

## TEACHERS PERSPECTIVE ON COMMUNICATION SKILLS AMONG ENGINEERING STUDENTS

**Mrs. Shubhangi R. Khambayat**

Lecturer, (Education), Jagran Lakecity University (JLU), Bhopal

### Abstract

Communication skills among graduating students are seen as a key performance indicator to measure the success of any individual in the world of work in many countries in the region. Taking into account graduating students competing for job positions with a global workforce, it would be their Communication skills proficiency that would be tested to the maximum, as English is the most widely spoken languages in the world at present. An effective communication, act as a bridge to fulfil the gap between world of study and world of work and thereby make passouts readily acceptable to the industry. The institution offering educational programs will have to integrate Communication skills as an integrated component to prepare young students for future employment (ABET, 2000).

An attempt is made in this paper to investigate the level of communication skills among students. Teachers' views were sought on Communication skills via a self-administered questionnaire. It assessed four core elements in Communication skills, including listening, speaking, reading and writing skills. The paper shares the outcomes of this survey.

**Keywords:** Communication Skills, Education, Classroom Practices



Scholarly Research Journal's is licensed Based on a work at [www.srjis.com](http://www.srjis.com)

### 1.0 INTRODUCTION

As per review of literature and various reports, for the career success of Newly Graduated Engineers, Technical acumen alone is insufficient. "Communication Skills" plays an increasingly important role in preparing the engineering students for employment and career advancement. Fresh engineers/passouts needs Professional Communication Skills in order to be fully effective in Career and are essential for job success.

Teachers who had experience in handling the curriculum of communication skills and involved in day to day teaching students were asked to give their opinion regarding the scope of developing communication skills in the existing curriculum. They were requested to provide feedback regarding the plan of action in engineering courses. In the proceeding pages teacher's views on the Communication Skills in students are given.

## 2.0 LITERATURE REVIEW

In conducting the survey, the literature was reviewed to acquaint with the work already done in the field regarding the significance of communication skills, as well, as how it affects the engineering graduates, and how it reflects the employment prospects of the graduates. The review of literature helped to identify a growing need to undertake study, work on the present status of communication skills among fresh engineering graduates for enhancing the employment prospects of graduates in the engineering education. The review of literature mainly encompasses research work & studies related to topic within India and Abroad.

As per review, communication mainly involves the exchange of ideas, opinions and information with a specific objective. Broadly, it is defined as a process of exchanging information, from the person giving the information through verbal and non-verbal methods, to the person receiving the information. The most common technique of communication is verbal, using a specific language where it is a two-way process, with feedback on the message received. Apart from oral communication, information can also be exchanged using symbols or signage.

As per Seiler & Beall (2005), Communication is defined as sharing and giving meaning occurring at the same time through symbolic interactions. Sulaiman Masri (1997), said Communication start when a message or information is transferred from the sender (the speaker, writer) to the receiver (listener, the reader) through an instrument or channel, and followed by the receiver giving feedback through coding and interpreting the information.

Some researchers defined communication as verbal communication, written communication, non-verbal communication, listening and giving feedback (Najmuddin, 2010). Likewise, Rodiah Idris (2010) proposes that communication as a non-verbal skill, giving feedback, presenting ideas verbally and in written form, doing presentations and negotiating to achieve a goal and getting support/agreement.

As per these definitions, elements of communication include person-giving information, the information and feedback by the receiver and repetition of these processes creates knowledge development. The process of communication generally involves four elements, which are the speaker, the receiver, communication channel and feedback. Communication is more effective if the receiver (of the information) can understand and practice the core skills. Further, communication will be more meaningful if the

physical, and social factors are taken into account during the communication process. A positive communication environment provides good opportunities for students to learn how to communicate, and thus, have better communication skills.

In the Indian context, engineering students' success in the on-campus recruitment is mainly based on their demonstration of communication skills. According to Karnik, Former President, NASSCOM (National Association of Software and Services Company), 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. (Karnik, 2007 as cited in P. Rayan 2008:1). Most students are not industry ready because they lack communication skills. (Infosys, 2008).

