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**Language in India** www.languageinindia.com **ISSN 1930-2940 Vol. 18:8 August 2018**
**India's Higher Education Authority UGC Approved List of Journals Serial Number 49042**
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# A Need-based Study of Register in English of Engineering Colleges in India

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**Abstract**

This paper deals with the importance of register in English of engineering students. The development of Science and Technology results the mushroom growth of English schools and institutions outsides the official educational system to uplift the students according to their proficiency level. Studies show that, the graph of engineering students with good proficiency level of English is very low. At which rate English is spreading itself as a medium of instruction in engineering field worldwide; students find it very difficult to cope up with the emerging trends. Involvement of register is a very crucial thing in development of proficiency of English of engineering students because engineering sessions are full of technical jargons. Until students are not fully aware with the jargons related with their field whatever modification institutions do with the language of medium of instruction they will never achieve the hundred percent result and they will not stand in the worldwide market of engineers to compete with the recent situations. This paper gives emphasis on the role of registers that how registers are playing crucial role for engineering students who are involved in the task of increasing their proficiency in English. A need-based study has done to analyse the role of register in English of engineering colleges of India. Some jargons from different branch of engineering have also been collected.

**Keywords**: Engineering students, English language, technical Jargons, Need Analysis

## 1. Introduction

In every country engineering is one of the favorable fields by students. India is one of the largest producers of engineers in the world. Now a day's competition is there in every field but engineering is in top five fields in which there is unemployment with the increasing rate of competition. Studies show that only 7-8% engineering graduates are employable in India. According to the news article in India Today (July 13, 2016) titled "*only 7 percent engineering graduates employable: what's wrong with India's engineers*?" mentioned the survey done by Aspiring mind 'New Delhi-based employment solutions company' the survey was based on 150,000 engineering students who graduated in 2013 and reveals that according to the HRD ministry, India has 6,214 engineering & technology institutions which are enrolling 2.3 million students.

Around 1.5 million engineers are released into the job market every year. But the dismal state of higher education in India ensures that they simply do not have adequate skills to be employed (Chakrabarty, 2016). And if we see the whole figure of students, that how many students get enrolled in a particular year then we find the huge gap between the students enrolled

in every year in engineering courses and student having degree of engineering get employed. Lack of communication skill is one of the reasons behind it.

Like any other field, in engineering also English plays very important role, paper named 'communication skill' in first and second semester of engineering courses is a big proof of it. Although there are several students in the batches who are good in English but still they have to read the paper named 'communication skill' because it is not simple English, it is the door through which an engineer will step into the world of multinational companies. Course designers say that one couldn't achieve a supervisor position unless she/he is not good enough in English to communicate with the staff under his supervision. Pendergrass et al. (2001) pointed out that English is an essential tool in engineering education, and therefore "integration English into engineering, Science and Math courses is an effective way to improve the performance of engineering students in oral and written communication".

After completing the course if someone is interesting to join the multinational company s/he has to face the interview where s/he will accept the need of this paper. In the Indian context, an engineers' success in the on-campus recruitment is mainly based on their demonstration of communication skills. According to the National Association of Software and Services company (NASSCOM) former president Kiran Karnik, only 25 percent of technical graduates are suitable for employment in the outsourcing industry because of their lack of abilities to speak or write well in English (Rayan, 2008).

All the engineers know the importance of English in their field but beside these "Register" play a very crucial role in this type of paper. Register is a variety of language used for a particular purpose or in a particular setting and may not be understood unless you haven't much idea of that field. Basically its vocabulary part makes it different from other language. An engineer with good communication skill and have much knowledge of technical jargons related with their field is always the preferences of multinational companies as compare to the one with less knowledge of jargon related with their field. The main objective of these courses is to enable the students to speak English correctly with confidence and intends to help them to overcome their inhibitions and self-consciousness while speaking in English.

