



# A Need of an Analytical Study of Technical Writing Skills of Engineering Students

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## Abstract

This article demonstrates that among LSRW listening, speaking, reading, and writing. It is undoubtedly proven that the writing skill is the hardest skill. The key reason is the lack of practice of the learners. Tomkins and Hoskisson (2015) mentioned the five phase formula to enhance writing skills such as preparation of plan, drafting, revising, editing and then publish. As per classroom observation of engineering students it is found that the ability often taken for granted and hardly any emphasis placed on the intricate process of writing. Moreover, it has been observed that many of the students after completing their degree from various engineering institutes they get fail to maintain required proficiency of written and spoken English. They find difficult to use proper rules of grammar and spellings and proper use of vocabulary. The main motive of ELT teachers in engineering institutes should provide the students with necessary language skills to make them succeed at the professional arena. ELT teachers should facilitate students to enhance their communication skills to meet social challenges. Here, Bloomfield (1933), written that writing is just an art to arrange the words in order to get the required meanings.

**Keywords:** Writing skill, engineering students, teaching and learning language ability.

## Introduction

Good writing skills allow you to communicate your message with clarity and ease to a far larger audience than through face-to-face or telephone conversations. Writing skills are a tool of communication to use as a record of sharing the important information, events, and messages in the form of writing script to a mass. Harmer: "Writing is a form of communication to deliver through or to express feeling through written form". It is abilities to use a variety of tools of sub-skills such as word selection, organization, syntax, language, content, fluency, and mechanics, among others. Furthermore, the work of composing is not a one-step procedure. Murcia and Olshtain (2000): "Writing skill is the production of written words that results in a text, and the text must be read and comprehended in order for communication to take place."

Comparatively writing competency is seen to be more complicated and difficult than other language abilities because pupils must learn particular principles and build skills in handwriting, spelling, flow, capitalization, and structuring thoughts into readable compositions (Richards, Richards, & Renandya & Renandya, 2002; Alsamadani, 2018; Adas & Bakir, 2013, Akhiar, Mydin & Kasuma, 2017). This intricacy of handwriting often stifles pupils' attention, affecting their students' understanding in language acquisition. In this context, Zainab, Isarji, and Zaidi (2017) suggested that

students with low writing skills do badly in written examinations and researcher report projects. This is due to the fact that writing skill requires proficiency in productive abilities as well as ongoing practice (Akhtar & Hussain, 2019). Bloomfield (1933), stated "writing is not the language it's a just to documents the words in meaningful order" this contains the writing process of converting abstract sounds into tangible scripts.

The handwriting in English seems useful for both academic and professional objectives. "Effective English writing is highly prized in the academic setting because it enables instructors, students, and investigators to spread their intellectual work to foreign populations." Professional manner, the knowing how to write using English is becoming critical in today's global world since it enables individuals from other cultures to connect via letters, e-mails, financial documents, web sites, and so on."

The teacher's goal in teaching English is to improve four abilities: understanding, speaking, reading, and writing. The capacity to write is included last on this list, but that does not imply that this was the least significant. "Reading makes a whole man; conference makes a ready person; and writing makes an accurate man," Bacon (1851) said (p. 171). In such a situation, mastery of the language may be assured only if the learner can successfully undertake the final tasks:

- Make use of correctly spelled wording.

- Make use of suitable and varied words, expressions, and idioms.
- Make use of a range of sentence structures.
- Create a suitable sentence sequence by employing relevant links.
- Make use of pertinent ideas.

### Objectives of the Study

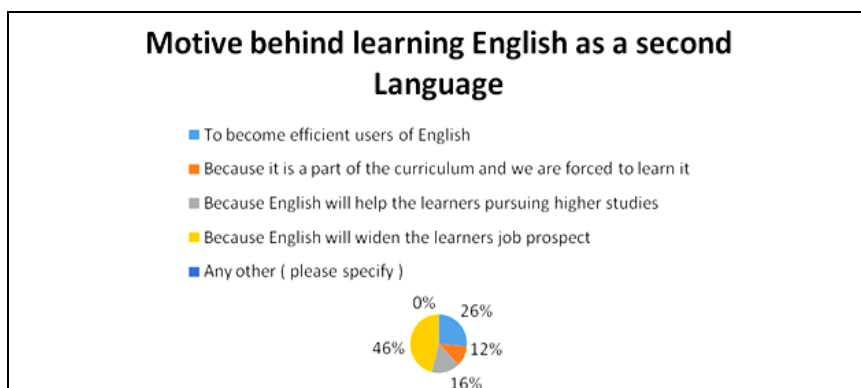
- To detect the weaknesses in the writing abilities of engineering students.
- To identify and collect information from learners using a questionnaire

