Engineering Students' EFL Needs at the Tertiary Level of Education in Bangladesh: Expectations and Existence

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Abstract

Conducting needs analysis is a prevalent phenomenon in designing curriculum in language teaching and learning. This paper explored the English language needs of engineering students at the tertiary level of education in Bangladesh vis-à-vis four basic language skills. Moreover, this paper tried to shed some light on the gaps between learners' present level of competence and target needs. This study followed the mixed approach (both quantitative approach and qualitative approach) to collect data through questionnaires, semi-structured interviews, and focus group discussions. Under the random stratified sampling method, the study collected data from 99 undergraduate engineering students and 15 EFL teachers from different universities in Bangladesh. The findings of the study revealed that engineering students felt the ardent need for all the four major language skills (listening, speaking, reading, and writing). The findings also addressed the needs of the subskills regarding each language skill. Additionally, the offered courses were not adequately addressing the language needs of the students. Moreover, the duration and number of English language classes were not sufficient to meet the needs of the engineering students. Based on the findings, this study made some recommendations to minimize the gaps between engineering students' present and target needs of the English language.

1. INTRODUCTION

Needs analysis is fundamental for planning a sound educational program. In 1920s, the term 'analysis of needs' (as cited in West, 1994, p. 1) first appeared in India. Michael West introduced the concept and he mentioned two separate and conflicting concepts of 'need'; the first one is learners' foreign language need in target situation and the second one is learners' competence in target language at the time of training (West, 1994). Davis (1977) and Robinson (1991) took both learner's target needs and learner's present level of competence into consideration while conducting needs analysis. Moreover, Richard & Rogers (1986) opines that needs analysis is concerned with ascertaining learners' general language needs, specific language needs, societal expectations, or specific needs. Lawrence et al. (1991) emphasized on the use of surveys to determine both general and specific problems experienced by a target group. Again, Brumfit & Roberts (1987) emphasized on the effectiveness of needs analysis to determine suitable teaching techniques. Moreover, West (1994) studied different modes of

needs analysis, namely *Target-situation anal*ysis, *Deficiency analysis*, *Strategy analysis*, *Means analysis*, their effectiveness, and constraints. Among the different modes of needs analysis, this study adopted *Deficiency analysis* to determine the language needs of undergraduate engineering students at the tertiary level of education in Bangladesh, which consider learners' present needs/wants and the requirements of the target needs. In addition, Allwright (1982) and Robinson (1991) titled this process as combined target-situation analysis and present-situation analysis.

Almost all the engineering departments in Bangladesh offer the English language course to their respective students in public and private universities. The general aim of these English courses is to develop the English language proficiency of the engineering students both in their academic and professional career (Rahman et al., 2017). However, the present English language courses offered to the engineering students at the tertiary level of education in Bangladesh are unable to fulfill the aim since the desired proficiency in English language of the engineering students is not good enough (Sultana, Sultana & Zakaria, 2019). One of the main reasons for this problem is not to conduct a proper needs analysis before administrating these courses. Therefore, this study attempts to determine the English language needs of engineering students at the tertiary level of education in Bangladesh. The study encompassed the following objectives:

i)   To identify students' perceptions of their needs and wants.
ii)   To discover how students rated their competence in particular language skills (e.g., listening).
iii)   To ascertain the language skills-based areas where they are facing problems.
iv)   To determine the extent to which the student-perceived needs match those of their teachers-perceived needs.

With reference to the above-mentioned objectives, this study assessed the following questions:

i)   What are the English Language needs of the engineering students at the tertiary level of education in Bangladesh with respect to reading, writing, listening, and speaking skills?
ii)   What gaps do exist between target needs and present level of competence of the current engineering students at the tertiary level of education in Bangladesh based on their linguistic competence?

2. LITERATURE REVIEW

There is an avalanche of literature available related to the English language needs of the students of different disciplines. However, most of them covered the humanities, business studies, automotive studies and non-English major students. On the other hand, some studies regarding the English language needs of engineering students have been conducted abroad. Therefore, the literature on the English language needs of engineering students at tertiary level of education in Bangladesh is quite inadequate.