## 2. Relation between Engineers, Needs, ESP and Register

In this time of globalization where every field is reserving its place in global market, engineering is also settling down itself as the most competitive field. To grab the pace of this field engineers should also boost their speed to cope up with the globalization. But if we saw the present setting we find the downfall in this regard. Globalization require everything in a high-tech manner and here we find the weak point, engineers who are deserving for MNC's are fails to qualify the interview either s/he has good command in their field here comes the thing that what is the reason behind their failure. That's where the question rises that the syllabus of their engineering course should be learners' centered and that's why "Needs analysis came in to existence to fill the gap between learners and their needs; ESP is essential course for the engineers for meeting the requirements of their needs.

ESP (English for special purpose) courses taught to engineers are designed by experienced course designers, they know the needs of the learners and according to the needs of the learners they design the syllabus taking things in to mind that the syllabus will be the learners' centered and it should fulfill all the goals of the study. English for special purpose defined 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 group of learners" (Richard JC, 2010) is an efficacious enterprise. Practically speaking, ESP deals with preparing the learners to be able to use English in academic (students of different fields), professional (people of different profession such as doctors, engineers and nurses). As it is about specific students, therefore, it must be tailored to the needs of these students (Mohammadi,V. 2013).

NA is defined as a means of establishing the "what & how of a course" (Dudley-Evans, 1998), this way the syllabus is likely to be motivating for learners. As students in ESP classes often have restricted time to learn English, it is responsible to teach them just the pre- specified segments of English based on their needs.

Although ESP courses are helpful to cover the needs of engineers but still one thing is remaining which is creating problem in the path of success, although it is a very little thing, but it is creating problem and students facing it, this is 'register'. In Linguistics; a register is a variety of a language used for a particular purpose or in a particular social setting. Halliday (1976) defined register as "the linguistic features which are typically associated with a configuration of situational features with particular values of the field, mode & tenor". The term 'register' was first used by the linguist Thomas Bertram Reid in 1956, and brought in to general currency in the 1960s by a group of linguists who wanted to distinguish among variations in language according to the user (defined by variables such as social background, geography, sex, age) and variation according to use 'in the sense that each speaker has a range of varieties and choices between them at different times" (Halliday et al., 1964).


*Fig.1: relation between Engineers, Needs, ESP and Register*

The idea of whole paper is based on the theme of the figure mentioned above. In this figure we can see that there is a broken bridge which shows 'the gap between an engineer and his/her needs' and ESP course build a temporary bridge to connect both and engineers got the communication skill but image after the "skill" shows that they are still struggling because some of their needs are remain and here comes the point of "Register/jargons".

ESP courses mainly emphasizes on the communication skills of engineers but course designers forget that to look more professional it is necessary to represent as you are i.e. the field you belongs and we know that language represent the identity of the speaker so if you are an engineer so it should be represented by your way of speaking and it is only possible when your language consists the words belongs to your field. Here comes the concept of register and from the figure.1. It is clear that it is filling a big hole in the path of engineers towards their success. This is the main objective of the paper to define the role of register in ESP in engineering field and to proof this data has collected, in this regard to know the opinion that is this point is really valid or not? And the study came up with the positive responses.

## 3. Data Collection, Analysis and Findings

In this study the research method of data collection employed using quantitative approach and the research findings are discussed with the descriptive data collected through questionnaire. The questionnaire data were gathered from 38 participants belongs to different branch and engineering colleges of India.

### a. Data Collection

**Methodology**

The methodology for this data collection was a questionnaire based survey among students of engineering and engineers working in various companies.

**Sample of data**

For collecting the sample of data stratified random sampling used. Total 38 participants were selected from the different branch and colleges/companies of India. These colleges/companies are situated in northern and southern parts of the country.

It included

Universities- Aligarh Muslim University-UP, Anna University-Bangaluru.

Colleges- LNCT-Jabalpur, HKBK college of Engineering-Bangaluru, Pallavan college of Engineering-Bangaluru, Guru nanak dev engineering college-Ludhiana.