- To provide suggestions for effective and appropriate ELT writing techniques that will assist students in honing their writing skills and achieving proficiency.

### Methods and Process of Data Collection

#### Q.1: What is objective behind learning English as a second language?

English is a compulsory language in engineering programme and entails the students to find out the motive to learning English as a second language.



**Fig 1:** Objective behind Learning English as a Second Language

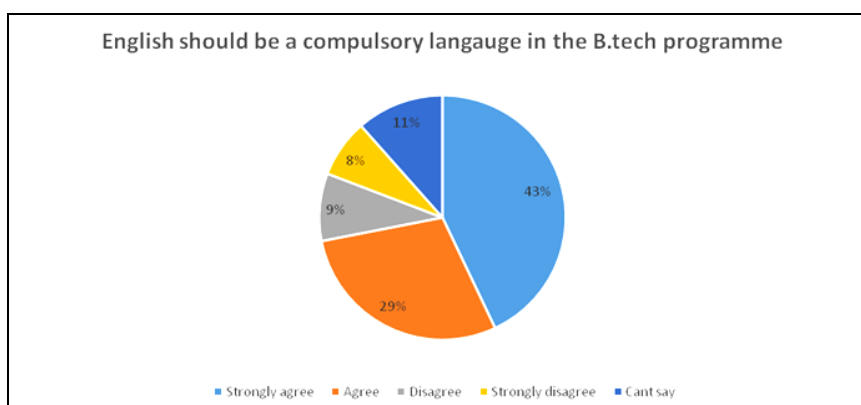
From the above pie chart one can say that most of the students' objective behind learning English as a second language to widen the job prospect which means that they want to acquire English as it will help them in their professional life which will motivate them to get healthy interaction with their seniors or juniors in office.

Twenty six percent of students say that they want to develop the habit of English speaking. The rest of the students answered to learn English as it will help them in pursuing their higher studies and the remaining says that English is a

part of the curriculum and they are forced to learn it which seems they find to have less interest in the subject.

#### Q.2: English should be a compulsory language in the engineering programme

As it is notify that English is being important part of the curriculum in every engineering programme then it seeks to find out whether the students have positive response regarding the language of English being used in their programme or not.



**Fig 2:** English should be a Compulsory Language in the B.Tech Programme

Majority of the students (43%) are strongly agree and (29%) are agree and states that English should be a compulsory language in the engineering programme that will help engineers to face interviews, group Discussion, debates and other activities at college and department level of presentation. Similarly, students develop their professional skills in completing their degree. Some respondents view that English should not be imposed as a compulsory language because those are from vernacular medium do face difficulty to continue the programme and to cope up with the system

where everything is communicated in English only and rest 11% of students are neutral to the question and do not have any response.

#### Q.3. How do you find the English classes on writing skills?

Here the main objective is to find out how the students find their English classes on writing skills do they find it bore or monotonous or interesting as overall it depends upon the environment of teaching in the class.



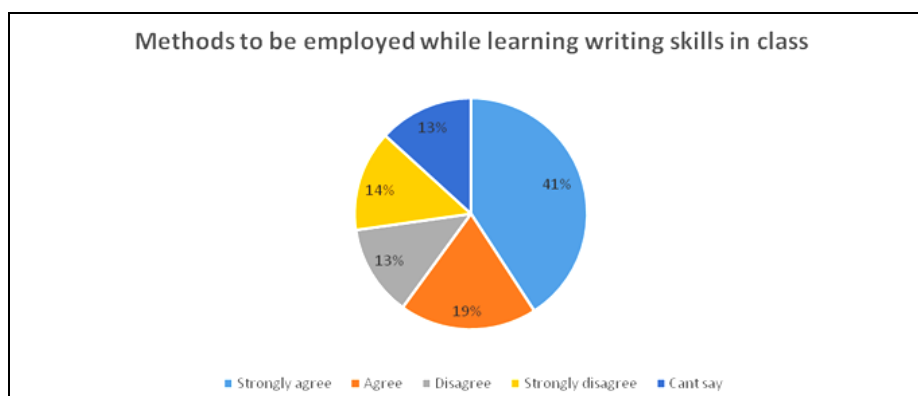
**Fig 3:** English Classes on Writing Skills

