

Information Technology Students' Language Needs for their ESP Course

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ABSTRACT

The purpose of this study was to find the needs of Iranian undergraduate Information Technology (IT) engineering students for their ESP course. To this end, a needs analysis questionnaire was administered to 30 undergraduate IT students to elicit information about their needs in English language at Islamic Azad University, Tabriz Branch. The results of data analysis revealed that among four skills reading was the highly needed skill followed by writing. It was also found that a majority of participants were dissatisfied with the current ESP courses for undergraduate students. This, in fact, indicated that ESP curricula have not yet been successfully developed in satisfying the students' professional needs in target situations. Findings point to the fact that ESP and its teaching in Iran has to undergo serious rethinking not only in the content of the course but also the whole process of teaching the language. The findings can help course designers to both put much more credit for ESP courses, and consider appropriate and suitable materials which can give useful information to the students. It can also help ESP teachers to meet the language needs of their students.

Key words: Engineering, ESP, Information Technology (IT), Language Needs, Needs Analysis

INTRODUCTION

Needs analysis, as a term related to language teaching, first appeared in the 1920s (West, 1997; White, 1988). However, it became popular in the decade of the 70s and early 80s by means of some major publications which were associated with teaching English for specific purposes (ESP) such as those by Richterich and Chancerel (1980) and Munby (1978). Needs analysis in one course examines what the learners know and what they need to know, and also ensures that course will contain relevant and useful things to learn (Nation & Macalister, 2010). The main purpose of conducting a needs analysis is, according to Gardner and Winslow (1983), "to produce information which when acted upon makes courses better adapted to students' needs" (p. 76).

ESP is a term that has traditionally been used for the courses which aim at teaching the English language needed for specific situation, mainly related to academic (EAP) or occupational (EOP) context. ESP program have been implemented since the early 1960s. There are some views indicating that the teaching of ESP is, in many ways, similar to the teaching of English in general although there are features that are typical in different specialized subjects and that ESP should be recognized as an approach (Crocker, 1981; Hutchinson & Waters, 1987; McDonough, 1984).

Different views are expressed about ESP courses. Hutchinson and Water's (1987) view of ESP points to the importance and roles of learners both in the design of the

course and its implementation in the teaching and learning process. Carter (1983) expresses that ESP courses should consider the material and the learners in a way that the material should be authentic and the learners should have a degree of freedom to decide what, when, and how to study. In the view of Belcher (2006), "ESP assumes that the problems are unique to specific learners in specific contexts and thus must be carefully delineated and addressed with tailored-to-fit instruction" (p. 135). The main purpose of EAP classes (English for Academic Purposes) is to improve the students' technical vocabulary, their reading and translation skills and the textbooks seem to represent what the students need to know in order to pass the exam (Mazdayasna, 2008). In this regard, universities in Iran present ESP courses to help students overcome their foreign language problems. Iranian university students at the undergraduate level of different disciplines have to pass an ESP course which utilizes a text-centered approach and can be described as examination-centered. Because of two reasons, this problem is not that much conspicuous. First, in all majors at least an ESP course is presented to the students and they pass the course whether they learn English or not. Second, most of the books studied at the undergraduate level are translated into Persian, so it is a great help for them as they compare the English references with their translated texts.

Actually, Iranian universities have not used special techniques to satisfy the needs of ESP learners (Barjasteh & Shakeri, 2013). Nearly in all of the undergraduate

engineering courses, lessons contain very specific words and phrases which are related to the ESP of that course but unfortunately, they aren't considered as an important matter. Existing of just one ESP course during undergraduate level in Iran causes significant problems for the students and teachers in using the related courses. These problems can include learning problems, inactivity in specialized courses, low language proficiency, uninterested and shy students, and communication problems. In order to overcome these problems, needs analysis can be a good solution.