Qasemi and Ibrahim (2015), Gözüyeşil (2014), and Mohamed, et al.,(2014) conducted studies to examine the English language needs of engineering students. Although Qasemi & Ibrahim (2015) and, Gözüyeşil (2014) tried to identify the English language needs of engineering undergraduates, Mohamed, et al., (2014) focused their studies on the English language needs of professional engineers at their workplace. The studies of Qasemi & Ibrahim (2015), Gözüyeşil (2014), and Mohamed, et al., (2014) revealed that the English language course for the engineering graduates had a significant importance on their academic as well as professional career. Qasemi and Ibrahim (2015) recommended to modifying the existing syllabus according to engineering students' needs. On the other hand, Gözüyeşil (2014)

suggested to give more importance to the speaking and reading skills of the engineering students. However, Mohamed, et al., (2014) made recommendations to focus more on soft skills to the engineering graduates and introduce the ESP programs to align the diverse language needs of the different disciplines.

Jamilah (2018), Lestari, et al., (2017), Mognhode and Woldemariam (2015), and Talif and Noor (2009) examined the English learning needs of non-English major students at the tertiary level of education. Mognhode and Woldemariam (2015) identified the English language needs of business studies students while Lestari, Syahrial, & Suwarno (2017) explored the needs of the language skills, sub skills and vocabularies for the engineering disciplines. However, both the studies of Mognhode and Woldemariam (2015), and Lestari, Syahrial, & Suwarno (2017) found that a gap existed between present needs and target needs of the non-English major students. On the other hand, Jamilah (2018), and Talif & Noor (2009) identified that students needed particular language skills which would develop their language competency in the workplace. Jamilah (2018), and Talif and Noor (2009) recommended that the contact hours needed to increase and more challenging language activities were required to develop the language proficiency of the non-English major students. However, Mognhode and Woldemariam (2015), and Lestari, et al., (2017) suggested to give more emphasis on learning the technical vocabularies and integrated learning of the four English language skills.

Sultana et al (2019), Chaudhury (2010), and Sudha (2017) conducted studies on the English language needs of the non-English major students at the tertiary level of education in Bangladesh. Although Sudha (2017) examined the effectiveness of English language courses for Non-English major students at the tertiary level of education in Bangladesh, Chaudhury (2010) tried to identify, particularly, the needs regarding English language learning of the students of arts and humanities at the tertiary level of education in Bangladesh. Both of these studies found that the present English language courses were not fulfilling all the necessary needs that the non-English major students need for their academic and professional success. Chaudhury (2010) suggested some changes in teaching styles for the effectiveness of the English language courses offered to the non-English major students. However, Sudha (2017) emphasized on the up-to-date syllabus and an increase of the classroom facilities.

On the other hand, Sultana, et al., (2019) conducted a study on Diploma level engineering students in Bangladesh. This study found that the present ESP syllabus was not adequate enough to meet the needs of the engineering students. Additionally, the number and duration of the English language courses were very limited. The study suggested updating the ESP syllabus according to learners' needs, giving more focus on functional aspects of the language, adopting various instructional methods, and increasing the number and duration of the language classes.

To sum up, there are discussions on the effectiveness of English language course for the non-English major students (Sultana et al, 2019, Sudha, 2017, and Chaudhury, 2009), the communication needs of the professional engineers (Mohamed et al, 2014), needs of language skills and sub-skills for the automotive students (Lestari et al, 2017), business studies (Mognhode and Woldemariam, 2015), and industry-linkage programs (Talif & Noor, 2009). However, there is no specific research on English language needs of the engineering students at the tertiary level of education in Bangladesh. Therefore, there remains a research gap in this field. The purpose of this study is to fill in the gap with a critical approach.

3. METHODOLOGY

3.1 RESEARCH DESIGN

This research employed mixed-methods approach i.e., a combination of qualitative and quantitative studies. Creswell et al. (2008) presented five typical research types of mixed-methods study namely *triangulation model*, *concurrent embedded design*, *explanatory design*,

exploratory design and *sequential embedded design*. This research adopted *triangulation model*. This model collects two sets of data simultaneously and uses them to understand the research questions thoroughly (Mackey & Gass, 2015).

3.2 POPULATION AND SAMPLING

The target population of the study were the engineering students at the tertiary level of education in different public and private universities of Bangladesh. In addition, instructors who are active in teaching English to the engineering students at the tertiary level in Bangladesh also took part in this research. This study employed *stratified random sampling* (Brown, 1988) as a sampling method. Therefore, the engineering students at the tertiary level of education in different public and private universities of Bangladesh were divided into subgroups or strata based on their departments like Electrical and Electronic Engineering, Computer Science and Engineering, Civil Engineering, Mechanical Engineering, etc. Samples were then selected randomly from each subgroup or stratum. Under this stratified random sampling method, the sample size includes 99 engineering students and 15 instructors of tertiary level of education in Bangladesh.