A majority (33%) of the students find their English classes on writing skills are interesting and they are able to learn different approaches, methods and techniques on writing skills. Only 28% of students say that their English classes on writing skills are suitable for enhancing their writing skills. But there are some students who find out that their English classes are used to be bore (24%), and they do not find any interest in the subject, and their teacher fails to develop

interest on writing skills. On the other hand, 14% of the students say that their English classes used to be mechanical and last 1% says English classes have never been conducted

**Q.4. You must employ the writing methods; you are learning in your classes.**

The researcher observes the writing methods have been implemented by the students in the classroom

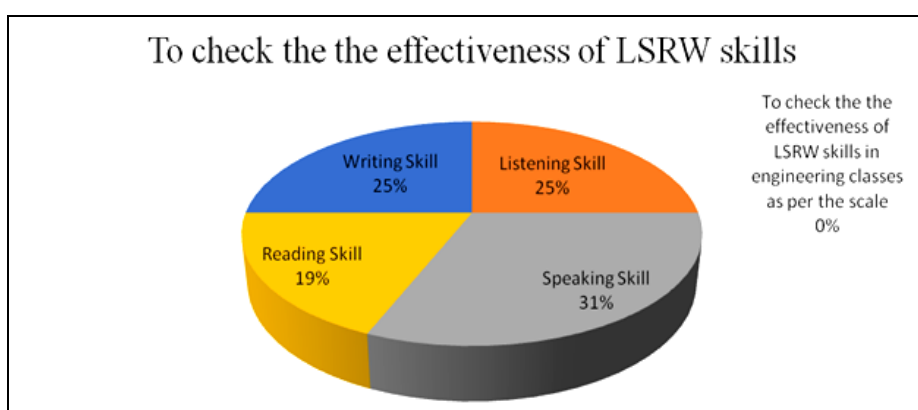


**Fig 4:** Methods to be employed while learning writing skills in class

From the above data it shows that majority (41%) of the students are strongly agree and (19%) are agree and they are used to employ the writing methods in their work of writing which they have been taught, they understand whether it is persuasive, narrative, expository and descriptive. Moreover 14% of students are strongly disagree and 13% are disagree that their English classes have never been occurred on regularly mode nor the teacher found good to understand and teach properly and 13% of respondents were neutral in their answers.

**Q.5. In relation to check the LSRW skills effectiveness in Engineering English classes as per the scale.**

Among the four basic skills of learning a language, Writing 'is a crucial competency for the academic growth of an individual. In one 's professional life, it is essential to have a fundamental knowledge of writing in different circumstances but still it needs to be evaluated from the students to mention about the effectiveness of teaching on the four basic skills of learning a language along with grammar and vocabulary being used.



**Fig 5:** To check the effectiveness of LSRW skills

### Q.6. Which medium in your English class, you receive instructions from your teacher in written/oral?

Many engineering institutes are government-run, while others are private. In government engineering institutes, a large number of students come from rural backgrounds and often

lack sufficient knowledge of the English language. Therefore, the main objective is to encourage them to learn the language. The instructions they receive in class are usually given in a bilingual form, or they are taught either entirely in Hindi or entirely in English.