There are different definitions regarding Needs Analysis. Needs Analysis generally refers to the activities that are concerned with collecting information that will serve as the basis for designing a curriculum that will meet the needs of a special cohort of students (Iwai, 1999). It is also defined as "technique and procedures for collecting information to be used in syllabus design" (Nunan, 2001, p.13). For Brown (1995), Needs Analysis is "the systematic collection and analysis of all subjective and objective information necessary to define and validate defensible curriculum purposes that satisfy the language learning requirement of students within the context of particular institutions that influence the learning and teaching situation" (p. 36).

As mentioned above needs analysis is one of the main stages in learning process and should be done as sensitively as possible, because through it teachers can decide on the materials learners need, methods they want to use for their learning, and time that they will devote to that course or that activity. In this regard, needs analysis can be regarded as the prerequisite for any ESP course design to achieve effective and instructional outcomes and to deliver appropriate input. Considering this, McDonough (1984) refers to the benefit of finding the language needs of the learner as a basis for course development and points out that "information on his or her language needs will help in drawing up a profile to establish coherent objectives, and take subsequent decisions on course content" (p. 29).

Therefore, this study was an attempt to find the needs of undergraduate IT engineering students in their ESP course. In this regard, the following research question was posed.

RQ: What are the English language needs of IT engineering students in their ESP course?

LITERATURE REVIEW

There is a close link between ESP and needs analysis. According to Johns and Price-Machado (2001), ESP is "a movement based on the proposition that all language teaching programs should be tailored to the specific learning and language use needs of identified groups of students" (p. 43). Richards and Schmidt (2010) consider ESP as "a language course or program of instruction in which the content and aims of the course are fixed by the specific needs of a particular groups of learners" (p. 198). In particular, the aim of ESP is to prepare the learners to use English in the future in different settings (e.g., academic, professional).

Dudley-Evans (1994, as cited in Carter & Nunan, 2001) mentions that for about 30 years, ESP has been a separate branch of English Language Teaching (ELT). Robinson

(1991) asserts that there are two main criteria for ESP; one is that ESP courses are normally goal-directed, that is, they are studied according to the learners' goals and aims, and the other is that ESP courses are developed from a needs analysis which aims to specify as closely as possible what exactly it is that students have to do through English courses.

A review of the literature indicates that in the realm of ESP/EAP and Needs Analysis many studies have been conducted in different countries including the United States (e.g., Boshier & Smalkoski, 2002, in the course of Health-care communication; Hoekje, 2007, in the medical course), Greece (e.g., Chostelidou, 2010, in Greek tertiary education), Israel (e.g., Deutch, 2003, in Legal English course), Turkey (e.g., Akyel & Ozek, 2010, language needs analysis in medium English university; Ulucay & Demirel, 2011, for Logistics department), and Taiwan (e.g., Liu, Chang, Yang, & Sun, 2011, in English courses for general and specific/academic purposes).

Various studies have also been conducted with the focus on learners' needs analysis in the EFL context of Iran. The questionnaire and interview were the main instruments of the data collection of these studies. For example, Aliakbari and Boghayeri (2014) studied the needs of the architecture students. The results revealed that among two groups of the participants, architecture students of Ilam university and architecture graduates from different universities in Iran, reading comprehension was recognized as the most important skill, followed by writing, speaking, and listening respectively. They also showed their dissatisfaction with the content of the textbooks because they indicated that they do not meet their needs, therefore, they asked for the revision and modification of the current ESP programs. In a study, Moslemi, Moinzadeh, and Dabaghi (2011) conducted a survey for investigating the foreign language learning needs of MA students in different fields of study including Biology, Psychology, Physical training, Accounting, and West Philosophy at the university of Isfahan. The results reflected the dissatisfaction of the majority of the participants with the existing ESP courses for the MA students. Similar to the participants of Aliakbari and Boghayeri (2014), they asked for the revision in the ESP courses to meet their subjective and objective needs. In Moattarian and Tahririan's (2014) study in the field of tourism management, the results of the questionnaire and interview showed the necessity of integrating all four skills in the textbook of this course. In addition, teachers and students found current ESP courses unsatisfactory in addressing their specific needs. Similar to Moattarian and Tahririan (2014), Nemat Tabrizi and Mojouidi Renani (2016) found that the undergraduate students of mechanical engineering gave importance to four language skills and their integration. Moreover, the participant teachers and students showed their dissatisfaction with the current ESP courses, as they cannot satisfy their target needs. This, in fact, indicates that ESP curricula have not yet been successfully developed in satisfying the students' professional needs in target situations.

