

Investigating the English Language Needs of the Female Students at the Faculty of Computing and Information Technology at King Abdulaziz University in Saudi Arabia

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Abstract

In the field of computer science, specific English language skills are needed to facilitate the students' academic progress. Needs analysis is generally believed to be an important element in ESP/EAP context because it enables the practitioners and curriculum designers determine the learners' needs in a particular academic context. In this regard, this paper, adopting a quantitative research design, reports on a survey conducted to investigate the English language needs of the female students studying in the Faculty of Computing and Information Technology (FCIT) at King Abdulaziz University (KAU). The study aims at identifying the students' perceptions about the importance of the English language skills, the frequency of using those skills, their ability levels in performing such skills, and their preferences regarding the English language course. The participants in this study are 135 female undergraduates who are studying at the third, fourth, and fifth year at the FCIT, during the academic year 2013-2014. The study identifies the students' English language necessities, lacks, wants, and their perceptions of the current English course. The paper concludes with several pedagogical implications which seek to improve the current course structure and contents so as to cater for the students' academic English language needs.

Keywords: Needs Analysis (NA), English for Specific Purposes (ESP), English for Academic Purposes (EAP), Saudi Arabia

1. Introduction

1.1 Background

Today, English has acquired the status of an international lingua franca. This increase in the use of English language worldwide has provoked many changes in educational institutions. Thus, English is no longer seen as a foreign language to learn, but it has progressively become the medium of instruction; even in non-English speaking countries (Jordan, 1997; Kennedy, 2001). As such, the students are not merely expected to "know" English, but they need to accomplish specific academic tasks utilizing language skills in English. These changes and demands in the educational situation have led to the expansion of English for Academic Purposes (EAP) as a necessary discipline in higher education. Indeed, many universities today offer freshmen the opportunity to undertake EAP courses that are goal directed, and seek to facilitate their academic progress.

Although EAP is guided towards the requirements of specific disciplines, many challenges seem to emerge in Higher Education. Saudi Arabia is no exception; particularly because English is the medium of instruction to students who are non-native speakers of English. In such an academic situation, students seem to be overwhelmed with two issues, one relates to the demanding academic tasks, and the other concerns the use of English to achieve those tasks. Assumingly, the students' overall low performance can be acquiesced to these issues. According to this assumption, functional and contextual needs must be taken into account.

Within the Saudi context, The Faculty of Computing and Information Technology (FCIT) at King Abdulaziz University (KAU) adopts English as the only medium of instruction. The students who are enrolled in this faculty face a problematic situation since they are not well-prepared for the specific English courses in their discipline. These students have only studied General English during the schooling years and continued to study English within a similar approach in the foundation year at KAU. The EAP course, namely, "Technical Writing",

that the faculty provides these students, does not adequately prepare the students to function in concordance with their specialization. The course book which the students are required to study is mainly intended for the students of business administration, which makes the case irrelevant to the needs of the Computing and Information Technology students. In this account, Ahmed (2012) argues: “ESP teaching materials and the books prescribed in Saudi universities do not fully cater the needs of the students because they have just been managed from different sources regardless of student’s level and their learning behavior” (p. 114). This indicates that, designing a syllabus suitable for the FCIT should be considered a necessity. This argument is relevant to that of many researchers who conceptualize that building awareness about students’ needs should be the first step in designing an ESP syllabus (Chen, 2006; Dudley-Evans & Johns, 1998; Hutchinson & Waters, 1987; Nunan, 1988; Robinson, 1991). Therefore, this study aims at investigating the students’ needs at the Faculty of Computing and Information Technology (CIT hereafter), by employing target needs approach to NA to delineate those needs.

1.2 Literature Review

1.2.1 Overview of ESP

Hutchinson et al. (1987) define ESP as “an approach to language teaching in which all decisions as to content and method are based on learners’ reason for learning”. Dudley-Evans & John, (1998) further extended the existing definitions of ESP into ‘absolute and variable’ characteristics, which are:

Absolute Characteristics

- 1) ESP is defined to meet specific needs of the learner;
- 2) ESP makes use of the underlying methodology and activities of the discipline it serves;
- 3) ESP is centered on the language (grammar, lexis, register), skills, discourse and genres appropriate to these 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 for learners at secondary school level;
- 4) ESP is generally designed for intermediate or advanced students;
- 5) Most ESP courses assume some basic knowledge of the language system, but it can be used with beginners (1998, pp. 4-5).

A more recent definition is given by Richards and Schmidt (2010) who defined ESP as “the role of English in a language course or programme of instruction in which the content and aims of the course are fixed by the specific needs of a particular group of learners.” (p. 198).

ESP dates back to the 1960s, when it emerged due to the demands of a brave new world which witnessed a revolution in linguistics, and a focus on the learner (Hutchinson & Waters, 1987). ESP refers to an English teaching approach that focuses on specific variety of technical English to students with specific goals, majors, or occupations. ESP has been developing since the 1960s, through five stages, till 1987; and still continues to do so. The first stage was identified as “special language concept”. A stage in which Hutchinson and Waters played a pioneering role that focused on different registers of language used in specific academic disciplines (Basturkmen, 2014). The second stage emerged as a reaction to the first one. The focus at that stage was on “rhetorical discourse analysis” that looked at the connected language units in full texts. The third stage was called “target situation analysis”, which was signified by John Munby’s (1978) work that emphasized the importance of taking the existing knowledge, and setting it on a more scientific basis; by establishing procedures for relating language analysis more closely to the learners’ reasons for learning. “Skills and strategies” constitute the fourth stage in the ESP history, in terms of materials, this approach generally puts the emphasis on reading or listening strategies. The characteristic exercises get the learners to analyze how meaning is produced in, and retrieved from, written or spoken discourse. The fifth and last stage in the ESP development is called “a learning-centered approach”. The significance of this stage lies in its endeavor to put the learner at the center of the learning process, and considers the students’ motivation by trying to approach what the students need to achieve a specific target. ESP has three main branches, these are: English for Science and Technology (EST), English for Business and Economics (EBE), and English for Social Studies (ESS). These branches were further divided into sub-branches of two categories: English for Academic Purposes (EAP), English for Occupational Purposes