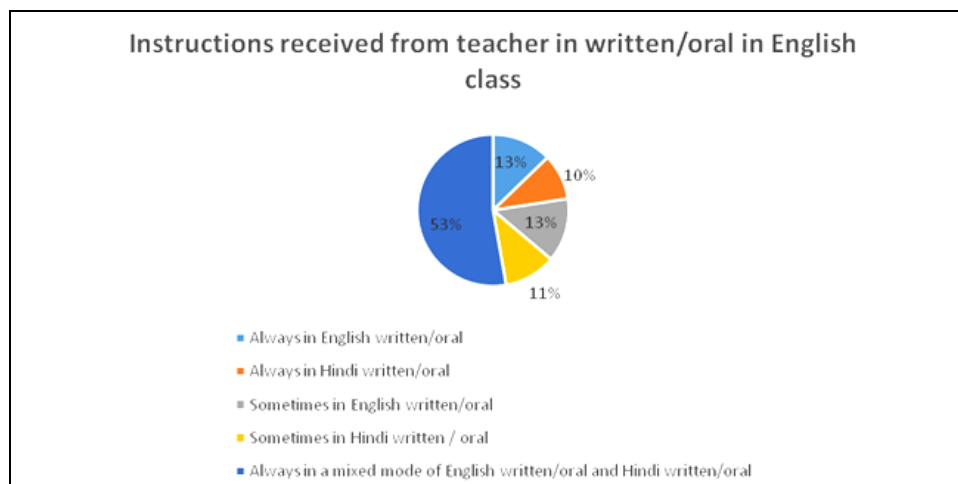


Fig 6: Instructions received from teacher in written/oral in English class.

From the above data, it is evident that many of the students (53%) receive instructions from their teachers primarily in a mixed mode of English (written/oral) and Hindi (written/oral). Because of this bilingual approach, students are able to understand the topics more clearly. About 13% of the students reported that they always receive instructions in English (written/oral), while another 13% mentioned that they sometimes receive instructions in English (written/oral). Similarly, 10% of the students stated that they always receive instructions in Hindi (written/oral), and 11% indicated that they sometimes receive instructions in Hindi (written/oral). Overall, the data reveals that the majority of students reported receiving classroom instructions from their teachers in a mixed mode of English (written/oral) and Hindi (written/oral).

### Q.7: which languages you use while chatting with your teacher or peer on social networking sites or in classes?

As we know, nowadays social media has become widespread across the world. Students use platforms such as Facebook and What Sapp for communication, and when they face difficulties in writing their assignments, they usually ask their teachers for help through email or what Sapp. In this context, the researcher aims to find out which language students feel more comfortable using while communicating with their teachers or peers on social networking sites.

The above data shows that majority of the students (89%) while chatting to their teacher or peer on social networking sites or in classes use both English and Hindi. Only a few of them (11%) used to chat with their teacher in only English language on social networking sites.

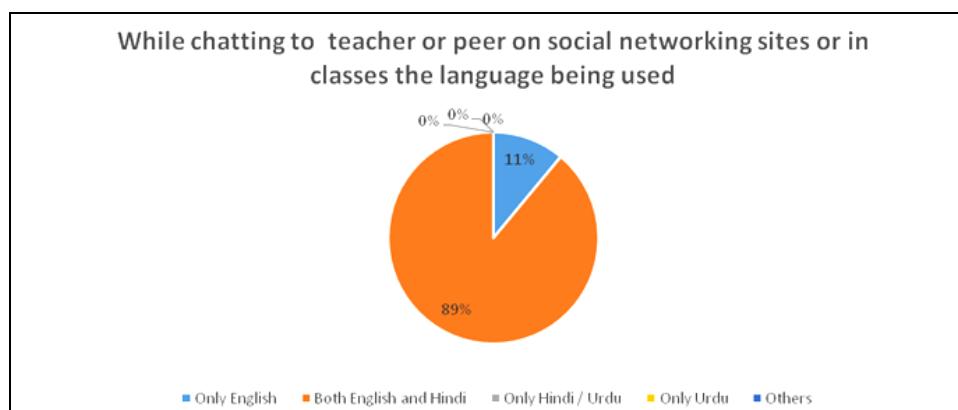
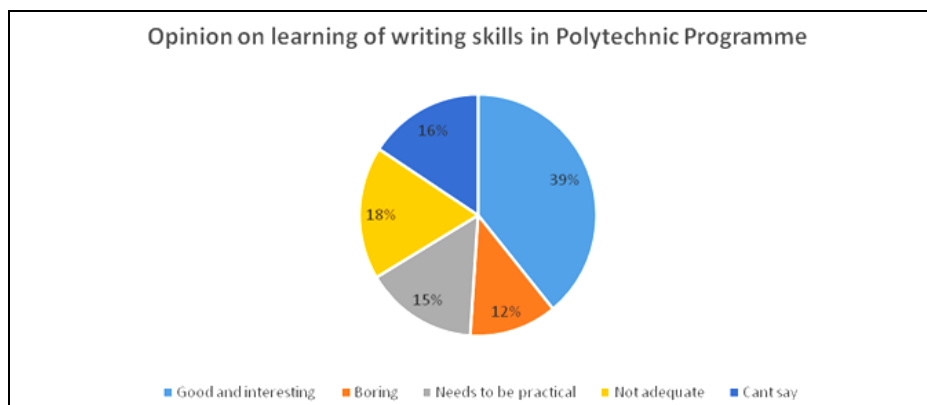


