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Original Article

Teaching EFL for Engineering Students from Tamil Medium

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Abstract: *To adapt to today's ultramodern world, knowing the English language is essential. It is required to use English for both written and oral communication because it is a foreign language. Every person has been forced to study English as a result of this circumstance. Why is it that while learning a foreign language is vital, teaching that language is just as crucial? It is more crucial to teach second languages than to learn them. On the other hand, there hasn't been much talk on engineering students' English language proficiency. According to recent Norwegian study, our pupils' present English proficiency is considerably behind what society expects as well.*

Keyword: *General English, Meta-Knowledge*

REASONING

Thomas N. Huckin and Leslie A. Olsen state the following in the first chapter of Technical Writing and Professional Communication for Non-native Speakers of English even with their technical brilliance and creativity, scientists and engineers risk having their technical skills ignored, undervalued, and unutilized if they can't persuade peers, clients, and superiors of their value. Put simply, technical experts and their superior technical abilities will become redundant if they are unable to explain to others why they are doing what they are doing and why it is necessary. According to this viewpoint, effective communication skills are essential for success and even survival in "real world" settings with trade, commerce, and industry becoming more internationalized by the day, the veracity of this statement becomes even more apparent. The majority of engineering graduates today lack the level of English language proficiency that tomorrow's engineers would require, as English has emerged as the de facto language of international affairs. Current English proficiency of an engineer is significantly lower than what is needed for admission to engineering institutes or higher education, according to recent research. English is taught in primary and secondary schools as the first foreign language (EFL). English language instruction is no longer required in engineering programs. Just four lessons a week for a semester totaling five ECTS make up this option.

Engineering students need to be more proficient in the English language, so it is important to implement tactics that help them acquire language skills relevant to their line of work. It has been suggested that effective substitutes for EFL in the development of English language proficiency are the introduction of bilingual education or English-language lectures. Numerous justifications have been offered by proponents of bilingual education to support this approach to teaching. On the other hand, there is also growing skepticism regarding bilingual education. Advocates of use English as the primary medium of instruction in postsecondary education contend that this will enhance students' language proficiency inadvertently. However, the primary financial incentive for them to introduce English-language lectures is that more international exchange students will benefit of the institution or the faculty. The two methods are essentially "subject-oriented" rather than "language-oriented," and they are not specifically intended for language learning. They might, in part, aid in the pupils' vocabulary growth and linguistic ability development. However, a language learning technique should be centered on the activities that are pertinent and typical of their profession in an international setting, since the language proficiency required of our future engineers should be tied to their line of work. Therefore, in order for engineering students to effectively connect with colleagues from different countries, a language learning program will need to develop not just their language abilities but also their cultural awareness.

WHAT IS ENGLISH?

English teachers occasionally debate whether it is better to teach British or American English. Even while the question might be interesting to academics, it is less significant in the context of this work. Furthermore, English comes in a lot more variants than the two mentioned above. As language skills are developed for communicative purposes, EFL teachers should concentrate on teaching a "World Standard English" (also

known as "International Standard English") that can be understood and used anywhere in the world. According to Tom McArthur, this type of English is a "ad-hoc balancing-out of" a variety of practices. "A fuzzy-edged subset drawn from all the Englishes," is what it is. It will be the standard and the goal for millions of people. The teaching of English as a foreign language is frequently referred to by the acronym EFL in a broad meaning. It is unclear from the text if this "English" is British, American, or another dialect. It also does not differentiate between English used for specific purposes, technical English, and general English.

When it comes to teaching engineering students English, a lot of English language instructors contend that proper English is best taught and learnt in a "General English" environment. My experience isn't like that. The requirement for didactic instruction is justified by the fact that texts dealing with technically oriented subjects differ from literary or journalism articles in terms of their goal, layout, discourse, and terminology. Methods that are distinct from those used with books on general, literary, or social issues. Writings that deal with "technical subjects" and whose discourse differs from those of literary writings or works on a range of social subjects are usually referred to as "technical English" texts. The phrase "vocationally-oriented English" can also refer to language training that focuses on acquiring language proficiency pertinent to a certain profession or set of related professions.

