistent and accurate" (Seliger and Shohamy, 1989:185), was worked out using the following equation:

$$rx^2y = \frac{[N. \Sigma XY - (\Sigma X)(XY)]^2}{[N. \Sigma X2 - (\Sigma X)^2][N. \Sigma Y^2 - (\Sigma Y)^2]}$$

Applying the above equation, rx2y = .99

d. Procedures

The questionnaire of the study was administered to the participants (n=100) during the second term of the academic year 2011-2012. As aforementioned, participants were randomly drawn from first year science students at Taif University in Khurma. Since all of the distributed questionnaires were returned, the questionnaire return rate is therefore 100%.

Data Analysis

Data generated by the study's questionnaire were tabulated and treated using the following statistics: frequency count, the mean, and the standard deviation.

Table1
Respondents' answers to section (A) of the questionnaire

Item	Highly needed	Very much needed	Only of limited use	Number of respondents	M	SD
Listening	55%	29%	16%	100	2.39	1.62
Speaking	68%	23%	9%	100	2.59	2.52
Reading	60%	29%	11%	100	2.49	2.43
Writing	55%	33%	12%	100	2.43	2.37
Grammar	42%	41%	17%	100	2.28	2.23
Vocabulary	42%	33%	25%	100	2.2	2.34

In this section of the questionnaire, respondents were asked to indicate their answers by ranking the four English language skills of listening, speaking, reading, and writing, together with grammar and vocabulary according to their importance to them. The following 3-point scale was used:

- Very useful=3

- Useful = 2

- Of limited use =1

As is shown in Table 1, respondents' answers demonstrated that speaking is ranked as the most needed skill to the study's participants with 68% (M=2.39). This is followed by reading 60%, writing and listening 55% each. Grammar and vocabulary were ranked as useful by 42% each according to respondents' choices. A small number of the sample of the study allocated 17% and 25% to grammar and vocabulary respectively as to their importance in the ESP courses they studied.

Table2
Respondents' reaction to section (B) of the questionnaire

Item	Highly needed	Very much needed	Only sometimes needed	Number of respondents	M	SD
Listening	55%	27%	18%	100	2.37	2.31
Speaking	58%	28%	14%	100	2.44	2.38
Reading	60%	28%	12%	100	2.48	2.42
Writing	55%	31%	14%	100	2.41	2.35
Grammar	42%	28%	30%	100	2.12	2.08
Vocabulary	40%	27%	33%	100	2.07	2.03

Section (B) of the questionnaire asked the respondents to prioritize, in a descending order, their need for the four language skills plus grammar and vocabulary using this 3-point scale:

- Highly needed = 3

- Very much needed = 2

- Only sometimes needed = 1

Referring to Table2, it can be seen that the majority of the study's participants language needs are according to these priorities:

- Reading 60%

- Speaking 58%

- Writing 55%

- Listening 55%

- Grammar 42%

- Vocabulary 40%

A quick comparison between respondents' answers to the questionnaire's sections (A) and (B) shows that the order of the importance and needs of the English language skills remained almost the same with the exception of speaking and reading swapping places.

Participants' responses to section (C) of the questionnaire

This third and last section of the questionnaire contained ten items to be answered using Likert's 5-point scale of strongly agree (SA), agree (A), undecided (UD), disagree (DA) and strongly disagree (SD). Table3 below shows the statistical analysis of the responses:

Table3
(a) Participants' responses to section (C) of the questionnaire

Item	SA	A	UD	DA	SD
1. ESP and academic success	38%	52%	8%	1%	1%
2.ESP and reading academic materials	35%	49%	11%	3%	2%
3. ESP and writing scientific papers	52%	28%	15%	4%	1%
4. ESP and making presentations in English	34%	35%	23%	7%	1%
5. ESP and holding academic discussions in English.	38%	34%	14%	9%	5%
6. ESP and graduate studies	66%	19%	6%	3%	6%
7. ESP and getting a good job	61%	19%	13%	2%	5%
8. ESP and the use of the internet.	46%	35%	13%	2%	4%
9. ESP and travelling abroad	55%	32%	2%	3%	8%
10. ESP and making friends across the world	53%	28%	7%	4%	8%

Item one of the questionnaire's section (C) asks respondents about the importance of ESP to their academic success. 38% strongly agreed that that it is important, whereas the majority of the participants 52% agreed about the important role ESP plays in their study of science. In contrast, only 1% of the respondents chose to either strongly disagree or disagree about the importance of ESP to their academic field of study.

