



Need for an Aligned ESP Writing Course for Engineering Students

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Abstract— *The English writing skills of engineering students in India is a tricky proposition. The term- end university exams majorly test their writing ability but the students focus more on oral communication skills to do well in group discussions and interviews to get placed. To add to this, the pressure of domain subjects and a lack of awareness about the real need of writing skills at the workplace and in higher education contribute both to a neglect and poor standard of writing. University courses are not updated frequently and proper needs analysis is not done. India produces the largest number of engineers annually. The paper argues for a mechanism to continuously update English writing course for engineering students by aligning the views of all stakeholders. It also recommends granting autonomy and flexibility to ESP teachers to draft a new or modify the existing writing course which will be updated as per the academic and workplace needs.*

Keywords— *aligned, ESP, engineering students, writing course*



I. INTRODUCTION

“One cannot travel far these days without being struck by the pervasiveness of English as the world’s second language.” (Crystal, 2012, p.1). English is spoken in 101 countries and it is the connecting language in “international businesses, worldwide diplomacy, and science.” (Thierry, 2018). The language plays the function of a bond between the countries, whether cultural or educational. As per Nordquist (2019), there are roughly 500 million speakers whose mother tongue is English and around 510 whose mother tongue is not English. Stevens (1980) pointed out that we needed to use English depending on the kind of culture we wished to inherit. It is a language which literally and metaphorically moves and shakes the world. The English language competence is strongly demanded in research, work prospects, and career growth. “It is a contact language, a lingua franca, and a language in flux.” (Rose, et al, 2021, p.158).

1.1 English in the National Context

When the British left in 1947, “the constitution of the new Republic had to be written in English.” (Chaudhary, 2002, p.39). English continues to play an essential role in modern India's transformation- social, cultural, and

political. If a language links people in India, it is English. Gujarat and Karnataka or Kerala have little contact without English, for example. The language of national unity is English.

Though Mookerjee (1944) was critical of the British education policy because it did not cater to sociocultural realities and was focused on creating civil servants for the government, the current role of English in our country is summed up quite rationally, “The position of English in Indian multilingualism has changed from being the symbol of colonial power and exploitation to be the symbol of economic and technological power for the progress of the country and the individuals.” (Annamalai, 2006, p.613).

1.1.1 National Education Policy, 2020: The new education policy seeks to promote multilingualism and as for the existing three-language formula, it seeks to bring at least two out of three in the classroom from among the native languages in India. Till class V, the students are to be taught in their mother tongue/regional language/local language. It strongly argues in favour of Indian languages. It points out that English education has brought in elitism and marginalization of large sections of society. Even if the argument is considered infallible, unless higher education is accessible in regional languages, the students

do not have options beyond English. The aspirational value of learning English is not addressed in the policy statement. In keeping with the current times, a lot of emphasis has been laid to incorporate technology in all the sections of education, be it primary, secondary, tertiary. Recognizing the need for highly qualified manpower, the policy proposes a closer connection between industry and higher education institutions.

1.3 Development of ESP in India

Chaudhury (2002) argues that as there were Bengali-English, and Urdu- English glossaries even in the eighteenth century; the roots of ESP in India could be traced to that time. As per Tasildar (2013), the findings of the Study Group (1971), Curriculum Development Centre (1989), and the various projects of the British Council in the 80s were mainly responsible for the spread of ESP education in India in the previous century. The recommendation of the Study Group (1971) to consider “English as a library language” initiated the official journey of ESP in India. It also suggested “a course on commercial English”. Similarly, CDC (1989) proposed courses like “Business Communication” and “English for advertising and copywriting”. The British Council’s collaboration with the Indian Institute of Mines resulted in “English for science and technology.” Similarly, its project in Kolkata with the Teachers’ Training Institute gave birth to “Communication in English for technical students” in 1984. (Tasildar, 2013, p.4). Though Upadhyay (2018) shows how ESP courses have flourished in the UK with the option of doing masters in it in some universities and also the fact that ESP has a dedicated international journal, Tasildar (2013) rightly points out that beyond a few specialized certificate courses offered by a few universities, only two courses “Technical English”, “Business English” satisfying the workplace needs of the budding engineers and business management students in India respectively have dominated. So, there are immense possibilities in ESP teaching/ learning, including designing courses, in India.