3.3 DATA COLLECTION

Quantitative data were collected from 99 engineering students and 15 instructors of tertiary level of education in Bangladesh through questionnaires. The questionnaires used five-point Likert scale to measure the responses (Likert, 1932). A review of literature was carried out in order to design the research questionnaires. The questionnaire items were partly adapted from Chaudhury (2009) and from Gravatt et al. (1997). Separate questionnaires were designed to collect data from the students as well as from the instructors. On the other hand, qualitative data were collected through Interviews and Focus Group Discussion (FGD) reports. Five English teachers who had conducted the English classes to the engineering students were interviewed and a focus group discussion was carried out with 30 students in three groups where each group consisted of 10 students.

3.4 DATA ANALYSIS

Quantitative data were analyzed by using IBM SPSS Statistics. The statistical measurements used were mode, median, mean, and standard deviation to analyze and interpret the collected data. The statements assessing the expected responses of the participants were adopted through a five-point Likert scale (Likert, 1932). On the scale, the positively worded items were scored e.g., "Always"= 5, "Often"= 4, "Sometimes"= 3, "Rarely"=2, "Never"= 1. However, the negatively worded items which address the opposite of the target concept were scored reversed before analysis i.e., 5 becomes 1, 4 becomes 2, etc.

4. RESULTS AND FINDINGS

This study employed descriptive statistics (e.g., mode, median, mean) to analyze and interpret data. In addition, this study used mean as a measure of central tendency and standard deviation (i.e., the measures of dispersion) to give more credibility to data analysis and interpretation.

4.1 RESULTS OF THE STUDENTS' DATA:

Table-1:

Students' frequency of need of the four language skills during their course of study						
Items	N		Mean	Median	Mode	Std. Deviation
	Valid	Missing				

Listening	99	0	4.2525	5	5	0.91856
Speaking	99	0	3.8283	4	4	0.96933
Reading	99	0	4.2828	5	5	0.93722
Writing	99	0	4.1111	4	5	0.91349

The results in Table-1 show that among the four language skills, reading skill has the highest mean (4.2828) while speaking skill has the lowest mean (3.8283). The results indicate that students need the reading skill most frequently, whereas the frequency of need of the speaking skill is the least. However, mode and median scores indicate their needs regarding the basic language skills.

Table-2:

Students' frequency of facing difficulty in each of the four language skills during their course of study

Items	N		Mean	Median	Mode	Std. Deviation
	Valid	Missing				
Listening	99	0	3.0606	3	3	0.92381
Speaking	99	0	3.6061	4	3	1.01838
Reading	99	0	2.9495	3	3	1.04368
Writing	99	0	3.1919	3	3	0.93325

The results in Table-2 show that among the four language skills, speaking skill has the highest mean (3.6061) while reading skill has the lowest mean (2.9495). The results reveal that students face most difficulty in speaking, whereas they face least difficulty in reading. However, mode and median score also indicates they are facing problems in other language skills as well.

Table-3:

Students' frequency of facing problems with regard to English listening skills

Items	N		Mean	Median	Mode	Std. Deviation
	Valid	Missing				
Have trouble understanding lectures.	99	0	2.9697	3	3	1.08284
Have trouble taking effective notes.	99	0	3.0101	3	3	0.99483
Have to ask questions for clarification to comprehend the lecture.	99	0	3.1515	3	3	0.94073
Have difficulty understanding lengthy descriptions.	99	0	3.2222	3	3	1.03565
Have trouble understanding spoken instructions.	99	0	3.0303	3	3	1.09222
Have trouble understanding informal language.	99	0	3.0909	3	3	1.12568
Have difficulty understanding the subject matter of a talk.	99	0	3.0202	3	3	1.07836

The results in Table-3 show that among the problems regarding English listening skills, 'have difficulty understanding lengthy descriptions' has the highest mean (3.2222) while 'have trouble understanding lectures' has the lowest mean (2.9697). The results express that the students face most trouble in understanding lengthy descriptions, whereas they face least

trouble in understanding class lectures.