A study by Atefi Boroujeni and Moradian Fard (2013) was conducted to determine the role of CLT in the course of

educational administration. The results indicated that there is strong and homogeneous bias towards CLT. The students desire the kind of learning culture which CLT can provide and teachers also favor the elements of CLT. The results of the study by Esfandiari (2015) showed that BA students, MA students, and content teachers unanimously believed that general vocabulary and technical vocabulary were two target needs for BA students of law to acquire because they were regarded as very important. The other study done by Shamsabadi and Eslami Rasekh (2014) suggested that dentistry students face difficulties with respect to not having a good command of English language participating in international occasions and they need to achieve mastery of English at the same time they are learning their specialized subject courses, although one fourth of the students felt that they could master English before they start their specialized subjects. In this case, the study of Hashemi and Radmehr (2015) on Iranian ESP medicine students' needs revealed that the curriculum of English course was not adequately defined in terms of students' future occupational needs. Therefore, "learners will end up disappointed with the language proficiency level that they achieve once they join the work force, regardless of the effort that they put into their language training" (Alharby, 1997, as cited in Hashemi and Radmehr, 2015, p.64).

As literature showed, a number of studies have been conducted in different fields regarding the needs of students in ESP courses. However, the area of ESP is so vast that requires ongoing investigations to find the strengths and shortcomings of these courses in order to do the necessary modifications in the ESP programs and meet the needs of those who are involved. In this case, in this study we tried to have some kind of evaluation of the ESP course for IT engineering students based on the analysis of their language needs.

METHOD

Participants

Participants who were involved in this study were 30 male and female undergraduate students from Islamic Azad University of Tabriz majoring in IT engineering course. They were in the age range of 19 to 30. For most of the students, their mother tongue was Azari and they were studying English as a foreign language. For all the students, Farsi was the second language; hence they all were bilingual with the same second language; that is, Farsi. Some variables such as age, sex, language ability, and course level were not controlled. The participants were all at the second year of their education and they had passed their ESP course.

Instruments

In this study, a needs analysis questionnaire, which was developed by Moattarian and Tahririan (2014), was used. The questionnaire consisted of 37 items with three parts: the participants' personal demographic information, the learners' needs in all the four language skills, and their evaluation of their ESP courses.

The first 27 items of the questionnaire were related to the four skills and should be filled according to the students' needs (never=1, little=2, sometimes=3, much=4, and to a great deal=5). Then, there were three questions (items 28-30) related to the evaluation of offered ESP course followed by seven explanatory and multiple-choice type items with a space at the end to provide their additional suggestions. The content validity and reliability of the questionnaire were checked by Moattarian and Tahririan (2014) and a high Cronbach's Alpha results (.815) was reported. Although the questionnaire was designed for the Tourism students, we found it applicable to the IT students because the items were of common nature to the students in both courses. In order to prevent any misunderstandings, the Persian version of the questionnaire, which was also translated by Moattarian and Tahririan (2014), was employed in this study and the internal consistency of the questionnaire was also checked and it came out to be .79, which is considered as an acceptable and almost high reliability.