Fig 7: While chatting to teacher or peer on social networking sites or in classes the language being used.

### Q.8: What is your opinion on learning of writing skill in engineering program?

Writing—a productive skill—is rightly considered one of the most important language abilities. It is both discouraging and disappointing that even the majority of students at the university level lack proficiency in the four essential skills of

Listening, Speaking, Reading, and Writing (LSRW). There is no denying the fact that developing writing skills takes time and consistent practice; however, once acquired, it opens numerous opportunities in the professional job market. Therefore, the question seeks to find out how students perceive writing classes in their institutes.

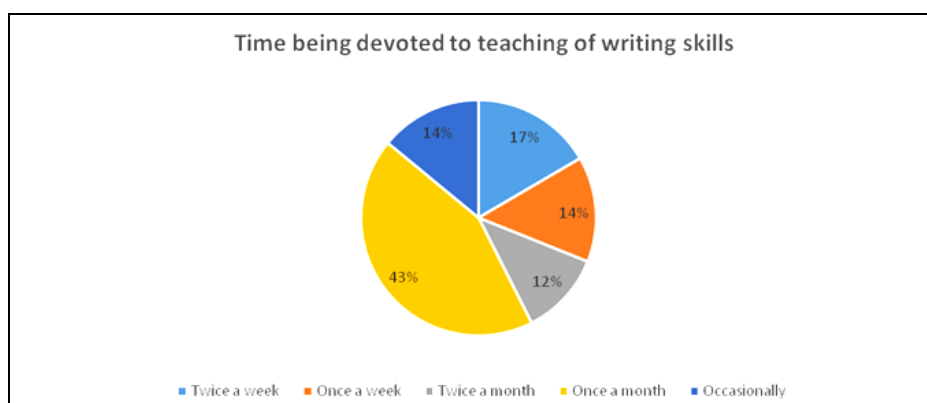


**Fig 8:** Opinion on learning of writing skill in polytechnic program

From the above data, it is evident that the highest percentage of students (39%) stated that the lecture on writing skills in the engineering program was good and interesting. About 12% found it boring, while 15% felt that more practical classes were needed to better understand writing skills. Additionally, 18% reported that they were not satisfied with the lecture, as it did not meet their expectations. Finally, 16% of the students did not respond to this question.

**Q.9 (a): How much time is devoted to teaching of writing skills in engineering programme?**

Here, the main objective is to find out that the time consumed by the students to develop their writing skills or to learn all the basic skills of language is enough or they want any changes in the distribution of time so that they can learn it properly.