Table-4:

Students' frequency of facing problems with regard to English speaking skills

Items	N		Mean	Median	Mode	Std. Deviation
	Valid	Missing				
Have difficulty in giving oral presentation.	99	0	3.6667	4	4	0.97938
Have trouble wording when you say something quickly.	99	0	3.6465	4	3	1.01331
Worry about saying something in English if you make a mistake.	99	0	3.6566	4	4	0.99141
Do not know how to express something in English.	99	0	3.0303	3	3	1.10153
Do not know the best way to express something in English.	99	0	3.2323	3	3	0.90157
Face trouble in pronunciation of words.	99	0	3.1818	3	3	1.01382
Find it challenging to enter discussion.	99	0	3.2525	3	3	1.05311

The result in Table-4 show that among the problems regarding English speaking skills, 'have difficulty in giving oral presentation' has the highest mean (3.6667) while 'do not know how to express something in English' has the lowest mean (3.0303). The results reveal that students face most difficulty in giving oral presentation, whereas they face less problem to say something in English.

Table-5:

Students' frequency of facing problems with regard to English reading skills

Items	N		Mean	Median	Mode	Std. Deviation
	Valid	Missing				
Understanding the main point of texts.	99	0	3.5859	4	4	1.05955
Reading a text quickly in order to understand the general idea of the content (skimming).	99	0	3.6061	4	4	0.95638
Reading a text thoroughly in order to comprehend the ins and outs of the text.	99	0	3.7778	4	4.00a	1.03565
Reading a text quickly in order to find specific information (scanning).	99	0	3.5657	4	3	1.02182
Inferring the meaning of unknown words in a text.	99	0	3.5455	4	4	0.99255
Interpreting a writer's attitude and purpose.	99	0	3.4848	4	3.00a	0.91878
Reading to take part in critical discussion.	99	0	3.5051	4	4	1.07261
Multiple mode exists. The smallest value is shown.						

The results in Table-5 show that among the problems regarding English reading skills, 'reading a text thoroughly in order to comprehend the ins and outs of the text' has the highest mean (3.7778) while 'interpreting a writer's attitude and purpose' has the lowest mean (3.4848). The results express that the students face most difficulty in reading a text thoroughly to

understand the ins and outs of the text, whereas they face least difficulty to understand writer's attitude and purpose.

Table-6:

Students' frequency of facing problems with regard to English writing skills						
Items	**N**		**Mean**	**Median**	**Mode**	**Std. Deviation**
	Valid	Missing				
Using correct punctuation and spelling.	99	0	3.7374	4	4	0.94314
Structuring sentences.	99	0	3.7677	4	4	0.92393
Using appropriate vocabulary.	99	0	3.7475	4	4	0.87299
Organizing paragraphs.	99	0	3.5657	4	4	1.00165
Expressing what you want to say clearly.	99	0	3.7879	4	4	1.02293
Evaluating and revising your writing.	99	0	3.5758	4	4	1.07941
Completing written tasks in time. (e.g., exams, tests, etc.)	99	0	3.8081	4	4	1.08493

The results in Table-6 show that among the problems regarding English writing skills, 'Completing written tasks in time, e.g., exams, tests, etc.' has the highest mean (3.8081) while the 'Organizing paragraphs' has the lowest mean (3.5657). The results reveal that students face most difficulty in completing written tasks within the time available, whereas they face least difficulty to organize paragraphs.

4.2 RESULTS OF THE INSTRUCTORS' DATA:

Table-7:

Instructors' perception on students' frequency of facing problems with regard to English listening skills						
Items	**N**		**Mean**	**Median**	**Mode**	**Std. Deviation**
	Valid	Missing				
Have trouble understanding lectures.	15	0	3.6	4	4	0.50709
Have trouble taking effective notes.	15	0	3.2	3	3	0.67612
Have to ask questions for clarification to comprehend the lecture.	15	0	3.8	4	4	0.86189
Have difficulty understanding lengthy descriptions.	15	0	3.4667	3	3	0.91548
Have trouble understanding spoken instructions.	15	0	2.9333	3	3	0.88372
Have trouble understanding informal language.	15	0	2.8667	3	3	0.83381
Have difficulty understanding the subject matter of a talk.	15	0	3	3	3	0.65465

The results in Table-7 show that among the problems regarding students' English listening skills, 'have to ask questions for clarification to comprehend the lecture' has the highest mean (3.8) while 'have difficulty understanding the subject matter of a talk' has the lowest mean (3). The results reveal that, according to instructors' perception, students face

frequent problem regarding listening skill, whereas students face least difficulty in understanding the subject matter of a talk.