TEXTBOOKS AND EDUCATIONAL SUPPLIES

Essentially, an English language education for engineering students should have two main goals: to build the students' general communication competence and to provide the groundwork for future language learning and skill development. In this regard, the curriculum, learning objectives, and selection of course materials and pedagogical techniques ought to be pertinent to the engineering specialization of the students. The best way to increase the significance and relevance of classroom activities and facilitate the transfer of knowledge and skills to future real-life situations is to teach English in authentic, nearly "real-life" scenarios and circumstances.

Learning objectives typically include the skills and knowledge components of a course. Grades and assessments convey the degree of knowledge and proficiency attained by the pupils. Exams are meant to provide students with a chance to exhibit the degree of expertise and abilities they have attained. Learning objectives and tests are strongly related. It should go without saying that test development is made easier by more accurate descriptions of learning objectives. Learning objectives should be accurately described in terms of the knowledge and skill domains they cover. It is frequently important to include examples to appropriately define the primary learning targets and to divide them down into more specific sub-targets. According to the close observations, clear explanations of learning objectives and specific connections between them, assignments, and evaluation criteria will aid students in their language learning and facilitate teachers' work when creating assignments.

The knowledge and skill domains are the two primary components of the learning targets in EFL. Knowledge concerning nations where English is the official language, such as the UK, the USA, Australia, and similar ones, has long been a part of the EFL knowledge area. Historically, the learning objectives have mandated that students have an understanding of these nations, including their histories, populations, and traditions. But because of growing globalization, learning objectives for cultural knowledge should increasingly encompass and relate to other nations, especially those nations where it is logical to expect that the engineering students will travel to when they are engineers. Although cultural awareness is valuable possibly even more valuable than language proficiency it is not necessary to teach it as a distinct topic. When required and pertinent, it can be obtained. Students should be asked to use material about culture that they find in books or on the Internet for a variety of exercises. Raising engineering students' awareness of the fact that people from different nations express themselves differently according to their cultural background should be the ultimate goal of adding cultural information in a language course. Errors in language can be instantly fixed or compensated for. Absence of awareness and knowledge of culture making connections and working together with coworkers and students from different colleges could be a practical way to learn about other nations. I have given it a few tries, but owing to a variety of obstacles, the outcomes have not been what I had hoped for. The time difference between the colleges is the first issue. It is possible to get around this restriction if students work together asynchronously. The biggest challenge is the discrepancy between the subjects pupils are taking and their total workload. When it comes to topic selection and instructional strategies, collaboration needs to be coordinated and should be scheduled amongst teachers prior to student involvement.

The four skill categories are: comprehending written and spoken communication; communicating both verbally and in writing; and interacting with people in both formal and casual social situations. But in the majority of conversational scenarios and settings, students will need to apply their cultural awareness. Language expressions are cultural expressions, and as such, they will imply and carry culturally conditioned meanings. They will reveal something about your background and the extent of your cultural understanding, Folks with whom you are conversing. Language proficiency and cultural awareness are two things that cannot and ought not to be separated. Furthermore, cultural sensitivity frequently has the power to "make or break" discussions and communication.

The learning objectives specified in the syllabus ought to be covered by the course materials. The majority of the learning materials for engineering students should be legitimate texts, preferably written in native English. Legitimate texts are books on engineering topics written by engineers for other engineers, with the intention of serving as more than just language teachers. Since these materials will be encountered in the students' future careers, they ought to be pertinent to the specific branch of engineering that the students are studying. The educational materials have to include of records, pictures, and graphic presentations that are utilized in typical engineering contexts and situations. The equations, formulas, and symbols from physics, chemistry, and mathematics should also be included. The texts will therefore be used as references and illustrations of language use in specific contexts and for specific goals. Authentic writings produced in a national language or in English by non-native English speakers can also be utilized for educational reasons, depending on the proficiency level of the students in the language. Some of them, though, might need to be modified or altered. The degree of editing and customization required will depend on the ability level of the students, the intended use of the texts, and the surrounding circumstances.