Procedure

This study was a descriptive survey, which was conducted to collect information about the needs of Iranian undergraduate engineering students in their ESP course. To this end, a valid and reliable needs analysis questionnaire was distributed among 30 undergraduate students of IT engineering. The researchers selected those students who had passed their ESP course because these students could give better opinion regarding the relevance of the course to their needs and the quality and the quantity of the course. Therefore, the researchers got the permission of their instructors in the special courses and explained the purpose of the study and distributed the Persian version of the questionnaire and asked them if they had any misunderstanding they could ask for clarification. The respondents were also assured that the information elicited would be kept confidential, so that they would feel free to answer the items of the questionnaire. After collecting the data, they were entered into the SPSS 22 for further analysis. The needs of the participants and their opinions on different parts of the questionnaire were estimated based on the descriptive statistics including frequency, percentage, mean, and standard deviation.

RESULTS

The learners' needs in the four language skills by considering items' frequencies and percentages are presented in Table 1.

As the frequencies and percentages in Table 1 show, the learners indicated their uneven need for different items of the four skills differently. For example, considering the total values of "sometimes, much, and a great deal", among the items of the listening, listening to public announcement (73.4%) and listening to other people talking (66.7%) were of highest necessity for IT students. In the case of speaking skill, class participation (60%) and taking part in conversation (60%) were the most needed ones. Among the items of reading skill, online reading (63.3%) and reading technical textbooks (60%) were of highest importance for the participants.

Table 1. Students' responses to questions related to the four language skills

How much do you need English for	Never (%)	Little (%)	Total (%)	Sometimes (%)	Much (%)	A great deal (%)	Total (%)	Frequency
Listening								
1. Listening to general conversations	5 (16.7)	6 (20.0)	11 (36.6)	8 (26.6)	6 (20.0)	5 (16.7)	19 (63.3)	30
2. Listening to conference speech	10 (33.4)	4 (13.3)	14 (46.7)	8 (26.6)	5 (16.7)	3 (10.0)	16 (53.3)	30
3. Listening to English media	7 (23.3)	8 (26.6)	15 (50.0)	8 (26.6)	4 (13.3)	3 (10.0)	15 (50)	30
4. Listening to instructions in real situations	4 (13.3)	12 (40.0)	16 (53.3)	6 (20.0)	7 (23.3)	1 (3.3)	14 (46.7)	30
5. Listening to public announcements	1 (3.3)	7 (23.3)	8 (26.6)	15 (50.0)	7 (23.3)	0 (0.0)	22 (73.4)	30
6. Listening to other people talking	2 (6.6)	8 (26.6)	10 (33.4)	6 (20.0)	5 (16.7)	9 (30.0)	20 (66.7)	30
Speaking								
7. Take part in conversation	3 (10.0)	9 (30.0)	12 (40.0)	8 (26.6)	8 (26.6)	2 (6.6)	18 (60.0)	30
8. Giving speech in conferences	12 (40.0)	9 (30.0)	21 (70.0)	4 (13.3)	1 (3.3)	4 (13.3)	9 (30.0)	30
9. Class participation	5 (16.7)	7 (23.3)	12 (40)	5 (16.7)	7 (23.3)	6 (20.0)	18 (60.0)	30
10. Talking to professional	10 (33.4)	5 (16.7)	15 (50.0)	6 (20.0)	4 (13.3)	5 (16.7)	15 (50.0)	30
11. Talking to hotel staff travel agency clerks, etc.	5 (16.7)	11 (36.6)	16 (53.3)	5 (16.7)	3 (10.0)	6 (20.0)	14 (46.7)	30
12. Getting into conversations	10 (33.4)	6 (20.0)	16 (53.3)	9 (30.0)	2 (6.6)	3 (10.0)	14 (46.7)	30
Writing								
13. Writing articles	12 (40.0)	7 (23.3)	19 (63.3)	3 (10.0)	2 (6.6)	6 (20.0)	11 (36.6)	30
14. Note-taking while reading	6 (20.0)	10 (33.4)	16 (53.3)	8 (26.6)	3 (10.0)	3 (10.0)	14 (46.7)	30
15. Note-taking in speeches	6 (20.0)	8 (26.6)	14 (46.7)	8 (26.6)	4 (13.3)	4 (13.3)	16 (53.3)	30
16. Note-taking in class	7 (23.3)	5 (16.7)	12 (40.0)	9 (30.0)	5 (16.7)	4 (13.3)	18 (60.0)	30
17. Writing business letters	10 (33.4)	7 (23.3)	17 (56.6)	4 (13.3)	7 (23.3)	2 (6.6)	13 (43.4)	30
18. Writing e-mails	7 (23.3)	5 (16.7)	12 (40.0)	7 (23.3)	8 (26.6)	3 (10.0)	18 (60.0)	30
19. Writing schedules	9 (30.0)	9 (30.0)	18 (60.0)	5 (16.7)	3 (10.0)	4 (13.3)	12 (40.0)	30
20. Writing reports	5 (16.7)	8 (26.6)	13 (43.4)	10 (33.4)	2 (6.6)	5 (16.7)	17 (56.6)	30
21. Writing brochures	11 (36.6)	7 (23.3)	18 (60.0)	7 (23.3)	3 (10.0)	2 (6.6)	12 (40.0)	30
Reading								
22. Reading technical text books	7 (23.3)	5 (16.7)	12 (40.0)	6 (20.0)	7 (23.3)	5 (16.7)	18 (60.0)	30
23. Reading article	9 (30.0)	7 (23.3)	16 (53.3)	1 (3.3)	7 (23.3)	6 (20.0)	14 (46.7)	30
24. Reading newspapers and magazines	5 (16.7)	8 (26.6)	13 (43.4)	6 (20.0)	4 (13.3)	7 (23.3)	17 (56.6)	30
25. Online reading	3 (10.0)	8 (26.6)	11 (36.6)	10 (33.4)	4 (13.3)	5 (16.7)	19 (63.3)	30
26. Reading reports	7 (23.3)	7 (23.3)	14 (46.7)	8 (26.6)	3 (10.0)	5 (16.7)	16 (53.3)	30
27. Reading brochures and instructions	5 (16.7)	8 (26.6)	13 (43.4)	7 (23.3)	5 (16.7)	5 (16.7)	17 (56.6)	30