Communication skills are categorised in different ways. Broadly, it involves four core elements such listening, speaking, reading and written skills. As a result, engineering students need to be given enough opportunities to communicate in order to be better prepared for the job market after their completion of the engineering studies.

The National Board of Accreditation (NBA) mentioned the need of having communication skills as one of important attributes required among graduating engineer. The fresh engineering graduates will have to master communication skills in different cultural contexts. From review of literature, it was observed that in India very few research studies have been conducted on the Communication skills. An attempt was made to study the present status of communication skills among engineers. The aim was to understand better the level of Communication skills (listening, speaking, reading and written skills) among fresh engineering graduates from industry personnel/employers perspective for the colleges affiliated to the Rajiv Gandhi Technological University, Bhopal, M.P. to improve the communication skills among students.

### **3.0 METHODOLOGY**

Based on the available literature on communication skills and discussions with the field experts, questionnaire was developed. The constructs of communication skills (listening, speaking, reading and written skills) in this paper was determined based on the definitions of communication discussed earlier. The communication skill were measured based on a few sub-construct that was measured by a number of items. Teachers were asked to respond on a five-point Likert Scale. The finalised questionnaire was then sent to three experts in the field of communication for validation. The validated questionnaire was

then pilot tested among potential respondent, which were involved in teaching the course to the final year students.

Reliability is another important criterion for quality. In the present case, the reliability of the questionnaire was calculated using Reliability coefficient of the test by Split Half Method. The reliability coefficient was estimated by splitting the whole Questionnaire into two parts of even & odd items. The questionnaire is divided into two halves selected to be as parallel as possible. The split-half reliability coefficient of the domain is the correlation between the total scores of the two half-tests corrected by the Spearman-Brown formula for the length of the full domain (Crocker & Algina, 1986).

The Table 1 presents Split-half reliability coefficient for the scores. The correlation was found for the half test using Pearson’s statistical formula in MS Excel.

**Table 1: Reliability Coefficient**

No.	Method used for calculating the reliability coefficient	Research Questionnaire & Respondent	Reliability Coefficient
1.	The Split-Half Method and corrected with Spearman-Brown Prophecy formula. $R(\text{whole test}) = \frac{2 * r(\text{Half Test})}{1 + r(\text{Half Test})}$ Where “r” is Pearson’s Product Moment Coefficient of Correlation $R = \frac{\sum xy}{\sqrt{(\sum x^2 \sum y^2)}}$	Questionnaire- Faculty Members	0.9963

The reliability coefficients found by the Split Half method for all the research questionnaires show good values of reliability of the constructed scale. This shows good internal reliability. The questionnaire was distributed to teachers to seek their views on Communication skills among fresh engineering graduates, who were randomly selected. Data from the questionnaire was analysed using SPSS (Version 20). The analysis of data pertaining to the present status of communication skills among fresh engineering graduates of different background is given in the next section.

#### **4.0 TEACHERS’ PERSPECTIVE ON COMMUNICATION SKILLS AMONG ENGINEERING STUDENTS**

Teacher’s views were collected through a questionnaire. The data were collected through the questionnaire by sending to present teachers involved in teaching communication skills to assess the Communication Skills needs of students from the teachers’ point of view. There

are mainly two parts and four sections in the teachers' questionnaire. It was with the assumption that Faculty of Communication Skills is good at evaluating the curriculum and assessing learner needs, and working teachers were contacted for the purpose.

The subject teachers of various engineering institutions under RGPV, Bhopal were asked to give their views on Student's Communication Skills for immediate and future needs. The teachers were asked to give their opinion regarding the Communication skills competence required among the students and which they have difficulty with. A list of major skills and sub-skills was given in the questionnaire.

The questionnaire consists of two parts and four sections:

- I. General information regarding the institution
- II. Teachers' view on Importance of Student's Communication Skills
- III. Scope of Developing Communication Skills through the curriculum
- IV. Communication Skills Teachers views on Improving 'Communication Skills Course.