COMMUNICATION SKILLS AND DIDACTIC METHODS

The question of what, when, why, and how we want to do anything in class is fundamental to didactics. To improve students' learning, it is necessary to design, organize, and integrate a variety of activities. The comprehension of spoken and written English as well as the ability to utilize the language effectively in writing and speech across a range of situations and goals is included in the English language skills domains. In my instruction, I have concentrated on helping the students become proficient writers in a variety of writing genres, including memos and formal letters, reports (of various lengths), writing documentation (such as brochures, manuals, and descriptions of procedures and processes), and short pieces for journals, magazines, and newspapers.

Despite the enormous range of configurations for these papers, norms and different standards point to a standard format that is generally acknowledged on a global scale. The students' speaking abilities can be developed through appropriate activities such as oral presentations and discussions in meetings and negotiations.

GENERAL FACTORS IN DIDACTICS

Language acquisition is the process of learning a foreign language; pupils will gradually pick up, use, and hone their language abilities in accordance with their unique demands. The secret to developing language skills in the classroom knows how to get pupils as engaged in their work as possible using appropriate materials, activities, and assignments. Assigning the pupils to groups (either in pairs or in groups of three or four is most likely the most effective way to engage every student in the class as much as possible.

According to my observations, formal English language instruction that is relevant to students' careers and environments will unavoidably include the same topics as a "General English" course. Additionally, pupils find great motivation in dealing with pertinent real material. I don't teach grammar "for grammar's sake" in my classes. Without needing to study grammar as a subject, pupils are generally more focused on getting their language "correct" and lack "meta-knowledge" of the subject. There is no benefit to teaching grammar just for its own sake."The study of traditional school grammar has no effect on raising the quality of student writing. It will... do them a gross disservice." Teaching grammar for the sake of grammar will not improve students' spoken or written communication skills. Rather, the instructor ought to motivate pupils to utilize "interactive grammar exercises" that are accessible on the internet on their own to enhance their formal language abilities. Teachers might utilize the "comparative or contrastive grammar" strategy to draw attention to and raise

awareness of the distinctions between their native language and English in order to supplement their language instruction on grammar.

In response, Formative assessment, which involves teacher response and coaching during the language learning process, is an effective way to let students know how proficient they are and how well their work is done. Instructors ought to react to students' work on a regular basis, and they ought to do so in a pedagogical way. Answers ought to center on a few different facets of the students' work and, ideally, prompt them to consider their own work. Teachers' answers should also be predicated on and consistent with the requirements and assessment criteria. Students will be more aware of the learning objectives and the expected caliber of their work if they are involved in creating the standards and criteria. This kind of student involvement could directly impact their education. Students could also be requested to react to or discuss the work of their peers. According to my observations, peer-response groups actively involve every student and are far more beneficial for learning as opposed to a "one-on-one" answer. Students should understand exactly what is expected of them when it comes to peer comments, just as they do for teacher responses. Assignment requirements will differ, but they should align with some of the learning objectives.

The sincerity of the tasks in the classroom Assigning students to a workplace that is relevant to the engineering field and asking them to participate in some of the regular workplace activities would be the perfect authentic environment and context for engineering learning activities. Anne Blakeslee makes this suggestion. Nonetheless, the majority of engineering institutions organize their learning activities in the classroom. This makes it crucial to establish the ideal degree of "authenticity" in the classroom. Activities in a way that makes them seem real and applicable to the students' future careers. The exercises need to inspire students' language learning while educating them about the realities of the job. Students may gain pertinent knowledge about workplace writing habits through visits to businesses and conversations with representatives.