Companies- DeltaX (Bangaluru), UPES (Dehradun), Access Automation Pvt Ltd (Bangaluru), BEL (Meerut Cantt) and Capgemini.

And students/engineers are from different branch of engineering: civil, mechanical, electronics and communication, Architecture, Chemical, Computer Science, Electrical and Electronics, Information technology.

**Participants**

Questionnaires were distributed among B.Tech, M.Tech, teaching faculty and engineers working in different companies. All the participants were between 22 to 35 and only one female participant was there.

**Description of Questionnaire**

Questionnaires were divided in to three parts. First part of the questionnaire considered personal background of the participants including their name, occupation, course, branch, organization/company/institute, first language, address, email regarding information. Second part of the questionnaire consist seven questions which were common to all. In which question 1-4 are related with the importance and necessity of the paper communication skill in the first and second semester of the course. Rest of the question 5-7 is related with how much of knowledge of jargons students have. Third part of the questionnaire consists six questions in which question 8-12 were related with the exposure of students with jargons in interview and these questions were only for those who have completed B.Tech. and appeared for any interview for the job and question no. 13 was for all the participants, which is very important in this papers' perspective.

**b. Analysis of the Data**

After collecting the data from 38 participants study came up with interesting figures which has shown below with the help of pie chart. Pie chart no. 1 showing the result which is based on the answers of question no. 10 (see appendix) given by participants.

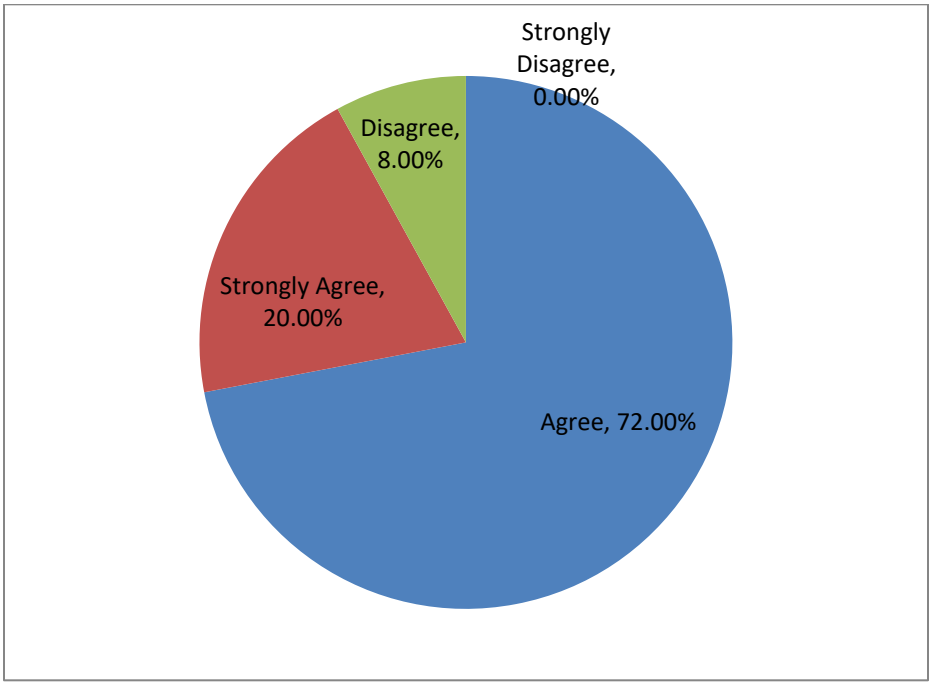


*Chart 1: Participant's Views in Percentage.*
*Total Number of Participants= 25*

Agree- 18 Participants= 72%  Strongly Agree-5 Participants= 20%
Disagree-2 Participants= 8%  Strongly Disagree- None= 0%

Pie chart no. 2 showing the results after asking the question no. 13 (see appendix) from 38 participants.
Total Participants-38
Agree- 20 Participants= 52.631**%** Disagree- 6 Participants= 15.789%
Strongly agree- 12 Participants= 31.578% strongly disagree- None= 0%