#### **4.1 Demographic Profile of Respondents**

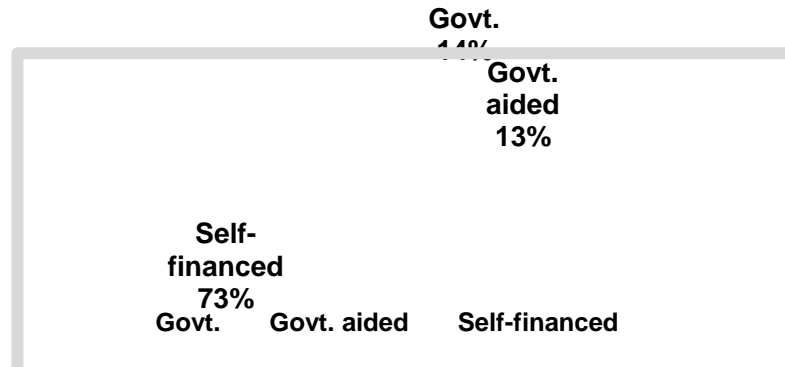
A total of 24 teachers responded in this study. The respondents detail is shown in the Chart 1 as given below. The data given in the above table, is easily justifying its representativeness in the defined situation.

It is essential to study the demographic profile of final respondents from which data is collected, used to arrive at valid and reliable conclusions. The demographic details included type of institution the teachers belonged to; whether the Government, Government aided and Self-Financed. It included the location of institution, urban, semi-urban and rural. The Profile characteristics studied are:

- a) Type of institution- Government, Government aided and Self-Financed
- b) Location of institution- urban, semi-urban and rural
- c) Qualification of teachers
- d) Nature of teaching assignment

In the following pages details of various sample characteristics are given.

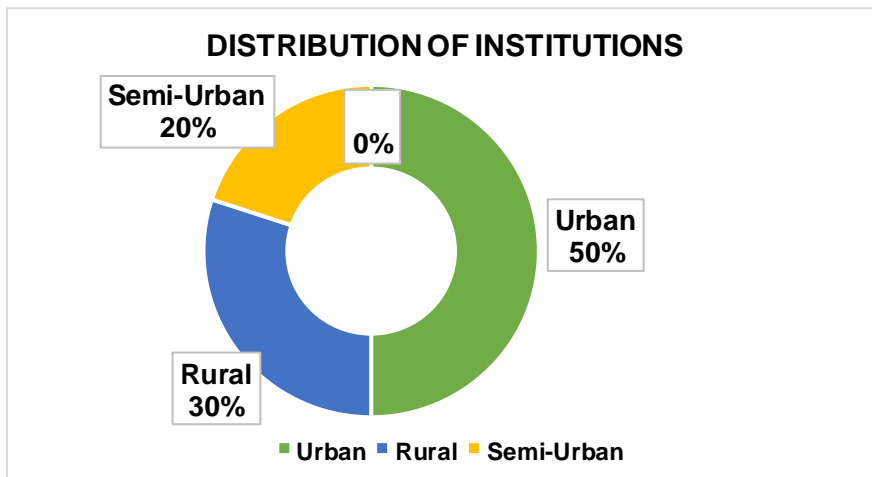
**a) Type of Institution**



**Chart 1: Type wise Distribution of Institutions**

Looking into the characteristics of the population was self-financing institutions are large, data selected can be said to be the representative sample of the population. The same is true with Govt. and Govt.-aided also.

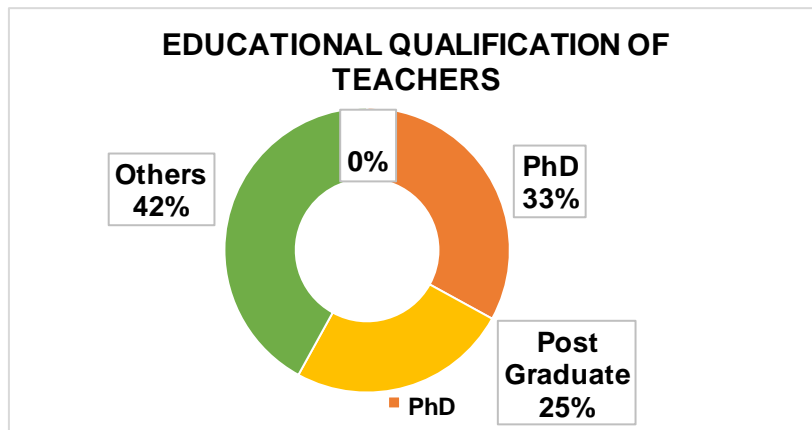
**b) Location of Institution**



**Chart 2: Location wise Distribution of Institutions**

Appropriate care was taken that sample should include, all the three strata of the population. The above shown graph also justifies the same.

