Language Teaching in Engineering Education: A Discombobulating Task

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Abstract - In India, engineering education has flurried to a great extent. Students from all the corners of the nation are striving to become engineers. Engineering has crept into every aspect of human life and no wonder students prefer it over other streams and subjects. "Engineering is the discipline, art, skill and profession of acquiring and applying scientific, mathematical, economic, social, and practical knowledge, in order to design and build structures, machines, devices, systems, materials and processes." (Wikipedia) This discipline essentially requires soft skills and language proficiency hand-in-hand with the hard core technical skills. The present paper throws light upon making engineering education a platform for students to become more competent and skilled in their personal as well as professional life. The education system should also take equal interest in making the road more smoothen for teachers as well as students.

Key words: Technocrat, Education, Language teacher, MTI(Mother tongue influence), Higher Education

I.INTRODUCTION

Engineering education has a wide significance. Unlike other streams it trains the students to become professionals who can meet with the challenges and needs of technology. These challenges are not merely technological; but also a great deal of soft aspects is attached with them. A good technocrat has also to be a good communicator in order to face and resolve the challenges and tasks. Here enters the role of a language teacher in a technical institute. His/her work further complicates when the students belong to different backgrounds. The crowds of students come from different backgrounds, different upbringing and different caliber. Some manage to find their place in elite institutes; others are left with the choice of sprawling private engineering institutions in order to fulfill their dreams of being technocrats.

In order to survive amidst the swarm of students, and the cut-throat competition after completion of the degree; student has to possess some 'add-on' along with the engineering education. Teachers of engineering colleges have to be well qualified and should have the eagerness to mould the student into a right shape. But teaching and learning goes hand in hand. A teacher should be able to jump into the shoes of his students. It is the duty of the teacher to make a student understand the concepts and methodology he applies. It is a challenging task for a teacher as it is very difficult for him to understand the psyche of a class of sixty or so. Engineering students are like half ripen fruits. Neither the teacher can treat them as raw products and start with ground zero, nor consider them as proficient figures and just polish them and make them a perfect fit, ready to face the corporate world.

II.PROBLEMS AND CHALLENGES

The problems faced by a language teacher in an engineering institute are quite common throughout the Indian subcontinent. English in India is more than two centuries old and its importance is increasing day by day. It is treated as a global language because of its use all over the world. Though we may call it as a new age of language learning and teaching with all the new teaching props at our disposal, the challenges for a teacher and student are still the same as it used to be few decades ago. Today the students do not want a conventional language teacher but

they want him/ her to be more modern in his/ her approach. In India a man knowing English is matter of pride and an asset for earning currency. Students who know to speak and write good English qualify the campus drives without much effort. But the students who are weak at this juncture fight hard to make a place for them in the corporate world. This paper unfolds the problems an English Language teacher bears, and the challenges that he/ she faces to groom the students for whom English is still a seven letter mystical word. We have tried to explore the commonest areas with which both the teacher and the student find difficulty to cope up.

The first and foremost problem the teachers deals with is the variety of students in the institute. With the growing number of engineering institutes, engineering has become a cup of tea for most of the students. Entrance examinations for most of the private engineering institutes are an easy step to crack, but once one gets into the college the real struggle begins. The approach with which a student enters in a college is framed according the curriculum of school; while in college the curriculum demands an entirely different and flexible approach which is more of self-learning. A student has to struggle and gradually adapt and evolve in order to survive in an entirely competitive web. The responsibility of developing and altering the approach of the students lies on the shoulders of a teacher. Language plays a vital role in this process of development and evolvement.

III.IMPORTANCE OF LANGUAGE PROFICIENCY

Throughout the country engineering education adopts English as the medium. English, which was earlier a mere subject, now is a separate language in the curriculum. In order to evolve as a capable technocrat, the student is required to master communication skills along with the English language. In India, English has rapidly emerged as a global and international language rather than a foreign or a second language. The English teacher is shouldered with the responsibility of grooming the student, in terms of knowledge of English language as well as its implementation to make his technical skills more effective. But the road towards this development is not smooth. His job becomes all the more difficult with the disparity in the backgrounds of the students. Some of the students belong to Hindi medium and rural areas, while some are convent educated, urban students. Some others are somewhere in the middle of these two. The teacher has to make a fine balance amongst such extremes. Neither he can totally concentrate on the weaker students nor can he overlook them. Such students with minimal English proficiency find it hard to match the pace of the English medium students. The hiatus between the students is so vast that bridging it becomes a tedious task for the teacher.