II. JUSTIFICATION OF TEACHING WRITING TO ENGINEERING STUDENTS

Clement and Murugavel (2018) have identified gaps between the teacher’s methodology and engineering students’ confidence levels. Tickoo (2003) sums up our problem well: “It is common knowledge that many of those who speak fluently and intelligibly often fail when it comes to writing for well-defined, job-related or academic purposes”. (p.56). The English that students learnt at school does not adequately prepare them for higher studies and workplace needs (Hyland, 2022, p.1).

Academic, professional, and personal are the three major reasons why writing needs to be taught.

2.1 Academic justification:

Today, India produces the largest number of engineers in the world annually. As per Thakur and Mantha (2021) one million engineers graduate in India every year from “3500 engineering colleges, 3400 polytechnics, and 200 schools of planning and architecture.”

2.2 Professional or Occupational Justification

According to Trevalyan (2009), a novice engineer spends 60% of his/her time interacting with others. As per Tenopir and King (2004), 28% of the above-mentioned time goes into writing and the remaining 32% in oral communication skills.

2.3 Personal Purposes

English can be helpful to an ordinary person in correspondence with foreign associates, heads of organizations, colleagues, governments, etc. A written complaint to either the shopping centre or the shopping web platform would also need English.

III. WRITING AS A SKILL

Writing is a productive language skill. Hyland (2013) signifies the importance of writing thus, “Not only is it hard to imagine modern academic and corporate life without essays, commercial letters, emails, medical reports and minutes of meetings, but writing is also a key feature of every student’s experience.” (p. 95). Hyland (2003) points out that writing skill is the toughest challenge to the teachers. A second language learner must acquire extensive linguistic competence to be able to write successfully. Teachers need to use controlled activities, authentic tasks and real- life experience to improve the writing of the learners. (Swales & Feak, 2004). A mother tongue and second language are most unlikely to have the same patterning of arrangement and outlining to present ideas and opinions and the earlier experiences of the learners at home or in school do not make them properly attuned to academic and workplace writing needs. (Hyland, 2013, p.96).

As per Thaiss & Zawacki (2006), academic writing entails dominantly a prose register that lays more emphasis on reason than on emotion or sensual perception. (p.5-7). However, stylistic variations across various disciplines are the norms rather than exceptions. Swales (1990) tried to analyze these differences across various disciplines and called this theory “discourse communities”. Biber & Gray (2016) pointed out quite clearly how academic writing in humanities differed from its counterpart in the sciences. They were of the view that humanities relied more on

structural elaboration while sciences relied more on structural compression.

IV. LITERATURE REVIEW

The study of Živković (2015) illustrated the value of students' language skills in the engineering sector. The study's findings demonstrated a fondness for career-oriented pedagogy. Altalib (2019) investigated motivation of learners in specific and general language contexts using the models of Dörnyei. The learners in the specific language category had higher motivation levels and more positive attitudes than General English course learners. Kannan (2013) wrote in *The Hindu* that potential engineers were not trained to compose decent plans, papers, or ideas. Kumari's (2016) findings in the classroom on teaching writing showed that most students had inferior writing skills. Deshmukh (2015) highlighted in her story that in polytechnics and engineering colleges, English was taught in compulsory form because a strong understanding of the English language allowed students to get work. It was reported that most students did not learn the requisite skills of written and spoken English even after completing their studies in college. The study of Rus (2015) introduced the characteristics and methodology that the ESP linguist could follow to construct and strengthen engineering students' writing skills and develop the most common written technical communications models in a step-by-step process. Robinson and Blair (1995) taught writing skills to the first-year students at Edinburgh University in a professional engineering module. The researchers concluded that structured input was an indicator that helped students build and sustain a professional growth curriculum to increase their abilities in writing to the degree that fitted their profession's needs. In the study of Changpueng and Pattanapichet (2015) regarding the importance of genres in professional life, there were some areas of misalignment between students, teachers, operational engineers and managerial engineers. Du (2019) showed the various problems that Chinese engineers faced in California while writing in English. Phoung (2018) showed the mismatch between an ESP curriculum and workplace communication needs in a Vietnamese context. In fact, her study showed that workplace genres were different from those taught in the ESP course.

V. DISCUSSION

The first globalization and liberalization of our economy have led to more emphasis on specialization and along with it higher-order thinking skills (HOTS) like synthesizing, analyzing, reasoning, comprehending application, and evaluation. To facilitate workplace

linguistic skills like writing emails, negotiating with the clients and colleagues, presenting information and product, writing a product manual or a technical report, and so on have become indispensable for a successful career.