Table-8:

Items	N		Mean	Median	Mode	Std. Deviation
Instructors' perception on students' frequency of facing problems with regard to English speaking skills						
	Valid	Missing				
Have difficulty giving oral presentation.	15	0	4.1333	4	4	0.74322
Have trouble wording when you say something quickly.	15	0	3.8667	4	4	0.63994
Worry about saying something in English if you make a mistake.	15	0	4.1333	4	4	0.83381
Do not know how to express something in English.	15	0	3	3	3	0.65465
Do not know the best way to express something in English.	15	0	3.5333	3	3	0.63994
Face trouble in pronunciation of words.	15	0	3.8667	4	4	0.74322
Find it challenging to enter discussion.	15	0	3.4667	3	3	0.63994

The results in Table-8 show that among the problems regarding students' English speaking skills, 'have difficulty giving oral presentation' and 'worry about saying something in English if you make a mistake' both have the highest mean (4.1333) while 'do not know how to express something in English' has the lowest mean (3). The results indicate that, according to instructors' perception, students face most problems to give oral presentation and to express something in English if they make a mistake, whereas they face less problem in proper wording to express something in English.

Table-9:

Items	N		Mean	Median	Mode	Std. Deviation
Instructors' perception on students' frequency of facing problems with regard to English reading skills						
	Valid	Missing				
Understanding the main point of texts.	15	0	2.9333	3	3	0.59362
Reading a text quickly in order to understand the general idea of the content (skimming).	15	0	3.2	3	3	0.56061
Reading a text thoroughly in order to comprehend the ins and outs of the text.	15	0	3.1333	3	3	0.74322
Reading a text quickly in order to find specific information (scanning).	15	0	3.2667	3	3	0.70373
Inferring the meaning of unknown words in a text.	15	0	3.3333	3	3	0.61721
Interpreting a writer's attitude and purpose.	15	0	3.6667	3	3	0.8165
Reading to take part in critical discussion.	15	0	3.8	4	4	0.67612

The results in Table-9 show that among the problems regarding students' English reading skills, 'reading to take part in critical discussion' has the highest mean (3.8) while 'understanding the main point of texts' has the lowest mean (2.9333). The results reveal that,

according to instructors' perception, students face difficulty in reading a text in order to respond critically, whereas they face less difficulty in understanding the main point of texts.

Table-10:

Instructors' perception on students' frequency of facing problems with regard to English writing skills						
Items	N		Mean	Median	Mode	Std. Deviation
	Valid	Missing				
Using correct punctuation and spelling.	15	0	3.6667	4	3	0.72375
Structuring sentences.	15	0	3.6667	4	3	0.72375
Using appropriate vocabulary.	15	0	3.5333	4	4	0.63994
Organizing paragraphs.	15	0	3.2	3	3	0.67612
Expressing what they want to say clearly.	15	0	3.3333	3	3	0.48795
Evaluating and revising their own writing.	15	0	3.6	4	3.00a	0.98561
Completing written tasks in time. (e.g., exams, tests, etc.)	15	0	3.2	3	3	0.7746
a. Multiple modes exist. The smallest value is shown.						

The results in Table-10 show that among the problems regarding students' English writing skills, 'using correct punctuation and spelling' and 'structuring sentences' both have the highest mean (3.6667) while 'organizing paragraphs' and 'completing written tasks in time. (e.g., exams, tests, etc.)' both have the lowest mean (3.2). The results express that, according to instructors' perception, students face most problems using correct punctuation and spelling and structure sentences where students face least problems to organize paragraphs and complete written tasks in time.

5. DISCUSSION ON THE FINDINGS

The results and discussion of the data mentioned above are all related to the research questions. There are two research questions of this paper. The first research question is "What are the English Language needs of the undergraduate engineering students at the tertiary level of education in Bangladesh with respect to reading, writing, listening, and speaking skills?" The study revealed the language needs by identifying the problems (see, Table-3,4,5,6) they are facing in the four skills which clearly indicates their lack of mastery of the four skills in general and the items in Table-3,4,5 & 6 mentioned under the major skills to be specific. The Focus group discussion also revealed students' incompetence regarding English due to several reasons: firstly, they spend very less or no time in learning skills as they are more focused and motivated in learning engineering subjects rather studying English; secondly, they were asked how much time they spent in learning English in a week and the findings shows they spend less time in leaning EFL courses in comparison to other engineering courses; thirdly, they were asked about the language learning materials and also asked whether they feel motivated to study the materials and the findings reveal their lack of motivation; and finally, they were asked how much the offered language course fill in their language need, and the findings show mixed responses and if we summarize their opinions we can say that it's not fulfilling the language needs and this claim is also supported by the data that were collected from 99 students. Moreover, this finding is also supported by the study of Sultana et al. (2019) which also reported that the present EAP syllabus was not adequate enough to meet the language needs of the engineering students. In addition, in this research we tried to incorporate instructors'