Regarding the question of how ESP makes it easy to read scientific materials, 35% and 49% of the respondents have strongly agreed and agreed respectively about the importance of ESP in reading scientific materials in English. On the other hand, a small number of the sample, have either disagreed or strongly disagreed (3% and 2% respectively) about ESP facilitating reading academic materials in their academic field of study.

To the majority of respondents, i.e. 52%, studying ESP courses will help them in their future as academics to write scientific papers in English. Conversely, only 4% of the respondents disagreed about that. In addition to the ESP potential of helping in writing scientific papers, 34% and 35% of the participants have strongly agreed and agreed respectively that ESP courses help them in classroom presentations in English.

Responses to item five in section (C) of the questionnaire, which asks about the role of ESP in participating in academic discussion and conferences, revealed that respondents tended to view ESP as helpful in academic activities that require the use of the English language. Meanwhile, 38% and 34% of the participants have either strongly agreed or just agreed on that.

The extent to which ESP can help in pursuing graduate studies in science as well as getting a good job in one's home country or abroad has generated similar answers. 66% of the study's sample have strongly agreed that ESP will help them to study for either Msc or PhD in an English-speaking country. On the other hand, 60% of the respondents have strongly agreed about ESP helping them to get a good job after graduation.

It is a known fact that the internet and other related electronic media have a bigger role to play in today's education and learning. Just like all other practicing teachers, ESP instructors would always want to draw their students' attention to the benefits of the internet as a powerful learning source. Thus, item eight of the questionnaire's section(C) asks how can participants be helped to use the internet. 46% of the sample of the study have strongly agreed about ESP helping them to use the internet compared to only 4% who disagreed about that.

Items seven, nine and ten of section (C) of the questionnaire were about the socio-economic aspect of ESP. The study's participants exhibited positive attitudes to both of the job and social sides of ESP. Item seven asks respondents about the benefit of ESP in getting a good job after graduation. A majority of 61% of the respondents have strongly agreed about the potential of ESP in helping them to get a good job in the future compared to only 2% who strongly disagreed. On the other hand, item nine requested participants to indicate their response as to the relationship between travelling to and staying in an English-speaking and ESP, while item ten was about ESP and making friends worldwide. 55% of the respondents have strongly agreed on ESP's help when travelling to and staying in an English-speaking country, while 53% of the participants tended to strongly agree about the role of ESP in making friends across the world.

Table4

(b) The Means and standard Deviations of Participants' responses to section (C) of the questionnaire (N=100)

Item	M	SD
1. ESP and academic success	4.25	4.07
2.ESP and reading academic materials	4.12	3.95
3. ESP and writing scientific papers	4.26	4.08
4. ESP and making presentations in English	3.94	3.78
5. ESP and holding academic discussions in English	3.91	3.76
6. ESP and graduate studies	4.36	4.17
7. ESP and getting a good job	4.29	4.11
8. ESP and the use of the internet	4.17	4.00
9. ESP and travelling abroad	4.23	4.05
10. ESP and making friends across the world	4.14	3.97

Owing to the fact that the number of the study's sample is 100 and given that participants' responses to section (C)of the questionnaire were rather divergent, the standard deviations in table four above show the extent to which respondents differed along the 5-point scale of 'strongly agree' through to 'strongly disagree'. However, all the responses to the ten items in section (C) reveal that the majority of the respondents have either chose 'strongly agree' or 'agree' about the ten items respectively.

Results of the study

Following the analysis and discussion of the data collected via the questionnaire of the study, these results were arrived at:

1. Respondents have agreed that listening, speaking, reading and writing in addition to grammar and vocabulary are very useful skills for them in the ESP courses they studied as part of their BSc curriculum.

2. The vast majority of respondents have indicated that they highly need to study the skills of listening, speaking, reading and writing together with grammar and vocabulary as part of their ESP courses.

3. The majority of respondents have either strongly agreed or just agreed about these statements pertaining to the ESP courses they have studied:

   a. The importance of ESP for their academic success.

   b. The importance of ESP to read scientific books and journals.

   c. ESP helps them to write scientific papers.

   d. ESP helps them to deliver presentations.

e.   ESP enables them to participate in academic discussions.

f.   ESP is vital for doing MSc and/or PhD in any English-speaking country.

g.   ESP provides much opportunity to getting a better job.

h.   ESP makes it easy to use the internet.

i.   ESP is an asset when visiting and staying in an English-speaking country.

j.   ESP can play a big role in maintaining friendship with people around the world.