(EOP), and English for Vocational Purposes (EVP) (Basturkmen, 2010; Hutchinson & Waters, 2006; Sifakis, 2003).

The main focus of this study is EAP, which focal point is to teach the students to use language appropriately for their study, and has a wide range of academic communicative practice. English for Academic Purposes is generally defined as, “teaching English with the aim of facilitating learners’ study, or research in that language” (Flowerdew and Peacock, 2001). Hyland and Hamp-Lyons (2002) believe that, “EAP refers to language research and instruction that focuses on the specific communicative needs and practices of particular groups in academic contexts” (p. 2).

1.2.2 Needs Analysis

Needs Analysis is a cornerstone element that should proceed prior to, during, and after designing any ESP course (Dudley-Evans, 1998). Generally, NA refers to the data collection method used to serve as a rationale for developing a syllabus or a curriculum to meet the particular needs of students studying or working in a specific field. Being a type of English for Specific Purposes approach (ESP), EAP provides specific instructions that are oriented by the students’ needs to accomplish communicative practices or tasks according to the demands of a certain academic discipline context. As those demands vary from one discipline to the other or through time, it is proposed that, any EAP course should be designed based on needs analysis which investigates the students’ needs and discipline’s requirements. Needs Analysis (hereafter NA) is the tool which ESP/EAP practitioners use to detect the learners’ needs in specific disciplines. In ESP literature, NA has been defined in many ways. Richards (1985) states, NA is “a mechanism for collecting a wider range of input into the content, design and implementation of a language program through involving people such as learners, teachers, administration and employees in the planning process” (p. 5). Hence, course objectives and learning outcomes should go in parallel with the results of NA to ensure that the students will be able to achieve whatever their academic discipline requires through the use of English (Chen, 2006; Dudley-Evans & John, 1998; Hutchinson and Waters, 1987; Richards, 2001; Robinson, 1991). Stojković (2015) maintains that: “need analysis should be an ongoing process, repeated yearly and both at the beginning and during the course (p. 152).

NA has more than one approach, which are: Target-Situation Analysis, Present-Situation Analysis, and Learning Situation Analysis. Target-Situation Analysis focuses on identifying the learners’ language needs to prepare them to successfully join their academic programs and future careers (West 1994) as it tries to approach the necessities, lacks and wants. Present-Situation Analysis involves strengths and weaknesses in language, skills, and learning experiences, while Learning-Situation Analysis includes subjective, felt, and process directed needs (Dudley-Evans & St. John, 1998).

1.2.3 Previous Studies on Needs Analysis in EAP

There is a plethora of research that has been conducted to assess learner’s needs among various academic disciplines and contexts. For instance, within the field of medical studies, Naruenatwatana and Vijchulata (2001) investigated the academic English needs of 297 medical students. They also included 10 subject teachers and seven English instructors in their sample. The results revealed that all the English language skills are important for the students; however, reading skills and sub-skills were the most important for the participants. It was also reported that the course book was irrelevant to the students’ academic English needs; therefore, the researchers called for ample English courses that cater to the academic needs of those medical students.

In Egypt, a research by Pritchard and Nasr (2004) was conducted to investigate the students’ English language needs in the collage of Technology to improve third-level engineering students’ reading performance. NA was the first step in this study which was carried out to conceptualize what the undergraduates and their teachers perceived as a preliminary reading skills. According to the results of NA, an English language reading program was developed. Later, the program was piloted with a group of 66 students to test its effectiveness. The findings also emphasized that the ESP teachers should not only be information providers, but they should rather share subject concepts with their learners and negotiate meaning with them.

Al-Fadly (2004) conducted a study at Hadramout University in Yemen that aimed at investigating the students and their teachers’ English language needs at the faculty of medicine. The findings of this study revealed that listening and speaking skills are the most important skills for the medical students. Based on the findings, the researcher suggested that more attention should be given to the English communication skills when designing an English language program.

In Algeria, Ounis (2005) investigated the agronomy students’ English language needs at Batna University. According to the findings, the faculty members as well as the students agreed that there is a need for a specific

English course that caters to the agronomy students' needs. The four skills of reading, writing, listening, and speaking were needed, however, reading skills were the most important.

Venkatraman and Prema (2007) conducted a study to investigate the English language needs of the engineering students at SASTRA University, India. The study also sought to discover the students' perceptions about their English language teachers. NA was administered to 254 students who reported that listening and speaking skills were ranked as the most important for them. The results also revealed that the students wanted their teachers to have specific set of competencies in the discipline other than that of regular General English teachers. Thus, the researchers proposed an English language curriculum that focuses on English and communication skills for the students. As for the teacher, the researcher suggested a competency-based training for the English language teachers to provide more audience oriented instructions for the target group of engineering students.