Regarding the writing skill, note-taking in class (60%), writing e-mails (60%), and writing reports (56%) were reported as the most necessary ones. Table 2 shows the frequency and percentage for the sum of items in each skill.

As is shown in Table 2, among the four language skills, considering the scales of 'A great deal', the highly needed skill was reading ($f= 33, p= 18.33\%$) among the participants

of the study. Table 3 also indicates the results based on the mean and standard deviation.

As it is demonstrated in Table 3, the most dominant and important skill needed by ESP students was reading skill ($M=4.71, SD=1.70$) followed by writing skill ($M= 3.49, SD=1.27$), listening skill ($M=2.84, SD=.78$), and speaking skill ($M=2.67, SD=1.35$), respectively. Therefore, most of

Table 2. Overall frequency and percentage for items of four skills

	Never	Little	Sometimes	Much	A great deal	Total
Listening						
<i>f</i>	29	45	51	34	21	180
<i>p</i> (%)	16.11%	25%	28.33%	18.89%	11.67%	100%
Speaking						
<i>f</i>	45	47	37	25	26	180
<i>p</i> (%)	25%	26.11%	20.55%	13.89%	14.44%	100%
Writing						
<i>f</i>	73	66	62	37	33	270
<i>p</i>	27.03%	24.44%	22.96%	13.70%	12.22%	100%
Reading						
<i>f</i>	36	43	38	30	33	180
<i>p</i> (%)	20.00%	23.89%	21.11%	16.67%	18.33%	100%

Table 3. The means and standard deviations for the four language skills

Skill	M	SD
Listening	2.84	0.78
Speaking	2.67	1.35
Writing	3.49	1.27
Reading	4.71	1.70

the ESP students needed more reading skill. Another important point investigated in this study was the evaluation of the offered ESP courses to see whether they had been successful in satisfying the learners' needs (items 28, 29, 30, see Table 4).