GAINING PROFICIENCY IN TEXT COMPREHENSION

Engineers who work in the field read a wide range of technical materials. On request, legitimate documents authored by English native speakers can be acquired from regional, global, or local businesses as well as online. Students will be able to observe how language, sentence structure, and layout are used in a variety of document kinds by studying authentic papers such as the ones previously described. They might act as "models," but in my opinion, they should more effectively function as tools and illustrations of the various situations and objectives in which English might be employed. Understanding sentence structure, vocabulary, and layout are necessary for text comprehension. However, by questioning pupils about the purpose and context of the texts, comprehension can also be increased.

Language learners can benefit from using real materials written in their original tongue or by non-native English speakers in English. Students may learn about the distinctions between English and their native tongue by contrasting these works with writings by native English speakers. In addition to increasing their vocabulary, this tactic could also help them become more cognizant of the "cultural" characteristics and variations among the pair of languages. Additionally, by using real texts written by native English speakers as models, students can pick up terminology and sentence structure that they can use in their own writing on related topics in related contexts or scenarios. The distinctions between "classroom" and "workplace" activities may be greatly diminished as a result, which may further improve the transfer of language abilities from the classroom to the workplace and make learning English an active process.

Increasing one's writing abilities like most other professional endeavors, engineering is becoming more and more "writing-oriented." It is crucial to concentrate on helping the kids' writing abilities because of this. Engineers will need to be able to write these kinds of papers as well as proofread, edit, and revise materials prepared by others. Genuine documents can serve as "model" documents, as previously said. However, in my opinion, they ought to be viewed and utilized as educational tools that students can examine and apply as models. This study tackles the issue of how non-native English speaking engineering students can enhance their English language proficiency; it makes no recommendations for methods of teaching technical writing or writing instruction. Although teaching English as a foreign language is the main goal, writing conventions related to different genres will inevitably come up in an EFL course. Technical writing, like good writing, is situational and contextual. This holds true for both literary and technical genres, as well as other text kinds. Genres are typically described in terms of formal qualities and set the conventions that students need to learn

and practice in order to communicate effectively. User manuals and academic papers, for example, have diverse elements, but writings within the same genre may also differ because of the circumstances, context, and intent behind their creation.

It is crucial to understand genres and the norms that define or define them, as these traditions often establish the expectations of readers regarding the type of content they might expect. Violating these customs could cause communication problems. Since communication is a social act that involves two people, information about a recipient or audience should be included in language activities that require pupils to address someone. Different communication methods will be required for different audiences as well as varied goals or purposes. Students are expected to follow the conventions that are typical of various texts and to use their understanding of text kinds to their written assignments.

It seems sense to dedicate more effort to honing writing abilities than the other three. Writing assignments have the benefit of allowing students to reflect and proofread their work so they can make necessary corrections. Writing is another activity that helps with speaking ability improvement. Writing assignments, ideally concise ones are to be assigned regularly and should focus on pertinent technological topics (such as succinct summaries of research publications, newspaper articles, technical reports, meeting minutes, and product presentations). Collaborative writing that is process-oriented and involves students working in groups of three to four will engage students as much as possible and help them gain from one another. If the groups are bigger than this, some pupils might turn docile. The groups write, edit, and modify their documents multiple times while writing them in response to feedback from peers, teachers, or peer response groups. Steer clear of lengthy discussions or lectures in class. Let the pupils to investigate the subject and ask questions or look for information about the issues they are having instead.

The students might be requested to portray the contents of papers in English rather than translate them if they are dealing with documents (like user manuals) written in their mother tongue. Compared to a "word-for-word" translation, this task allows the students a little more latitude in their paraphrasing. They can then be required to use the rendered text to create a document that is identical to the original one in the country's language utilizing the proper style guidelines for writing. Studying, gathering, and incorporating pertinent words from related writings by native English speakers into one's own work could be the last step. Students will be forced to concentrate on the language used by fluent English speaker as well as the background information and goals of their own documents through this set of exercises.