Within the field of sciences and technology, Rahman (2012) explored the students' English language needs among fifty undergraduate students of computer science at Putra University, Malaysia. The study was based on the three fundamental components of NA; which are: Target Situation Analysis, Present Situation Analysis, and Learning Situation Analysis. The only focus of the study was to discover the difficulties which the students found in reading in English for academic purposes. The results revealed that the students' mainly faced difficulty in skimming for gist, scanning, and decoding meaning. Based on the findings, the researcher proposed English for Computer Science course to suit the target needs of the undergraduate students to elevate their reading skills in their specialized discipline.

All these studies provide a profound overview about the importance of NA. Therefore, it is believed that NA is beneficial for the faculty of Computing and Information Technology at KAU. It is apparent that in the Saudi context, very few studies have been conducted to investigate the English language needs of learners within their disciplines' contexts. Ahmed (2012) states that in Saudi Arabia "the kind of books and the teaching materials needed in health colleges, engineering colleges and management colleges should be contextual and relevant to what the students of ESP really need for" (p.115). Thus, the lack in literature of NA research in Saudi Arabia should motivate many researchers to investigate the needs of the Saudi students in regards to the use of the English for specific purposes. This gap in literature, along with the need to design a syllabus, constructed a motivation for the researcher to carry out a NA to investigate the current English language needs of the students in the FCIT at KAU.

1.2.4 Limitations of the Study

This study a small scale investigation of the English language needs of the female students only and did not consider the male students due to the restrictions related to the university policy and gender segregation in education in Saudi Arabia. The study did not investigate the stakeholders or the administration employees' perspectives, which is considered as part of the limitations of this study.

2. Method

This study followed a quantitative case study design which aims at investigating the English language needs of the computing and information technology students at KAU based on their perceptions. It is a small scale research with convenient sampling utilizing probabilistic sampling methods (Oakshott, 2016).

The study addresses the following four questions:

- 1). How important are the English language skills used by the FCIT students at KAU?
- 2). How frequently are the English language skills used by FCIT students at KAU?
- 3). What are the FCIT students' English language lacks?
- 4). What are the FCIT students' English language wants?
- 5). To what extent is the English language course relevant to the FICT students?

The study is designed based on Hutchinson and Waters's (1987) target needs approach to NA, which broadly includes learners' necessities, lacks, and wants. The necessities can be portrayed as the target linguistic features which the students need, as identified by Hutchinson and Waters (1987): "the demands of the target situation, that is, what the learner has to know in order to function effectively in the target situation" (p. 55). Meanwhile, the lacks are their target linguistic features that exclude what they already know, which should be investigated to configure the gap between their target versus their current proficiency; this was defined by Brindley (1989) as: "theories of adult learning indicate concerns, language teaching tends to concentrate on the end-product: the actual language which learners had to use" (p. 70). Lastly, the wants can be described as what the learners feel they want and need. Thus, Hutchinson and Waters (1987) consider investigating the students' wants as an

important component, and stress that most of the time the students have a clear insight about what they really want, which should not be ignored.

The rationale of choosing this NA approach is that it provides “a useful classification of needs which may be seen to reflect differing viewpoints and give rise to different forms of NA” (West, 1994, p. 3). Hutchinson and Waters’ NA approach has actually been adopted by many researchers who were seeking a recognizable, thorough, flexible, appropriate and manageable model (e.g. Al-Haddad & Shuib, 2005, 2005; Al-Khatib, 2005; Basturkmen, 1998; Basturkmen, 2014; Chen, 2005; Chin, 2004; Kaur, 1993; Kaur & Hua, 2006; Mason, 1994; Rahim, 2005; Hayland, 2006; Stojković, 2015; West, 1994).

For the purpose of investigating the FCIT students’ English language necessities, this research explores the students’ perceptions of the importance of the English language skills in regards to their field of study and the frequency using the English language sub-skills. In order to analyze the participants’ lacks, the students were required to rate themselves in order to elicit information about their ability in performing the language skills. Finally, the students’ wants were determined by investigating the areas of training which they would like to receive to improve their language skills.

2.1 Participant

The participants of this study are 130 students studying in the Faculty of Computing and Information Technology (FCIT) at KAU, Saudi Arabia, in the academic year 2013-2014. Due to the fact that gender mixing is not permitted in education in Saudi Arabia, the study targeted the female campus only. The FCIT offers a five-year academic program that qualifies the students to graduate with a Bachelor of Arts (BA) degree in computer sciences. The FCIT provides a balanced mix of strong theory, application, and practice that aims at preparing qualified professional human resources who fulfill the society’s needs for computing specialists. Thus, it is important to note that the students have to pass the first year of the undergraduate degree program at the FCIT and can only specialize after finishing the required credits, then, they have to choose one of three departments affiliated to the FCIT, which are: Information Technology, Computer Science, or Information Systems. An English language course, namely “technical writing”, is taught to all the FCIT’s students over the first semester in their first year. This study targeted the Information Systems’ students only as they are the ones most likely to use the English language for technical and administrative tasks which demands the use of English for documentation or report of technical computer related issues.

More specifically, the third, fourth, and fifth year students are selected as a sample to fill in the questionnaire. These students are aged 21 to 24 years old. All the students in this nature speak Arabic as their mother tongue. The rationale for selecting these levels in particular is their ability to report sufficient knowledge about the exact language needs of the students studying at FCIT are based on their experience throughout their previous three years. Moreover, these students have already finished the English course in their first semester of the preparatory year and are able to reflect on the aspects of the English language they perceived as needed, unlike the inexperienced students who are at their first or second year of studies, who: “should not be expected to make sound language decisions concerning their needs” (Drobnic, 1978, as cited in Chambers, 1980, p.26).