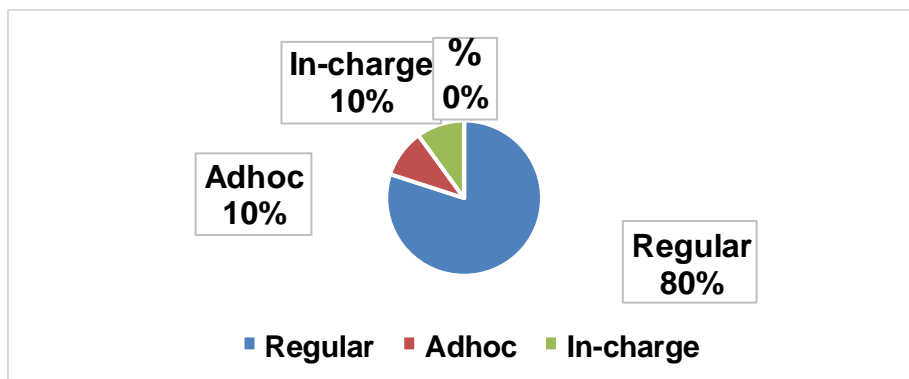
**c) Qualification of Teachers**



**Chart 3: Qualification wise Distribution of Faculty Teachers**

From the survey data presented in the above charts, it is observed that the majority of the faculty members (80%) possess the desired necessary qualification for teaching courses on Communication Skills in engineering institutions. Eight Communication Skills teachers/practitioners had a Ph.D. in English; nineteen of them had MA and M.Phil. in the English Literature and one of them had an MBA degree. All the others are from literature background. The teacher has an English literature as an area of specialisation in their M.A. and M.Phil.

**d) Nature of Teaching Assignment**



**Chart 4: Nature of Assignment wise Distribution of Faculty Teachers**

In most of the self-financing engineering colleges in and around Bhopal, the faculty is on all the modes viz. Regular, Adhoc and In-charge. The sample consists of all the three types as shown in the above chart.