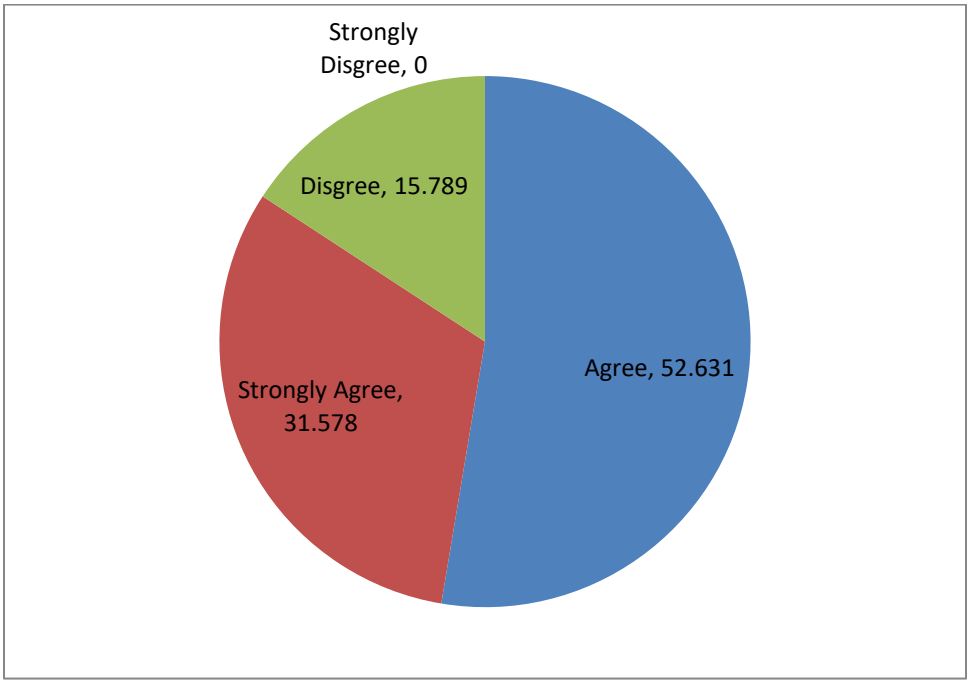


*Chart 2: Percentage Participants with their different views.*

**c. Observation and Findings**

Although ESP course is very helpful for the students of engineering, after analyzing study came up with the view that at the initial stage they are not aware of the circumstances that what's going on outsides their campus, they are unable to understand the importance of this course and this results that this is a boring paper for them, Instead of first and second semester if it occur after third semester then at the semester where students are preparing for the interview importance of same paper will change.

The second thing which study came up with is that in the questionnaire, question no. 10 gives very surprising results (see the pie chart no. 1) that, in 25 participants, 18 were agree and 5 were strongly agree and only 2 persons were disagree. It shows the interests of the participant that inclusion of technical terms will make their English more professional.

The third and the main thing which is observed in the study is that (see pie chart no. 2), among 38 participants, 20 were agree and 12 participants were strongly agree that there is a need to include the technical terms or register in the syllabus of their communicational skill course.

The last thing which is found in the observation is, in questionnaire, question no. 7 (see appendix) is about jargon related with their field and the result is very interesting, study came up with the different jargons related with the different branch of engineering. Some of them are as follows:

| Branch | Word | Meaning |
|---|---|---|
| Civil | PILE | It refers to a greater depth, it is a type of foundation generally constructed for multi-storied buildings, bridges etc. |
| | SIEVE | It is a process to remove unwanted contents from soil before its testing. |
| Electronics & communication | BOTTLE ROCKET | When an application launches, displays something & then leaves a trail of error messages before crashing. |
| | RS-232 | It is a serial interface of asynchronous data communication over a distance up to hundred feet. |
| Architecture | FACADE | Front of a building |
| | GANG WAY | Aisle in the auditorium |
| Petroleum | MONKEY BOARD | Location in Rig |
| Chemical | CSTR | A constant stirred tank reactor |

## 4. Conclusion

In conclusion, ESP provides useful and Practical information to the engineering students to upgrade their skills but if there will be inclusion of the 'technical jargons' or some concentration on register than it will never be a boring paper for the students and it will fulfill all the competency requirements of the learners as well as job seekers.