Those participants were selected for this study for a variety of reasons. Firstly, as Long (2005) believes that students are a valuable source of information to the extent of being “primary, sometimes the only, respondents” (p. 19). Secondly, the students’ wants should be of primary importance in any NA study, and many studies revealed this (e.g. Dudley-Evans & John, 1998; Hutchinson & Waters, 1987; Long 2005). Thirdly, any learner-centered approach to course or syllabus design should consider the learner’s perceptions as a first step (Nunan, 1988), which goes in line with the latest trend or stage in the development of ESP.

2.2 Instrument

In this study, a questionnaire was adapted as the only method of data collection. It is comprised of ten items which were designed to reveal the target needs based on the objectives of this study. The questionnaire contained four sections, namely A, B, C and D, designed for specific purpose. The first section (A) is meant to elicit information on respondents’ educational level, specialized department and language in which the main subjects of specialty are presented during in-class instructions or in the textbooks. The second section (B) was designed to investigate the students’ perceptions regarding their English language skills and sub-skills needs. In the third section (C), the informants were requested to rate their proficiency in specific language skills in a rate scale of very good, good, weak. The last section of the questionnaire (D) was designed based on Kaur’s (1993) work, which, in the first part, intended to elicit the participants’ perceptions in terms of the relevance of the current English language course. In the second part of the same section, the subjects were asked to select the language skills which they would prefer to have training in, based on their views.

The questionnaire was translated into Arabic to guarantee the students’ full comprehension of the items included and then it was submitted for the approval of the vice-dean of the Faculty of Computing and Information Technology. After the permission was received, the questionnaire was sent to the participants through an electronic link through which they get direct access to the questionnaire in which they can select the answers by clicking on their choice or by typing their responses to the two open-ended questions.

2.3 Procedures

In May 2014, the researcher started conducting the study at the FCIT at KAU, female campus. In this study, Google Document survey is used, which is a web based survey tool that is mainly chosen based on its convenience to both the students and the researcher. An online survey is a questionnaire that the target audience can complete over the Internet, and does not accept submission except when the respondent fills in all the required items, which ensures that all the answers completed are always saved online. Online surveys are usually created as Web forms with a database to store the answers and statistical software to provide analytics. The analytics reveal a summary of responses which appear as bar graphs or pie charts with all demographics presented as percentages for each questionnaire item. The data of the study targeted the undergraduate students in FCIT who are in their third, fourth, and fifth year of study. The data was collected in a period of two weeks, after which the online responses were set to “stopped accepting responses” on the 23rd of May.

3. Results

This section will present the NA results based on the responses of the participants to the questionnaire. The main objective of this questionnaire is to investigate the students’ English language needs and preferences for the English language course.

3.1 The Students’ English Language Needs

To assure the importance of the English language to the students, it is seen as important to know about the language used in the course books of the main subjects which they use in the FCIT. The pie chart below proves that English is the only medium used in the faculty, whether in classroom instructions or in the computer sciences’ subjects course books, with 100%, as confirmed by the whole sample.

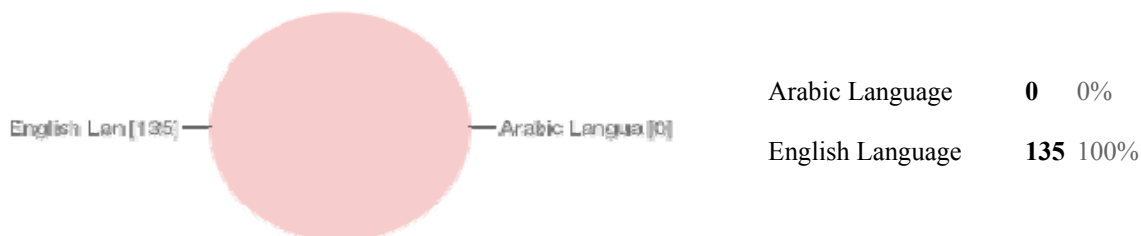


Figure 1. The language used during in class instructions and in computing subjects’ course books

This indicates that English is considered crucial for the students to understand, interact, and succeed in, in their studies.

In Figure 2 below, the bar graph shows the results obtained from section B of the questionnaire, regarding the use of English language skills within their major.

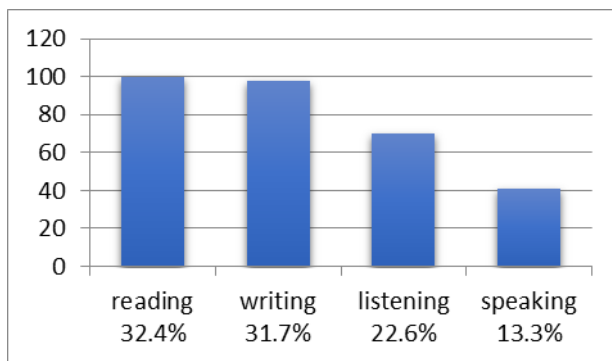


Figure 2. Students’ frequency of English language skills use

Of the four language skills, the bar graph in Figure 2 shows that reading is the first skill which the FCIT students perceived to be the most frequently used skill at 32.4%. Writing skills come second with a minor difference to that of reading with less than 1%. Listening comes as the third skill which they use, as many of the instructors tend to use code switching and sometimes use Arabic if they find it very difficult for the students to follow instructions. Finally, speaking skills have been regarded as the least frequently used skill at 13.3%.