responses to bring a clear picture of existing situation of language teaching and learning (see, Table-11, 12, 13, 14) at the tertiary level of education in Bangladesh.

The second research question is "What gaps do exist between target needs and present level of competence of the current engineering students at the tertiary level of education in Bangladesh based on their linguistic competence?" The study revealed that target needs are not adequately addressed by the syllabus. The interview of five academics revealed that the students were far behind to attain communicative competence (see, Table-11, 12, 13, 14). The 'gap' is not recognizing their language needs as syllabi don't reflect learners' language need and this finding is supported by Gözüyeşil (2014) which reported that the present curriculum of English for the Engineering students needed to update according to the needs of the students and recommendations of the teachers.

6. CONCLUSION AND RECOMMENDATIONS

Needs analysis in language teaching and learning is important for manifold reasons. Particularly, it helps to discover what language skills are necessary to carry out a specific role, decide whether an existing course satisfactorily addresses the requirements of potential students, diagnose what students able to do as well as what they need to be able to do and gather information of particular problems learners are experiencing. Therefore, conducting needs analysis is basic for designing a sound educational program. The present study is designed to determine engineering students' English language needs at the tertiary level of education in Bangladesh. This study explores that the students are not sufficiently skilled to fulfill the target language needs since the present course design does not adequately address the language needs of the students from engineering disciplines. Moreover, a gap exists between present situation and target needs of learners. This paper tries to reveal the gap between learners' present level of competence and target needs.

Based on the findings, some recommendations might be made in order to minimize the gap between present and target needs of engineering students regarding English language. Firstly, the present English language syllabus of engineering disciplines at the tertiary level of education in Bangladesh needs to update and modify according to learners' needs. Additionally, the recommendations of the English language teachers for respective engineering disciplines should be included while designing the syllabus. Moreover, both functional aspects and notional aspects of language need to be incorporated while designing the English language syllabus for the engineering students.

Secondly, the present duration of the English language course (which is 4 to 6 months depending on the universities) for the students of engineering disciplines is not enough to meet the demands of the English language needs. Moreover, the number of English classes offered to the engineering students in one semester is inadequate to fulfill the needs of the students. Therefore, both number and duration of the English language courses for the engineering students need to increase.

Thirdly, the findings of this study show that among the four language skills (listening, speaking, reading and writing) engineering students face most difficulty in speaking. Particularly, students face most difficulty in giving oral presentation. Besides, understanding lengthy descriptions and comprehending the details of a text through careful reading are the most difficult areas regarding listening, reading and writing skills of the engineering students. Therefore, more focus should be given on the development of the presentation skills. Nonetheless, interactive class discussion, giving more importance to skimming, scanning, predicting, inferring and practicing more writing tasks within time limit during the class can be a good practice to develop listening, reading and writing skills of the engineering students.

Fourthly, modern and interactive classroom teaching techniques could be incorporated to eliminate the difficulties engineering students face regarding the listening, speaking, reading and writing. For example, information gap, role paly, simulations, jigsaw activities, peer

conversation, group debate, word mapping, quick writing, etc. could be used to make the learning more effective and interactive. Moreover, English language teachers should explore and use the classroom techniques which would be suitable for the development of English language skills of the engineering students.

Fifthly, needs analysis is a systematic and continuous process. Needs analysis may be conducted before, amid and after the language program (Richards, 2001). Most of the cases, we find that needs analysis is not carried out during the course and at the end of the course. However, all the three phases (before, amid and after) of needs analysis should be given equal importance to fill in the gap of the learners' present and target needs.

Last but not the least, incorporating challenging language learning activities, motivating students, creating learner-centered classroom, upgrading classroom facilities and resources for practice could be helpful to fulfill the English language needs of the engineering students.

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