Based on Table 4, most of the participants were not satisfied with their ESP courses (items 28-30). In Iran, the ESP courses are obligatory at BA level, but not at MA level. Still, all the participants believed that ESP courses offered at undergraduate level did not satisfy their needs; so, they needed to resume studying ESP in their graduate program. Besides quality, the participants' views on the quantity of the offered ESP courses were investigated (item 31: How many credits should be devoted to ESP?). What they suggested was adding extra credit hours (about 10-20) of ESP to their current curriculum to develop their needed language skills. In addition, they wanted to take more ESP courses (item 32: for how many semesters should the ESP course be offered to have best result?). Almost all participants stated that their ESP course did not satisfy their needs and that this course should not be limited to one semester and they offered having ESP courses at least in two semesters.

Item 33 concerned with the question which asked whether they preferred language teachers (i.e. ELT specialists) or content teachers (IT specialists) to teach them ESP courses. About 36% preferred language teachers, 20% preferred content teachers and 44% had no preference for language teachers or content teachers; instead, they explained that there should be a close teamwork between the two in order to make their ESP courses more effective. What they referred to as their problem was that content teachers have

limited knowledge of language teaching skills, whereas their language teachers do not have sufficient knowledge of the students' subject specific matters. They wanted their ESP teachers to be knowledgeable enough in both subject and language. Regarding the item 34 (In general, how do you evaluate ESP courses?), only 8(26.7%) of the students in general stated their satisfaction with their ESP course [Good (5/16.7%), and Great (3/10%)], while, 22(73.3%) students evaluated ESP courses as poor and they were not satisfied [Very poor (8/26.6%), Poor (8/26.6%), Average (6/20%)].

Item 35 was a general question asking which language skills should be emphasized more in ESP classes. The students had different ideas, but most of them selected the reading (40%), and writing (35%) more than the other two skills, which has conformity with the results of Tables 1 and 2. Item 36 was about the best time for offering the ESP course (i.e. before/after/while specialized courses). In this case, 15(50%) of the students selected the first option, that is "before the specialized courses", and the rest selected either after (7 students) or while (8 students) specialized courses. Finally, regarding item 37 (i.e. Is it necessary to offer ESP courses at postgraduate level, too?), 16(53.33%) of the students were in favor of having ESP courses in MA level.

DISCUSSION

The purpose of this study was to find the needs of Iranian undergraduate IT engineering students in their ESP courses. The results obtained from the needs analysis showed that among the four language skills, reading, was the most important and highly needed skill for these students and writing was the second needed skill. Therefore, to satisfy the needs of IT engineering students, reading and writing skills should be focused more. The same result was found by Aliakbari and Boghayeri (2014) in the ESP course for Architecture students. This is in accordance with Hamp Lyons's (2001) view on ESP course, that is, "many ESP courses place more focus on reading and writing, while most general English courses on speaking and listening" (p. 126). However, in Moattaran and Tahririan (2014), based on the results of the

Table 4. Students' evaluation of their ESP courses

	Not at all (%)	Little (%)	Somewhat (%)	Much (%)	A great deal (%)
28. Have your ESP courses satisfied your needs?	4 (13.3)	4 (13.3)	12 (40.0)	9 (30.0)	1 (3.3)
29. Had the materials been appropriately chosen to satisfy your needs?	3 (10.0)	10 (33.4)	12 (40.0)	4 (13.3)	1 (3.3)
30. Were the materials appropriately used to satisfy your needs?	4 (13.3)	5 (16.7)	11 (36.6)	7 (23.3)	3 (10.0)

questionnaire among students and interviews among instructors, the integration of the four skills was suggested.