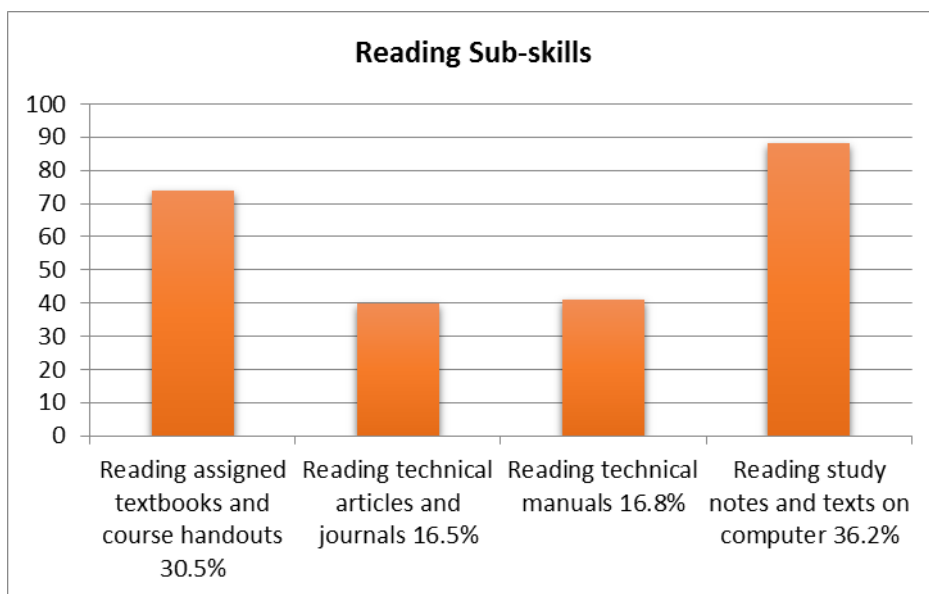


Figure 3. Students' frequency of reading sub-skills use

The bar graph in figure 3 shows that among the sub-skills of reading, the majority of the participants consider reading electronic study notes and texts as the most frequently used skill, which rates at (65%), followed by reading assigned textbooks and course hand outs at (55%). Reading technical articles and journals is the third reading sub-skill which the students frequently use, and stood at (42%). (39%) of the proportion was allocated to reading technical manuals; this means it is the least reading sub-skill used by the students.

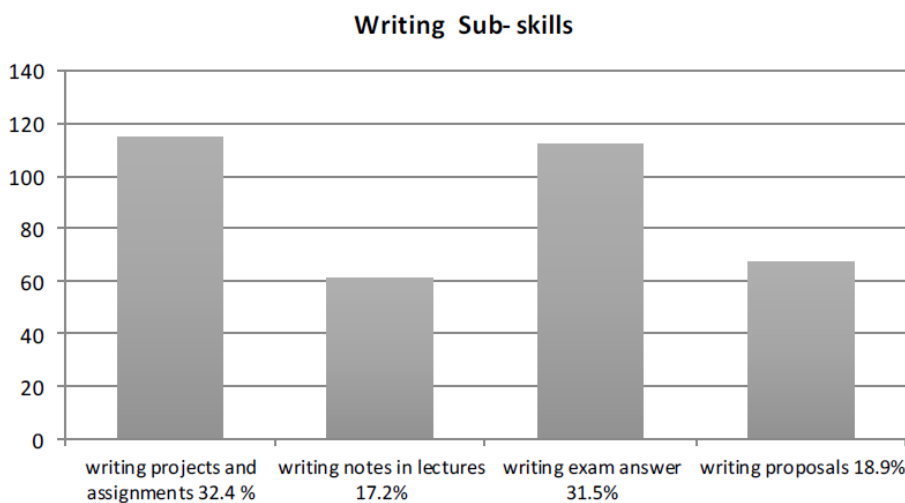


Figure 4. Students' frequency of writing sub-skills use

For the writing sub-skills, as the bar graph in figure 4 indicates, the students always use English to write projects and assignments, (32.4%) which constitutes about one third of the responses of the participants indicated.

Writing exam answers has grossed the same proportion as that of writing projects and assignments, with a minimal difference of less than (1%). Thus, the writing sub-skills of projects and assignments as well as writing exam answers are considered as equally in regards to the frequency of use. Writing proposals and notes in lectures rate lesser infrequency of use among the writing sub-skills; they consecutively stood at (18.9%) for writing proposals and (17.2%) for writing notes in lectures.

As reported above, listening is perceived by the students as the third skill in its frequency of use. In figure 5 below, the responses to the items related to the + sub-skills of listening are portrayed. The students perceived the issue of following lectures through listening as the most frequent listening sub-skill which stood at about 38%. About 33% of the participants consider listening to instructions and explanations as the second most frequent listening sub-skill they use, while about 29% indicated that listening to oral presentations is not as frequent as the other sub-skills of listening.