## 5.0 TEACHERS' VIEWS ON SCOPE OF DEVELOPING COMMUNICATION SKILLS IN THE EXISTING CURRICULUM

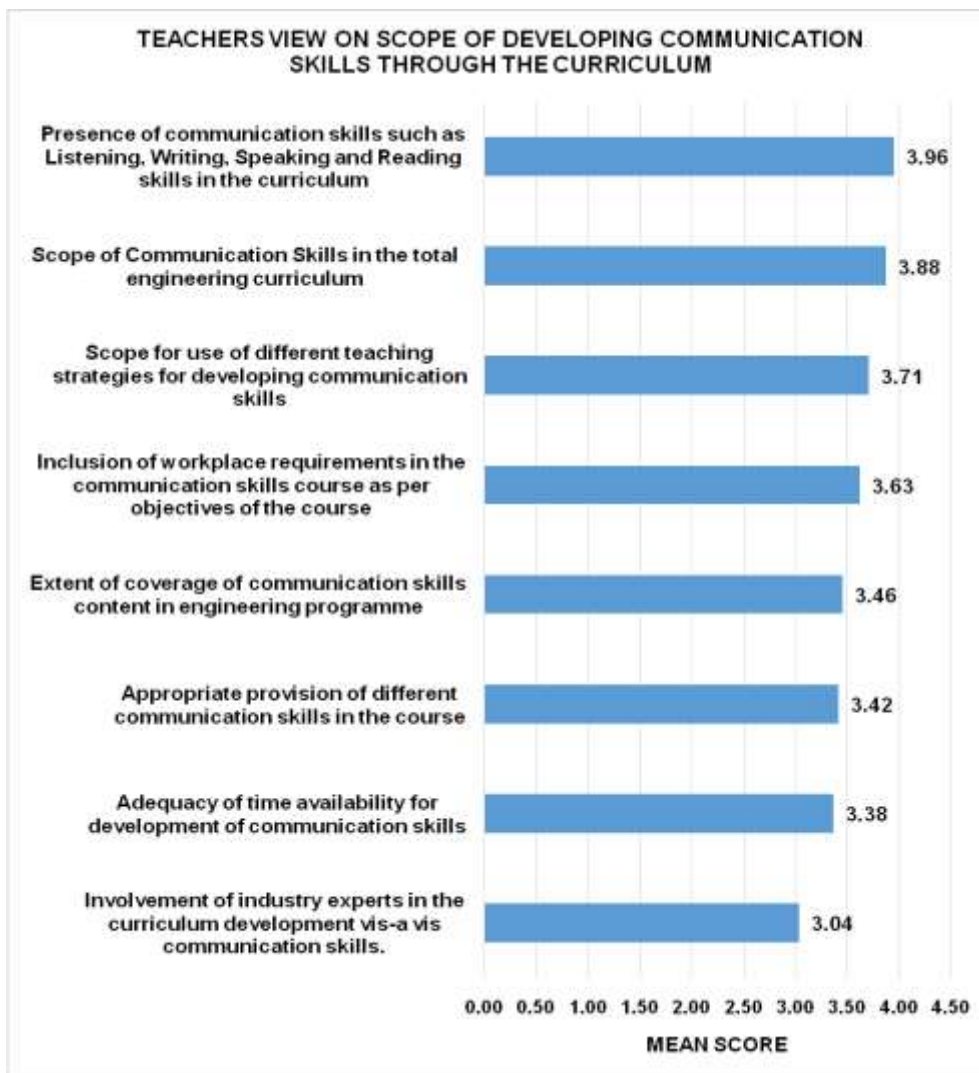
Based on the experience in teaching the course on Communication Skills and growing expectations of the industry regarding Communication Skills, views and opinions were collected from practicing teachers of Communication Skills for scope of developing Communication skills through the present curriculum. The data were organised in rank order as shown in Table 2 given below.

**Table 2: Scope of Developing Communication Skills through the Existing Curriculum**

No.	Title	Mean Score	Rank Order
<b>Curriculum Document</b>			
i.	Scope of Communication Skills in the total engineering curriculum	3.88	2
ii.	Extent of coverage of communication skills content in engineering programme	3.46	5
iii.	Inclusion of workplace requirements in the communication skills course as per objectives of the course	3.63	4
iv.	Presence of communication skills such as Listening, Writing, Speaking and Reading skills in the curriculum	3.96	1
v.	Provision of involvement of industry experts in the curriculum development vis-a-vis communication skills.	3.04	8
vi.	Appropriate provision of different communication skills in the course	3.42	6
vii.	Adequacy of time availability for development of communication skills	3.38	7
viii.	Scope for use of different teaching strategies for developing communication skills	3.71	3

The Chart 5 given below, provide each subcategory ranked by mean within its respective category heading. This helped to distinguish the comparative importance of each subcategory item within the communication skill category.





**Chart 5: Teachers View about Scope of Developing Communication Skills through the Curriculum**

From the above data, it is observed that the existing curriculum of communication skills has a satisfactory scope of developing Communication Skills. Based on the rank order, the data further reveal the following.

- i.** Presence of Communication Skills such as Listening, Writing, Speaking and Reading, etc. in the curriculum.
- ii.** Scope of Communication Skills in the total engineering curriculum.
- iii.** Scope for use of different teaching strategies for developing communication skills.

However, the lower side of the rank reveals that there is a need to improve the scope of developing communication skills through curriculum on the following aspects.

- i. Involvement of industry experts in the curriculum development vis-a-vis communication skills,
- ii. Adequacy of time available for development of communication skills, and
- iii. Appropriate provision of different communication skills in the course.