The review of the literature reflected that the existing ESP course of universities for graduate students is very poor and it can't cover students' related needs. This, in fact, indicates that ESP curricula have not yet been successfully developed in satisfying the students' professional needs in target situations (Moattarian & Tahririan, 2014). In the case of this study, what students referred to as their problem was that IT specialists have limited knowledge of language skills, and their ELT specialists do not have sufficient knowledge of the students' subject specific matters. They wanted their ESP teachers to be knowledgeable enough in both subject and language areas, for this reason most of them suggested the idea of team teaching of ESP courses. In this regard, there can be a collaboration between the ELT teachers and IT teachers in different stages of ESP program. Even, the ESP syllabus designers and materials writers can consult with both the content and ELT specialists in order to produce a good and appropriate material that covers the specified needs of the learners. According to Hutchinson and Waters (1987), ESP teachers' responsibility is well beyond only providing the language and most of them are not aware of the requirements of the specific professional fields. That is why, they should be trained in how to conduct the ESP courses.

One of the major problems in ESP classes is students' poor "general English proficiency level when they start the ESP courses" (Moattarian & Tahririan, 2014). It is because the mother tongue of all students is not English and a majority of them never experience foreign language situations during life either for studying or living. This causes the ESP teachers to focus more on general English rather than the specific English. As the teachers in Moattarian and Tahririan's study indicated, because the students have low level of English language proficiency, to ensure mutual understanding, they use L1 as their medium of instruction and the main activities are limited to reading passages aloud and translating them. This can limit the use of various strategies in the EFL classes. As the results of the present study revealed, a majority of IT students indicated that they need to read technical textbooks either in print or online and understand them. Therefore, they should be able to read and comprehend in different situations out of the classroom. Even in the case of writing, less emphasis is put on teaching how to write reports or how to take notes in the ESP courses. As the IT students in their further suggestions part of the questionnaire mentioned, the

ESP teachers do not focus on these features of writing, which is necessary in academic settings.

The results of this study verify the findings of several studies that assert the courses of English for specific purposes cannot satisfy the learners' specific needs (e.g., Aliakbari & Boghayeri, 2014; Hashemi & Radmehr, 2015; Moattarian & Tahririan's, 2014; Moslemi, Moinzadeh, & Dabaghi, 2011; Nemat Tabrizi & Renanni, 2016; Shamsabadi & Eslami Rasekh, 2014). In other words, there is a gap between the current ESP courses and target situation needs of the students.

In general, based on the findings of the study and other similar studies in the realm of ESP in Iran, the ESP courses do not consider the target needs of the students when designing the courses and developing the materials. As it came out that IT students in the study needed to practice more on the reading and writing skills, the materials should provide some activities and tasks to help them practice for their future needs.

Considering the shortcomings of ESP courses, it is necessary to set up teacher training courses to brief the teachers in how they can teach English to satisfy the ESP students' needs for their academic, professional, and occupational settings. In addition, the choice of good materials is of prime importance in educational setting and especially in ESP programs. The teachers should select the appropriate material(s) in the content area to meet the specific needs of the students.

The present study, which was an attempt to analyze the needs of Iranian undergraduate IT students for their ESP course, can help both course designers to put much more credit for ESP courses of graduate level, and syllabus designers to consider the shortcomings of the course and provide appropriate and suitable materials to give useful information to the students. It can also help ESP teachers to meet the language needs of their students.

This study conducted the needs analysis among 30 IT engineering students, the use of higher sample size can give more accurate information regarding the English language needs of IT students in their ESP course. Furthermore, the study administered a needs analysis questionnaire among the IT students to find their needs, further research can interview both the students and teachers to get an in-depth information about the actual needs of the students. It is also suggested that needs analysis to be conducted in line with the coursebook evaluation to find the matches and mismatches between the IT students' academic, professional, and occupational needs and what the coursebook provides in these regards to satisfy their ESP needs.

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