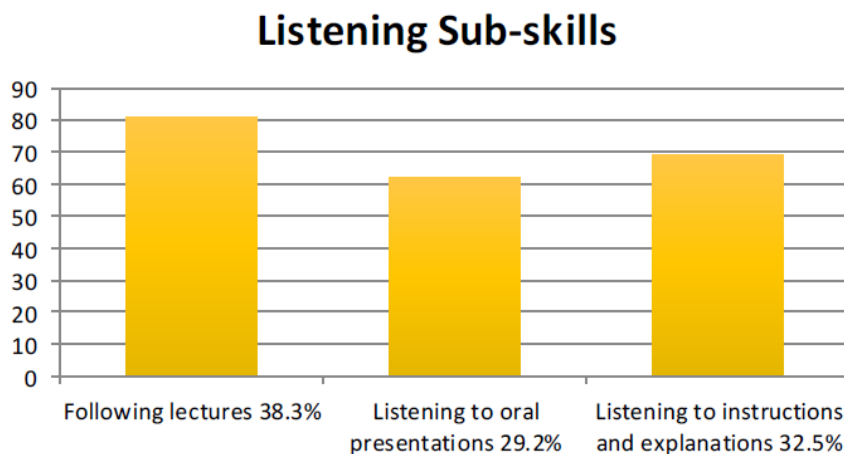


Figure 5. Students’ frequency of listening sub-skills use

Considering the speaking sub-skills, figure 6 below shows more than one third of the participants consider that giving oral presentations is the most frequent speaking skill, which stood at about 36%. Asking and answering questions at nearly 33% as well as participating in discussions at about 31% , are perceived as equal in regards to their frequency of use.

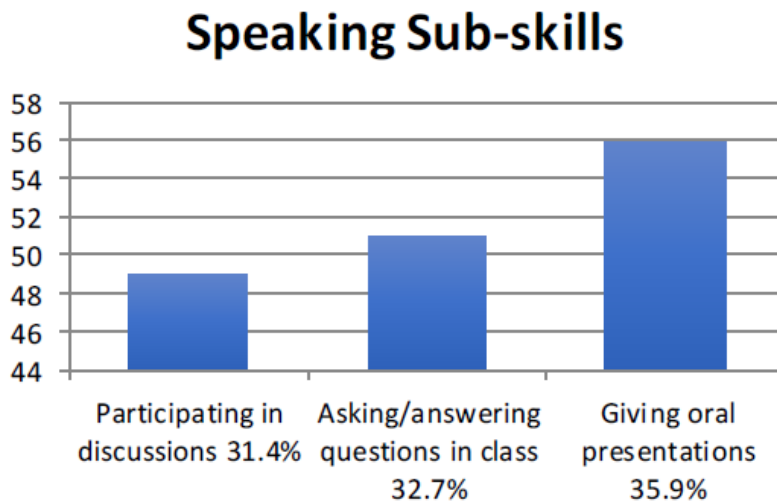


Figure 6. Students’ frequency of speaking sub-skills use

The last item of section B in the questionnaire was an open-ended question. Not many students provided additional sub-skills that are frequently used within their discipline and considered important for them; below are the other sub-skills which the students reported:

Communicating with non-Arab instructors or Engineers

Speaking during training sessions

3.2 The Students' English Language Lacks

This section reports the participants' responses to section C of the questionnaire. The students were asked to rate themselves in terms of English language proficiency.

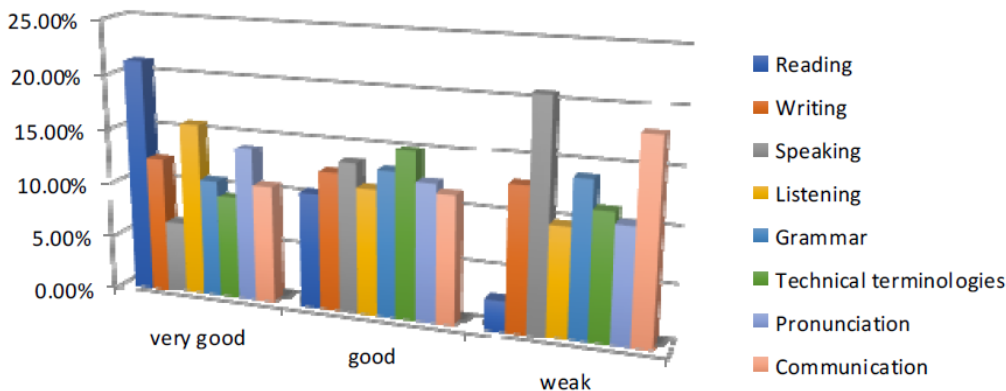


Figure 7. Students' proficiency in the English language

The bar graph in figure 7 shows that (20%) of the students consider themselves weak in the speaking skills, and only (4%) rated themselves as very good in that skill. This is followed by the communication skills at around (17%) who see themselves weak, which is considered their second weakest skill after speaking, while the rest self-evaluated themselves as average. As for grammar skills, a small number of students saw their grammar skills as weak, at around (13%), while the rest believed they were either good (11%), or very good (10%) at that particular skill. Most of the students considered their pronunciation to be very good, and their awareness of technical terminologies as good. The bar graph also shows that most of the students considered themselves to be very good at listening. In general, the majority of the students rated themselves to be very good at reading, while being redundant, when rating themselves at all the other skills, as the scale fluctuates between good to weak.

3.3 The students' English Language Wants

This section represents section D of the questionnaire which reflects the students' perceptions regarding the English language course which they have attended in their preparatory year at the FCIT, specifically, the relevance of this English course to their discipline or study.