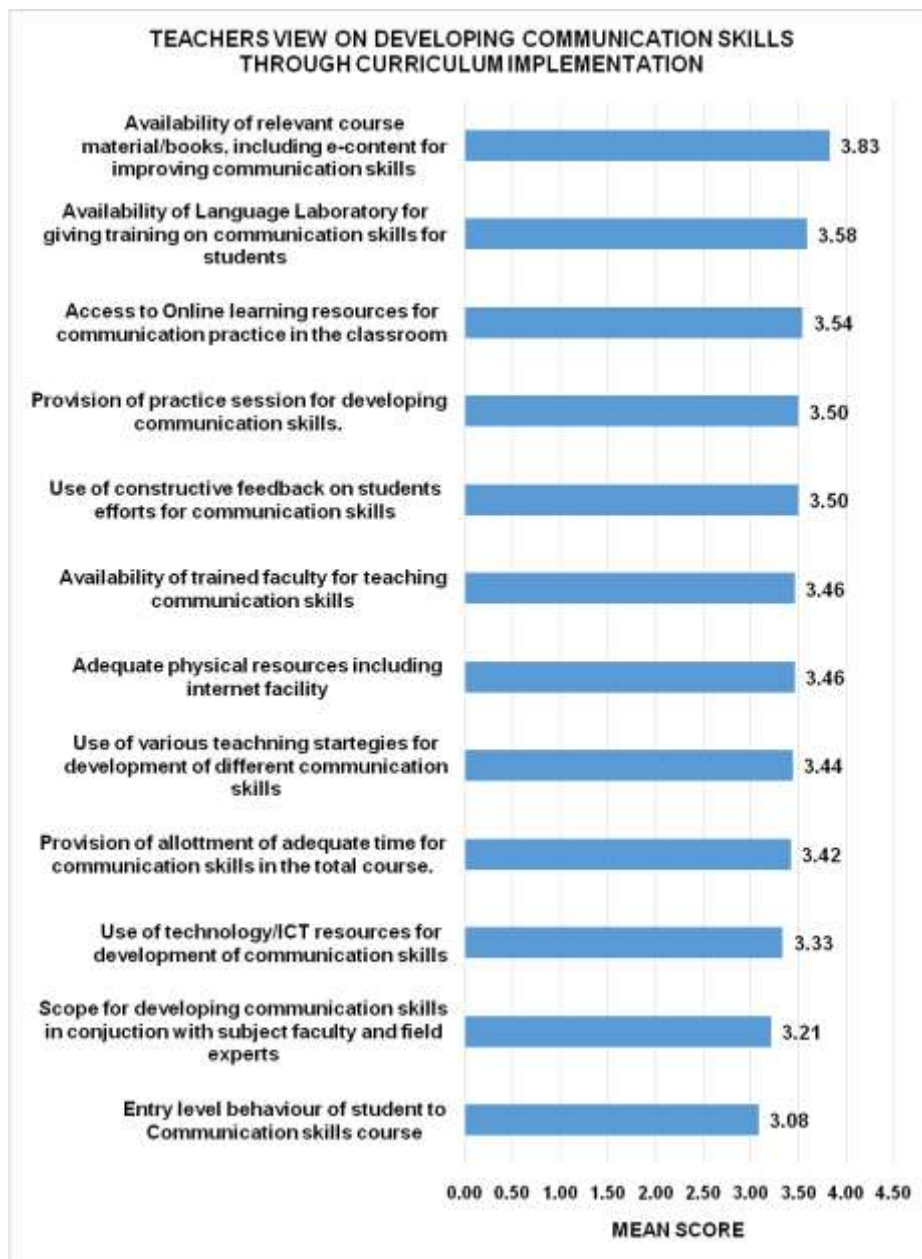
### **6.0 TEACHERS' VIEWS ON THE IMPLEMENTATION OF EXISTING CURRICULUM OF COMMUNICATION SKILLS**

Based on the experience in teaching the course on Communication Skills and growing expectations of the industry regarding Communication Skills, views and opinions were collected from practicing teachers of Communication Skills on the implementation of existing curriculum of Communication Skills through the present curriculum. The data were organised in rank order as shown in Table 3 given below.