Referring to the questions of the study, it can be said that results a, b, c, and d clearly support question one of the study which was about the extent to which ESP science students are aware of their needs, wants and necessities of studying English. As for the second question of the study which related to whether the needs and attitudes of a particular group of ESP students are the same or different, the study's results may not have shown support for the question. However, as was indicated in table 3 of data analysis, statistics do show that a sizable majority of the respondents have expressed similarly positive attitudes towards the usefulness of English when it comes to getting a good job, travelling abroad as well as making friends with people across the world.

Due to the number and characteristics of the sample of the study who are first-year science students, results b, c, d and e may lend some support to answering the third question of the study which pertained to the order of priorities of language skills. Data analysis indicated that the majority of respondents have identified reading, speaking writing and listening as the skills they needed most in that order.

Questions four and five of the study were concerned with ESP learners' expectations of learning English together with the effect their needs and attitudes have on the syllabus and learning materials. According to the results of the study given in table3, items 7,9 and 10 of the questionnaire's section C , respondents have clearly expressed strong positive attitudes to ESP. This may tell us something about the importance of ESP to the study's sample. On the other hand, if ESP syllabuses and materials were to be based on learners' needs and attitudes, perhaps the learning outcome would have been better.

Conclusion

This study has explored the needs and attitudes of first-year science students at Taif University in Khurma. The study has been conducted with the main aim of identifying and categorizing the participants' needs and attitudes to the ESP courses the university offers to first-year science students. The study's results and findings have shown that the majority of respondents have expressed varying needs to the four language skills of listening, speaking, reading and writing together with grammar and vocabulary. On the other hand, participants have also   exhibited   very   positive

attitudes regarding the use of English in non-academic situations which implies that ESP courses can help students both academically and socially.

Regarding the aims of the study which were mentioned in an earlier section and in relation to the results of data analysis, we can say that the results corroborate the first aim which is about helping science students to discover their academic needs of studying ESP. It was found that the majority of respondents have indicated their needs of ESP in terms of the skills of reading, speaking, writing and listening.

The second aim of the study was to elicit respondents' attitudes towards the usefulness of ESP. Results have shown that the majority of respondents have expressed positive attitudes to ESP's usefulness in relation to getting a job, travelling abroad and making friends worldwide.

As for the third, fourth and fifth aims of the study, results of data analysis may not have shown clear support to those aims.

Based on the results and discussion of the data analyzed, the researcher would like to make the following recommendations as far as ESP practicing teachers, syllabus designers and administrators are concerned:

 1. Draw students' attention to the importance of discovering their academic needs of studying ESP.

 2. Link students' perceived needs of ESP to the syllabus and materials they study.

 3. Encourage students' positive attitudes to ESP.

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Appendix (I) The Questionnaire of the Study

Dear student,
This questionnaire is intended to collect data on the needs and attitudes of science students in Khurma branch of Taif University to studying English for specific purposes (ESP).
I thank you in advance for taking some of your time to respond to ALL of the items on the questionnaire as sincerely as it reflects yourself. I would also like to assure you that your answers will be kept confidential and used **ONLY** for the purpose of collecting data for this study.

Section (A): **Rank the following skills and elements of the English language according to their importance to you by assigning them numbers as follows:**

- Very useful = 3   Useful = 2   Of limited use = 1

    1. Listening ( )

    2. Speaking ( )

    3. Reading ( )

    4. Writing ( )

    5. Grammar ( )

    6. Vocabulary ( )

Section (B): **Rank the following skills and elements of the English language according to your need of them in your academic study by giving them numbers as follows:**

Highly needed = 3   Very much needed = 2   Only sometimes needed = 1

1. Listening ( )
 2. Speaking ( )
3. Reading ( )
4. Writing ( )
5. Grammar ( )
 6. Vocabulary ( )

Section (C): **Respond to these statements by ticking (√) your answer:**

Statement	Strongly agree	Agree	Undecided	Disagree	Strongly disagree
1 .ESP is important for my academic success.					
2. To me, ESP is important for reading materials in my academic specialization.					
3. ESP will help me to write scientific papers in English.					
4. ESP will help me to make presentations in English.					
5. ESP will help me to participate in academic discussions and conferences in English.					
6. ESP will help me to study for my MSc and PhD in an English-speaking country.					
7. ESP will help me to get a good job in my country and abroad.					
8. ESP will help me to use the internet to search for sources in my area of study.					
9. ESP will enable me to visit and stay in any English-speaking country.					
10. ESP will help me to make friends with people around the world.					

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