GAINING PROFICIENCY IN ORAL COMPREHENSION

Gaining comprehension in oral communication is a crucial component of learning a foreign language. Oral communication is quick and requires not only a large vocabulary and sentence structure expertise, but also some understanding of the cultural background of the person you are speaking with. Spoken words should be understood or interpreted in the context in which they are spoken because spoken words heavily depend on culture, situation, and context Videos (such as TV shows on technical topics, businesses, or product presentations) or movie scenes can teach students about the ways in which language use is influenced by culture and context. Watching English-language TV shows and movies without any dubbing or subtitles can be difficult, but it can also be gratifying. It might be necessary to play the sequences multiple times while instructing students to take English-language notes and give briefs in front of the class or in pairs. Discussions in class may touch on cultural issues.

GAINING PROFICIENCY IN SPEAKING

Gaining proficiency in oral communication is a multifaceted endeavor and is often the most challenging aspect of learning a foreign language. It entails more than just learning acceptable vocabulary, pronouncing words correctly, and improving one's flow and sentence structure. Additionally, it involves applying cultural sensitivity and tailoring remarks to the circumstance, the environment, and the intended outcome. Maintaining a discourse in meetings and negotiations requires the application of proper language skills and cultural awareness. Inaction on your part could make or break the conversation. When speaking with foreigners, students far too frequently employ improper vocabulary or the "language of films" carelessly and indiscriminately, unaware of the situation or the cultural background of the person they are speaking with.

The simplest task to help pupils improve their oral abilities is to have them practice reading aloud in pairs while concentrating on fluency. This practice is useful not only for books but also for understanding formulas, equations, and symbols found in physics, chemistry, and other mathematical fields. My perception is that English professors don't always give their students enough time to practice this ability, and a deficiency in fluency in this area could lead to misunderstandings. Early in the language course, oral skill development exercises can be centered on written information and then merged with comprehension of spoken communication. For the aim of learning a language, it is effective to alternate between honing written and oral skills because they are interdependent. Students may be assigned a real book to study, but before approaching the teacher for assistance, they may ask their peers for information in English regarding vocabulary, sentence structure, paragraph usage, and overall organization. After that, you might invite them to discuss the text (such as its history or intent). There are a few different kinds of writing that can come after this oral practice.

Students enjoy giving oral presentations on technical subjects, either individually or in groups. There will be a variety of tasks associated with oral presentations, including writing, introspection, and organizing (e.g. setting up notes). Giving the student's time to prepare for their oral presentation through this practice also helps them become more fluent speakers. Numerous other engineering-related topics, such as business presentations, employee roles and duties, product offerings, production methods, exports, and trade relations, may also be covered in oral presentations. Students also enjoy role-playing, which can be used in a variety of contexts and scenarios (e.g., working in pairs as "guides" and "tourists,""instructors" and "apprentices," or "visitor information officers"). Role cards, which include the details pupils need to act out a certain character, are necessary for role play. The characters' details (age, education, occupation, circumstance, and context) may be included on role cards, but students may also be asked to add details or create entirely new characters. Role-playing exercises can help teachers establish several "cultural contexts" where students can practice speaking and demonstrating cultural competency.

While role play, like most other "classroom" activities, cannot take the place of a "real life" event, it can provide students with an opportunity to our engineering students will participate in a required English language study program as part of their coursework to improve their language proficiency. The development of language skills that engineering students will require for their future careers as engineers should be the overarching goal and focus of the language program. Engineers will communicate both in writing and verbally for a variety of reasons in a range of contexts and circumstances, thus the language program should include exercises that are as similar to real-world scenarios as feasible. Similar to this, using real-world materials in the classroom can help students learn a language more quickly and provide them the chance to become proficient in it so they can use it even more in the workplace.

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