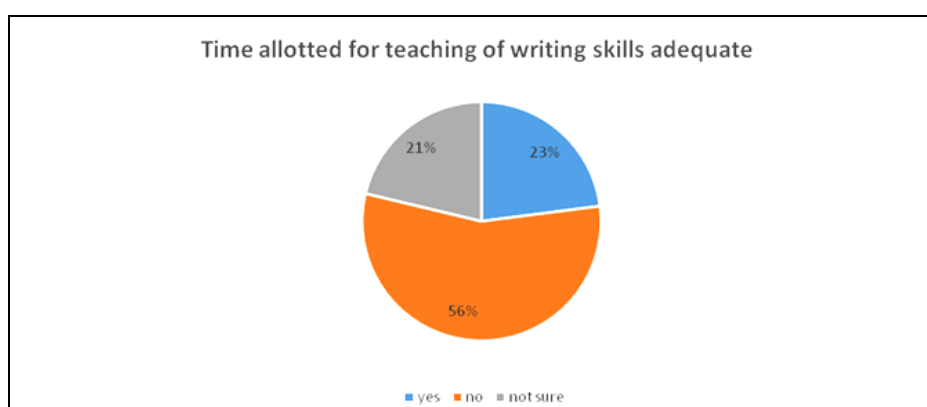


**Fig 9(a):** Time being devoted to teaching of writing skills

A majority of the students (43%) reported that their classes on writing skills are conducted only once a month. As a result, they are neither able to understand the topic clearly nor gain sufficient knowledge about all aspects of communication skills. About 17% of the students stated that their classes are held twice a week, while 14% mentioned that their classes take place once a week, which allows them to gain some knowledge. Another 12% said that their classes are conducted only twice a month, and 14% expressed dissatisfaction with the classes, as they are conducted only occasionally.

**b) Is time allotted for teaching of writing skills adequate?**

From the above data it is clear that maximum students are not in favor of the time being allotted to them for teaching of writing skills. The above pie chart also shows that 56% learners say that time allotted for them is not adequate, while 23% says it is ok and the remaining 21% say that they are not sure that time allotment is ok or not.



**Fig 9(b):** Time allotted for teaching of writing skills adequate

## c) If response is 'NO'

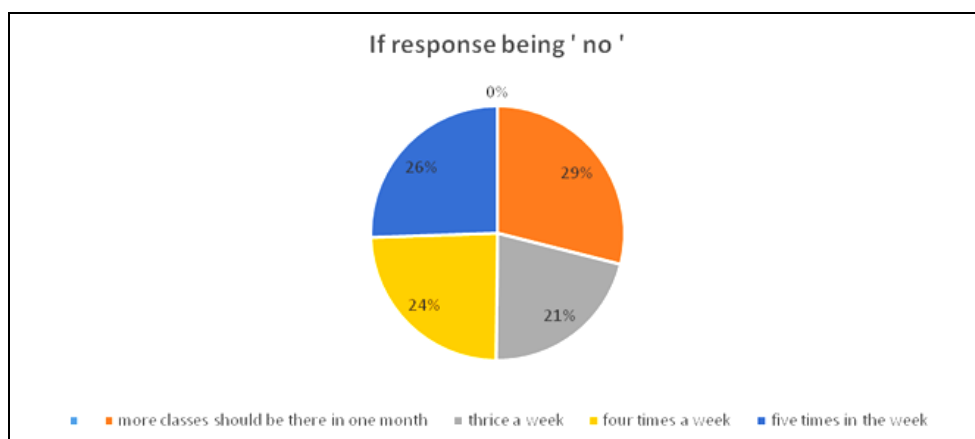


Fig 10: If response is 'NO'

To make the teaching of writing sessions more effective, 29% of the students suggested that more classes should be held each month. About 21% recommended that classes should be conducted three times a week, 24% preferred four times a week, and 26% suggested five times a week, so that they can properly adopt the various techniques and methods of writing skills.

**Q.11: Does the syllabus of English in engineering program provide ample scope for learning of English writing?**

The main objective here it is to find out the reliability and scope of the English syllabus in engineering to help the students learn English writing skills.