Post second world war heralded the domination of technology and commerce. As a corollary to this, people wanted English to survive and grow instead of the common reason of "pleasure or prestige." (Hutchinson & Waters, 2009, p.6). At around the same time, development in linguistics changed the way we perceive language. From the primal grammar intensive learning, all kinds of language learning moved to the realization that the key to language learning was going beyond the realm of grammar. Canale and Swain (1980) argued in favor of three sub-competences to communicate effectively:

- a) fluency and accuracy in usage and grammar
- b) interactions as per the requirement of the context or discourse community
- c) strategic ability to overcome communication-related problems.

Canale (2014) added another 'discourse' competence to this list which implied cohesion and coherence in utterances. These competences together resulted in what is commonly called 'communicative competence.' For short-term and result-oriented communicative competence which aims at fully specified results, we need an ESP course for professionals as against a general English course. (Ghafournia & Sabet, 2014). In the words of Hutchinson & Waters (1987): "if language varies from one situation of use to another, it should be possible to determine the features of specific situations and then make these features the basis of the learners' course." (p.7).

As ESP is a highly 'learning -centered approach' (Hutchinson & Waters, 2009, p.14), the needs, which include psychological needs and preferences of the adult learner, are multi-dimensional and hence the teacher needs to go beyond the classroom not only to find out those but to align those with the requirements of the workplace. (Ghafournia & Sabet, 2014). Thus, working engineers should also be included in ESP writing course design. Without needs analysis, no modern ESP course has been or can be designed. As Widodo (2017) points out "It provides the basis for lesson planning, syllabus design, materials evaluation and development, and instructional design and assessment development." (p.127).

Engineers need to write both for their operation and business roles. To add to this, many engineers, with or without work experience, specialize in business through an immensely popular business course MBA (Master of Business Administration). As Sigmar and Hynes (2012) argue strongly: "If students at the university level lack the

skills to write an effective business message, then educators must provide them additional writing instruction, practice, motivation, and feedback until they can produce an acceptable document.” (p.141). So, what is required is the development of a course in English writing seeking to enhance the writing ability of the engineers so that it would meet their academic and employment needs.

VI. CONCLUSION

The English writing skills of engineering students in India, including are not upto the expected level as shown in various research studies. Most of the courses designed by various authorities, including the universities and AICTE are not frequently updated.

A single English course for engineers lasts for many years. The students need English both in their workplace and in academic settings. Most studies in India have considered the needs and views of either the teachers or students. In order to assess the use of genres and digital tools in order to develop the writing skills, only students were selected as respondents. (Freddi & Tlukova, 2022, p.36) whereas Hamdani and Ouahmiche (2022, p.681) chose only engineers with experience. Jacob (2015) surveyed both students and teachers to design an ESP writing course for engineers. In each, one or more stakeholders are left out. The research on writing genres exposed this mismatch “between both the students’ perceptions of what was needed and what the professional engineers wrote at their workplace.” (Kharbanda, 2023, p.67). We need to align all- the students, the teachers, and professional engineers- because each is a vital and indispensable cog in the wheel. Hence there remains a gap between what is perceived to be needed and what is needed. Many engineers work in the services sector, for example and the use of English writing skills in that sector can be safely assumed to differ from what is required in other sectors. So, a comprehensive writing course is needed which could be useful for all kinds of engineers in all sectors. Further, many engineers handle managerial or business profiles with or without a business course like MBA. Their requirements are likely to be different from those who handle engineering or operational profiles. So, the course also needs to cater to these kinds of engineers. Thus, the ESP writing course should be designed and implemented by taking a holistic view of the needs of all the important stakeholders- the students, the professional engineers (operational and managerial), and of course, the teachers. Technology is getting updated rapidly and so is the writing skill requirement. It takes time for these changes to percolate to the academic world. It is also a commonly accepted fact that university syllabuses change after a prolonged period for obvious reasons. Such delays may add to inadequate

learning of the students. Freddi and Tlukova (2022, p.46) prescribe a “close cooperation between ESP teachers and engineering specialists to develop an L2 English writing module in the engineering curriculum.” The gap between the classroom and the workplace, if any, will have to be bridged by this aligned course. The NEP (2020) also lays stress on this aspect as it proposes “closer collaborations between industry and higher education institutions to drive innovation and research in these fields” (p.50).

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