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## References


Chakrabarty, R.2016. 'Only 7 percent engineering graduates employable: what's wrong with India's engineers? India Today, 13 July 2016.https://www.indiatoday.in/education-today/featurephilia/story/engineering-employment-problems-329022-2016-07-13[18feb. 2018].

Dudley-Evans, T. &. St John, M. J. (1998). *Developments in English for specific purposes: A multi-disciplinary approach.* Cambridge, England: Cambridge University Press.

Halliday, M. A. K. and R. Hasan (1976), *Cohesion in English*, London: Longman.

Halliday, M. A. K.(1964), "Comparison and translation", in M. A. K.Halliday, M. Mclntosh and P. Strevens, The linguistic sciences and language teaching, London:Longman. Retrived to July 23, 2018 from http://www.en.wikipedia.org/


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Mohammadi,V., Mousavi,N. (2013). Analyzing needs analysis in ESP: a (re) modeling, International Research Journal of Applied and Basic Sciences, ISSN 2251-838X, Vol, 4(5): 1014-1020, Science Explorer Publicaations.

Pendergrass, N., Kowalczyk,R., Dowd., & Laoulache, R. (2001). Improving first-year engineering education. *Journal of Engineering Education*, 90 (1), 33-41.

Rayan,A.P, Shetty, R.T (2008). Developing engineering students' communication skills by reducing their communication apprehension. *English for specific purposes world, 7*(4 (20)).

Richard JC, Schmidt. R. (2010). *Longman Dictionary of Language Teaching and Applied Linguistics* (4th Edition). London: Longman.

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## APPENDIX
## Questionnaire

Purpose of this survey is to collect the information about technical jargons used in engineering field from the graduate students and those who got the job or struggling. Kindly take the time to fill in the following questionnaire.

**Personal Background**
**Name:**
**Occupation:**
**Course:**
**Branch:**
**Organization/company/institute:**
**First Language:**
**Address:**
**Email:**

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1. Is/was the course "English/ communication skill" is/was helpful for you?*(Yes/No)*
2. Are you satisfied with the content of this course?*(Yes/No)*
3. Do you think this course is necessary for the engineering students? *(Agree/disagree/strongly agree/strongly disagree*)
4. Do you find this English is different from the main English?*(Yes/No)*
5. Do you find the English of your engineering main course is full of words that are nowhere present in any other field?*(Yes/No)*

6. Do you face any difficulty regarding meaning of these words when talking to other colleagues/teachers/interviewer when you come across with the new one?*(Yes/No)*

7. Do you ever come across with the jargon (technical words only related with your field) of your field? (**name any with its meaning*)

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**Question from 8-13 are only for those who have completed the B.Tech. and have faced the interview for the job/ applying for the job.*

8. Do you find the course of English/communicational skill is helpful for the interview you have faced for the job? (*Agree/disagree/strongly agree/strongly disagree)*
9. Do you find the vacancy post in newspapers contain slight tricky words from your field? (*Yes/No)*
10. Do you find the knowledge of these technical words will make your English more professional? (*Agree/disagree/strongly agree/strongly disagree).*
11. Do you ever come across with any technical term related with your field which you never heard before appearing in the interview? *(Yes/No).*
12. After facing the interview do you feel that knowledge of that term is necessary for you? *(Yes/No)*
13. Do you feel the need to add these technical terms to the syllabus of your English for special purpose course? (*Agree/disagree/strongly agree/strongly disagree)*

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*Thank you for your patience*
*I will treat the information you have given to me with the strict confidence.*

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