**Table 3: Scope of Developing Communication Skills through Implementation**

No.	Title	Mean Score	Rank Order
i.	Entry level behaviour of student to Communication skills course	3.08	10
ii.	Availability of Language Laboratory for giving training on communication skills for students	3.58	2
iii.	Adequate physical resources including internet facility	3.46	5
iv.	Availability of trained faculty for teaching communication skills	3.46	5
v.	Availability of relevant course material/books, including e-content for improving communication skills	3.83	1
vi.	Access to Online learning resources for communication practice in the classroom	3.54	3
vii.	Use of constructive feedback on students efforts for communication skills	3.50	4
viii.	Provision of allotment of adequate time for communication skills in the total course	3.42	7
ix.	Use of various teaching strategies for development of different communication skills	3.44	6
x.	Scope for developing communication skills in conjunction with subject faculty and field experts	3.21	9
xi.	Provision of a practice session for developing communication skills.	3.50	3
xii.	Use of Technology/ICT resources for development of communication skills	3.33	8

The Chart 6 given below, provide each subcategory ranked by mean within its respective category heading. This helped to identify the relative importance of each sub-category item within the communication skill category.



**Chart 6: Teachers View about Scope of Developing Communication Skills through Curriculum Implementation**

From the above data, it is observed that the existing curriculum of communication skills has a satisfactory scope of developing Communication Skills. Based on the rank order, the data further reveal the following.

- i. Availability of relevant course material/books, including e-content for improving communication skills
- ii. Availability of Language Laboratory for giving training on communication skills for students

- iii. Access to Online learning resources for communication practice in the classroom
- iv. Provision of a practice session for developing communication skills.

However, the lower side of the rank reveals that there is a need to improve the scope of developing communication skills through curriculum on the following aspects.

- i. Entry level behaviour of student to Communication skills course
- ii. Scope for developing communication skills in conjunction with subject faculty and field experts
- iii. Use of Technology/ICT resources for development of communication skills

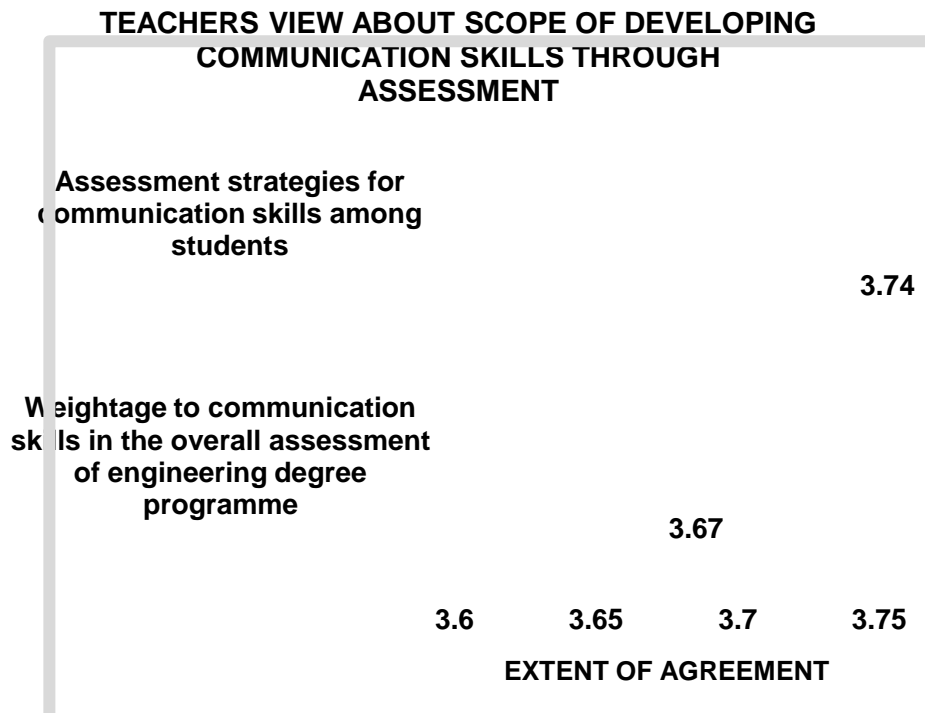
### 7.0 TEACHERS' VIEWS ON THE ASSESSMENT OF COMMUNICATION SKILLS THROUGH THE EXISTING CURRICULUM