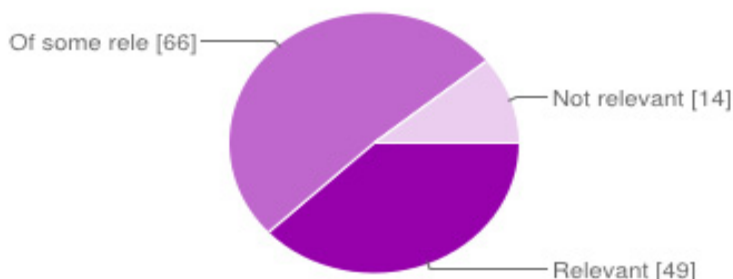


Figure 8. The relevance of the English course taught at FCIT

The results which appear in figure 8 revealed that the students have mixed perceptions towards the relevance of the English language course in terms of meeting their English language needs. Thus, around half of the majority consider the course to be of only some relevance to their needs, at (51%); meanwhile, (38%) of the students

perceived that the current course is relevant to them. The minority of the students, at (11%) believed that the English course is not relevant to their area of study.

To explore more about the students' perceptions about the English language course, there was a need to investigate whether or not the time allocated for the course was enough for the students to use the language effectively.

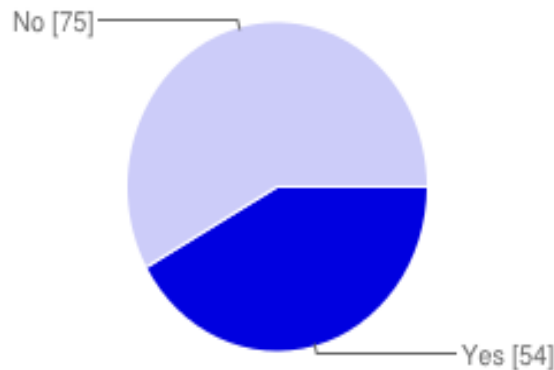


Figure 9. The time allocated for the English course is enough for them to use the language effectively

As illustrated in the pie chart in figure 9, more than half of the respondents, at (58%) believed that the time allocated for the English language program is not enough; meanwhile, (42%) considered the allocated time to be enough to use the language effectively. The last item in section D aimed at investigating the students' wants regarding the language aspects of the English language course. The bar graph in figure 10 below, shows that most of the students stated that, priority should be devoted to speaking skills (22%), then technical vocabulary skills (18%), which is equal to that of the writing skills. The other skills that focus on grammar, reading comprehension, listening comprehension, and communicative skills fluctuated between (11%) to (10%).

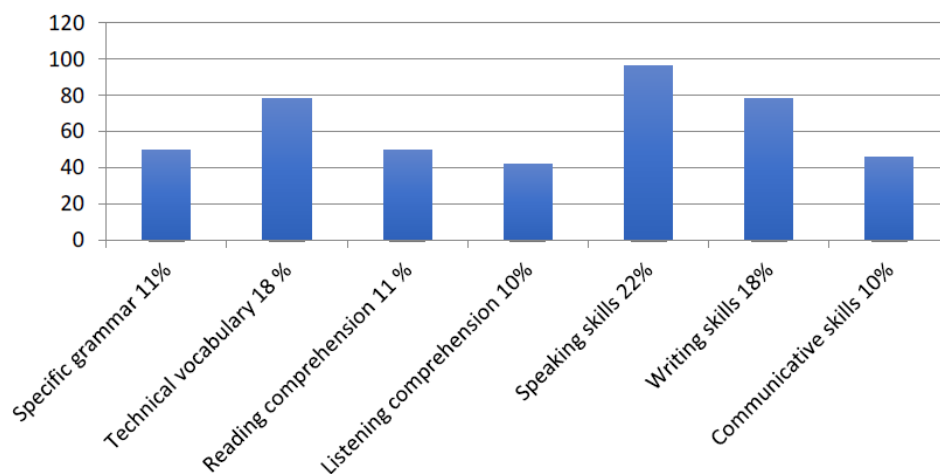


Figure 10. Students' wants regarding the language aspects of the English language course

4. Discussion

This current study investigated the academic English needs of FCIT students through administering a needs analysis. Many studies that aimed at investigating the students' needs emphasized the importance of recognizing and implementing the students' academic English needs in an EAP course to assist their academic progress and discipline requirements (e.g., Alqhatani, 2011). Discussions are built on the results of the students' English language needs and perceptions about English language course to provide answers to the research questions.

Firstly, the findings of section B represent the FCIT students' necessities. The results reported that according to

the participants, the most important skills are reading and writing respectively, as Figure 2 indicated. This means, any specific course designed for this group of learners should highly consider these two skills, since they are related to the discipline requirements. However, the other two skills, which are listening and speaking, should not be ignored since they are also basic skills which the students need to successfully achieve academic tasks.

The results also revealed that The FCIT students find many sub-skills necessary to them with regards to their studies. Those skills are essential since they facilitate the students' learning process in the target situation. In terms of the most frequent sub-skills used, the results holistically revealed that writing projects and assignments, at (33.8%), as well as reading study notes and texts on computer, at (25.9 %), are the most frequently used sub-skills to the majority of the participants. On the other hand, the listening sub-skills, and the speaking sub-skills total rate was (40.3%). Also for listening, following lectures was the most important sub-skill according to (23.8%) of the participants. The least rating sub-skill was speaking, in which giving oral presentations was the most needed sub-skill, at (16.5%). These results of the current study confirmed the significance of English in the science studies done by previous researchers (e.g. Chen, 2006; and Pritchard & Nasr, 2004).