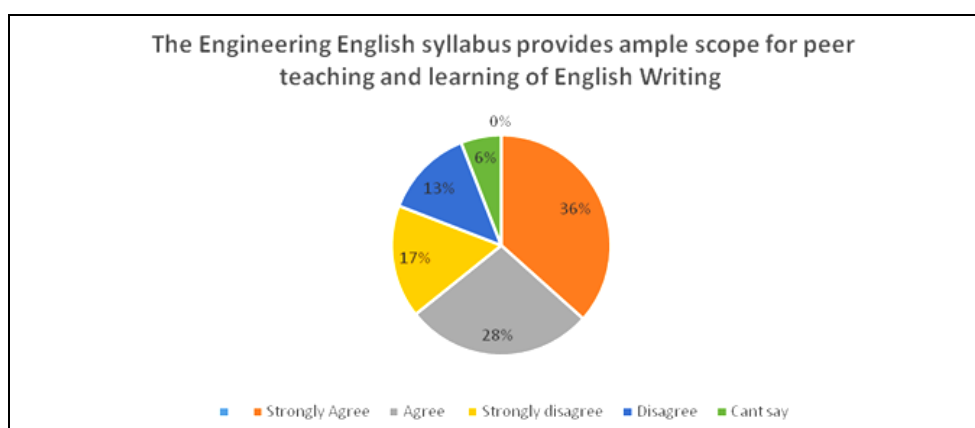


Fig 11: The engineering English syllabus provides ample scope for peer teaching and learning of English writing

From the above data, it is evident that 36% of the students strongly agree and 28% agree that their engineering English syllabus provides ample scope for peer teaching and learning of English writing. However, 17% and 13% disagreed with

this view, stating that peer teaching is not encouraged. Overall, the data indicates that the majority of students believe their English syllabus offers sufficient opportunities for peer teaching and learning of English writing.

**Q.12: Does your college provide any opportunity to attend workshop or seminar on teaching and learning of writing skill?**

Fig 12: College provide any opportunity to attend workshop or seminar on teaching and learning of writing skill



When asked whether their college provides opportunities to attend workshops or seminars on the teaching and learning of writing skills, most students (43%) reported that such opportunities are offered only once a year. About 15% stated they are offered twice a year, 16% said once every two years, 14% mentioned that their college never provides such opportunities, and 12% chose not to comment on this question.

### Findings

- English is one of the most widely spoken languages in the world. Fluency in English is essential for engineers and engineering students, both in their education and in their professional careers. Since engineering is a vast field of study, much of the research and academic literature is published in English.
- When discussing English classes on writing skills, most students find them interesting, as they are able to grasp the key aspects of the writing craft.
- According to a survey on listening, speaking, and reading skills, the teaching of listening and speaking in the engineering institute is considered excellent. The majority of students reported that the teaching of speaking skills is good. At the same time, writing is also recognized as an essential component of English, which requires grammatical accuracy and an adequate vocabulary.
- From the data collected on whether colleges provide opportunities to attend workshops or seminars, we discovered that such workshops are usually organized only once a year for the teaching and learning of writing skills. To better enhance students' talent, these workshops should be conducted more frequently to improve their understanding and writing proficiency.
- We also observed that students receive instructions from their teachers in both written and oral forms. The study revealed that the majority of students reported receiving instructions in a mixed mode—English (written and oral) combined with Hindi (written and oral). Only a small number of students stated that instructions are given exclusively in English. Social media, meanwhile, provides exposure to real-life language and models how native speakers actually interact with one another. Teachers can encourage students to note unfamiliar vocabulary or sentence structures they encounter on social media and bring them to class for discussion. Furthermore, students should be encouraged to interact with one another both in class and online. Overall, most students preferred receiving instructions in both English and Hindi.
- We have also observed that the current Engineering English syllabus is relevant for improving writing skills. English is taught as a compulsory subject in engineering institutions because a good command of the language helps students secure employment. However, it has been found that the majority of students, even after completing their college courses, fail to attain the required level of proficiency in written and spoken English. While most respondents agreed that the syllabus is relevant, a small minority chose not to respond.

### Conclusion

The survey findings highlight both the strengths and challenges in the teaching and learning of English in engineering institutions. While listening and speaking skills

are effectively taught and well-received by students, writing skills remain an area requiring greater attention. Workshops and seminars on writing are limited, often conducted only once a year, which restricts opportunities for students to strengthen their proficiency. The study also indicates that most teachers deliver instructions in a bilingual mode, combining English and Hindi, which students find practical and accessible. However, exclusive use of English in instruction is less common. Furthermore, the integration of social media as a learning resource can serve as an effective tool to expose students to authentic language use. Although the current Engineering English syllabus is considered relevant, a significant gap persists, as many students fail to achieve the desired level of competency in written and spoken English even after completing their courses. This suggests a need for more frequent workshops, greater emphasis on writing, and enhanced teaching strategies to ensure students acquire the communication skills essential for their academic success and future employment.

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