Based on the experience in teaching the course on Communication Skills and growing expectations of the industry regarding Communication Skills, views and opinions were collected from practicing teachers of Communication Skills on the assessment of Communication Skills through the present curriculum. The data were organised in rank order as shown in Table 4 given below.

**Table 4: Scope of Developing Communication Skills through Assessment**

No.	Title	Mean Score	Rank Order
<b>Assessment</b>			
i.	Assessment strategies for communication skills among students	3.74	1
ii.	Weightage to communication skills in the overall assessment of engineering degree programme	3.67	2

The Chart 7 given below, provide each subcategory ranked by mean within its respective category heading. This helped to identify the relative importance of each sub-category item within the communication skill category.



**Chart 7: Teachers View about Scope of Developing Communication Skills through Assessment**

From the above data, it is observed that the existing curriculum of communication skills has a satisfactory scope of developing Communication Skills. Based on the rank order, the data further reveal the need for assessment strategies for communication skills among students.

However, the lower side of the rank reveals that there is a need to improve the scope of developing communication skills through curriculum on the following aspects.

- i. Weightage to communication skills in the overall assessment of engineering degree programme.

## 8.0 CONCLUSION

We are aware that good communication skills play a huge part in our daily life. Communication is a mode, which helps every one of us to transfer our messages, thoughts, feelings, thinking, imagination and ideas. Good communication is vital in a working and business environment. There is overwhelming evidence that proficiency in communication skills can make any engineer more versatile, and thus more competitive in today's job market.

The paper discussed teacher's perspective in the context of communication skills among the final year students. Hoping that practicing teachers will consider all of the observations in the paper in light of their teaching styles and personalities and attempt to adopt a few of them in the communication course they teach.

## REFERENCES

- Deepshikha Mehra, Vinita Virgandham (2013). *Communication Skills for Enhanced Employability of Engineers*, ISSN: 2250-138X, Available at <http://www.tgpct.com/E-journal/80%20PAPERS%20PDF/Deepshikha%20Mehra.pdf>
- Ihmeideh, F. M., Ahmad, A., & Al-Dababneh, K. A. (2010). *Attitude toward communication skills among students' teachers' in Jordanian Public Universities*. *Australian Journal of Teacher Education*, 35, 1-11.
- Mansour, B. and Dean, J. (2016). *Employability Skills as Perceived by Employers and University Faculty in the Fields of Human Resource Development (HRD) for Entry Level Graduate Jobs*. *Journal of Human Resource and Sustainability Studies*, 4, 39-49. doi: 10.4236/jhrss.2016.41005.
- Masita Misdi, Mohammad Pauzi Mokhtar, Mohamad Ali & Mohd Yusop Hadi. (2010). *The importance of Communication Skills in Placement of Civil Engineering Students according to the needs of Employers*.
- NASSCOM Survey (2012). Available at <http://trak.in/tags/business/2011/04/11/nasscom-says-only-25-graduates-employable/>
- Seiler, W. J., & Beall, M. L. (2005). *Communication: Making connections* (6<sup>th</sup>. ed). Boston: Allyn & Bacon.
- Sravani (2016). *Communication Skills Importance for Teachers, Students & Employees*, Available at <http://content.wisestep.com/communication-skills-importance-teachers-students-employees/>. May 8, 2016.
- Sulaiman Masri. (1997). *Media and Communication in English*. Malaysia

**ACKNOWLEDGEMENT:** The author would like to express sincere indebtedness to her Ph.D. Guide Dr. Anil Kumar, Professor, NITTTR, Bhopal for providing the valuable guidance and support for undertaking the research work.