Secondly, based on results drawn on the FCIT students' English language lacks, it was found that the students rated themselves to be weak in speaking, communication, and grammar skills. On the other hand, most of the students rated themselves at the average level in terms of technical terminologies, while the vast majority believed that they are very good in the reading skills. The results at this part indicate that although reading is considered the most important skill, they find themselves capable of managing tasks which demand the use of that skill, but at average level. Surprisingly, most of the students rated themselves weak in the writing skill even though it is the second most important skill of English which they need in their studies in the field of computer sciences. Thus, although the only English language course that the FCIT offers its students is "Technical Writing", they still perceive their level of performance in this skill as unsatisfactory. This is a clear indication that the English language course did not fulfill the needs of those students with regards to their discipline requirements.

Finally, the results revealed the students' English language wants came as a rational consequence to their lacks. In other words, speaking, writing, and technical vocabulary are demonstrated as the skills in which they want to receive training the most. Although technical vocabulary was not reported as an area of weakness by the students, they might have chosen that as part of their wants as an area which they wish to get further training in.

Taking into consideration the learners' perceptions of the current English language course appropriateness with regards to its content and allocated time, the results showed that the opinions of the participants considerably varied. Around (60%) of the students agreed that the time allocated for the English language course, namely "technical writing", was not sufficient for them to master the needed language skills effectively in such a short period of one semester. Almost half of the students considered the course content to be relevant to their needs while the other half thought it did not. These two opposing opinions could be due to two factors. The first factor is that most of the teachers who teach "technical writing" are specialists in the field of sciences and technology. The second factor is, those teachers always work hard to provide extracurricular handouts or slide show presentations, which contain relevant materials to that of the discipline based on their experience and knowledge as field experts. However, those teachers are burdened by the certain faculty administration mandates that oblige them to use the "technical writing" course book, since it is part of the accreditation requirements of more than one association which the FCIT have already maintained. Such a situation directly reflects negatively on the learning academic progress which should be placed as the first priority, rather than the radical burdens which such accreditations' requirements dictate. In this sense, Ahmed (2012) portrays the situation at many of the Saudi universities in which "the learners complain that the prescribed textbooks either in one year preparatory course or in ESP contexts are not embedded in Saudi culture, hence do not satisfy their needs" (p. 115). He further illustrates on the teaching situation and suggests "what kind of language acquisition is actually required by the learner and what kind of teaching materials and teaching methodologies should be applied in different teaching scenario at the kingdom" (p. 115).

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5. Conclusions and Recommendations

The current research tried to identify the FCIT students' needs in terms of the importance and frequency of the English language skills as well sub-skills used in their major. Also, it identifies the students' English language lacks, wants, and perceptions about the current English language course. The findings perceived by the five

research questions identified the “gap between what is and what should be” (Brindley, 1989, P. 65). For instance, the responses showed that the students are aware of the most important academic English skills which they use in their field of study, like the reading and writing skills; however, they ranked themselves as very good in reading, while ratings themselves weak in writing. As stated before, this strongly shows how irrelevant the “technical writing” English course is, which they have received. It also indicates that their reading skills are very good due to the frequency of its use, and therefore, practice within the sub-skills of reading assigned textbooks and course handouts, or for reading study notes and texts on the computer. Speaking, writing, and technical vocabulary are the three skills which the students want to have extra focus on the most when designing an academic English course for them. This also confirms that the current English course has ignored the students’ needs to be efficient in the productive skills. In the open-ended question of section B, the students mentioned other reasons which were not available in the questionnaire, but confirmed the seriousness of those students when reporting their need for speaking and communication skills; these reasons are: communicating with non-Arab instructors or Engineers, and speaking during training sessions. Accordingly, the following recommendations might help in designing an academic English course for the FCIT students at KAU:

The pedagogic implications should be based on the learners’ perceived needs, lacks and wants. Thus, the ESP teachers and course designers should consider these needs by focusing on all the language skills, specifically writing and speaking skills.

Due to the administrative restrictions that comply with the accreditation standards, as well as the results concerning the students’ opinions, the current curriculum can be amended with some omissions and additions that cater for the students’ needs and discipline requirements. As Ahmed (2012) states, “If teaching materials do not fulfill the immediate needs of the students, this will cause lack of motivation” (p.115).

The level of the students should be taken into account, based on the results; most of the students could be in the category of the intermediate level. Therefore, the course materials should be tailored in concordance to the students’ level, and adopt an intermediate syllabus.

The duration of an EAP course should be allotted more than three hours per week, which is the current case in the FCIT. Thus, it should be increased in order to cover what is needed and give the students ample time to practice.

A suggested outline of speaking and writing skill objectives could be:

Speaking Skills objectives	Writing skills objectives	Oral communication skill objectives
Give an academic presentation: Identify the structure of a speech Introduce a topic Sequence a speech Summarize and conclude a speech Outline a process Give a talk on a problem-solution topic. Ask for clarification Illustrate and explain a point Give examples by referring to research Use effective body language Give a talk describing graphs and illustrations	Write an academic text in English: Identify the parts of an academic essay Use other’s words in an essay Write definition Classify/ categorize Give reasons Make explanations Express cause and effect Present arguments, ideas and opinions Express certainty and doubt Describe developments and changes Describe a sequence of events Write a lab report	State an opinion and give support to Comment on a given opinion Ask questions Ask for clarification Illustrate and explain a point Interrupt and deal with interruptions

To conclude, the current study investigated the Faculty of Computing and Information Technology students' English language needs, based on Richards et al. (1985); emphasizing that, conducting a NA facilitates the process to "identify general to specific language needs, which can be addressed in developing goals, objectives, and content for a language program" (p. 7). Based on the findings of this study, it is hoped that EAP practitioners can come up with a core of EAP course objectives guided by the students' needs, and discipline requirements at the FCIT.

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