Further, even the English medium students are from different boards of education, or belong to different areas. The influence of the board and particularly the place where they hail from is clearly reflected through his communication using a foreign language. Those, whose mother tongue is Hindi, find English an ambiguous and almost absurd kind of a language. Unlike Hindi, there is no one to one relationship between a word's spelling and its pronunciation. Rules of grammar are no exception. This difference between the basics of the two languages bewilders the student. Even if the student manages to handle it, he finds it almost impossible to get rid of the MTI (Mother Tongue Influence). MTI signifies the traces of one's mother tongue over any other language, English in this case. This influence gives rise to many other problems. For example, one's mother tongue may not have some sounds found in English; thus the speaker always struggles while dealing with such sounds. People who are from South India are often heard pronouncing the letters 'M', 'N' or 'L' as /jʌm/(yam), /jʌn/(yan) or /jʌl/(yal). Some people are habitual of pronouncing /ʃ/ sound as /s/, sound /v/ as /b/ etc. So mastering the speaking skills becomes problematic due to MTI. Apart from this, the major hindrance in the path of English learning is that the student think in his/her mother tongue due to MTI, and then tries to translate it in English. If one has to master English language he/she has to 'think' in English first.

IV. CULTURAL INFLUENCE

The influence of culture and country goes hand in hand with MTI. There are some usages typically of a country. Since long Indian people are trying to learn English language using the "Translation Method". Thus some typical Indian and Hindi-influenced expressions have come into existence. Along with the set American and British forms of English, a new type of English has evolved, popularly known as Indian-English. This Indian-English has its own rules of pronunciation, vocabulary and grammar. The teacher faces the challenge of making the student imbibe this concept of Indian-English, and also remain unpretentious by the country and culture specific usages. The even more problematic thing is that in India itself several cultures and languages are in practice. This abundance leads to

enhanced load of the teacher. With every passing mile, a modified language is found in India; so is the case with culture and tradition. This makes language teaching a very irksome job.

In India, teachers have been employing some fixed patterns of language teaching. With the advent of various boards of education and internationally designed curriculum, the scenario is changing. Still, the basic education provided to students relies on the traditional methods. One such commonly practiced method, as discussed earlier, is the translation method. This implies the training of translating the desired sentence from the mother tongue to English. This conventional method also involves explanation in native language by the teacher. But, this method gives stress more on first language (L1) rather than the second language (L2). Also the student finds himself unable to create a balance between the two entirely different languages. The teachers have also been following the Grammar method by teaching through the syntactical rules. Here, a student learns the written form of language with ease, but again he lacks in the spoken word. Some other innovative and creative methods involve use of more than one language i.e. explanation in L1 and activities based on that explanation using L2. Some modules pay emphasis on the direct method of language teaching. This method has no dependence on the L1. It completely secludes the native language and teaches the students to think and act in the L2 i.e. English. But it is not as facile as it seems to be.

Now, the teacher is left in a vacillating situation; whether to go with one method or the other. He/she has to find some middle path where he/she can make the student proficient in both the written and spoken forms of English.

V. ROLE OF CURRICULUM

One poignant issue that a teacher undergoes is the curriculum design. Particularly in Madhya-Pradesh most of the engineering colleges are affiliated to Rajiv Gandhi Technical University. This university has included English as a compulsory subject in the syllabus of first and second semesters. In the first semester students learn the four skills of communication i.e. LSRW (Listening, Speaking, Reading and Writing), with equal emphasis on all these skills. In the second semester the syllabus focuses mainly on enhancing the spoken skills. The syllabus tries to target the placement of the students. In order to qualify for a good job and then survive in the corporate world, the student needs to master English language along with good communication skills. In 2015, RGTU has introduced the choice based credit system (CBCS). The new system gives an opportunity to enhance Reading and writing skills. In this audit course (Communication- HU-111) the student is supposed to read literary work and present a review on it. Skills like book analysis and criticism are refined. But, the students hardly seem to get any benefit of the newly designed syllabus. The reasons are many. First of all according to the academic calendar of the university, there are 90 working days in a semester. With all the ups and downs considering the late admissions in private engineering colleges, low attendance at festive seasons, unexpected holidays, loss of teaching days due to Mid-terms etc; the teacher gets limited time to complete the syllabus. Over all that the disparity in the level of intelligence of the students makes his job Herculean. The tasks are many: completing the exam oriented syllabus; practical teaching of the communication skills; developing sound knowledge of English language; preparing the student for the corporate world etc. Coupled with these tasks there are the expectations from the teacher. If the institute is owned by a private management, the teacher withstands a lot of pressure from the higher authorities. This pressure includes good result and good performance in the campus drives by the students.

VI. ROLE OF GOVERNMENT BODIES IN TECHNICAL EDUCATION

As compared to the responsibilities, the rights and privileges enjoyed by the teacher, including the salary, appraisal, teaching load, working conditions etc., are minimal. Most of the times the teachers are over-burdened with teaching load. Apart from the load of teaching, the teacher is delegated with other clerical jobs as well. The number of students in each class is so high that it hinders the individual approach. Also, the management lacks in providing motivation to the teachers. In engineering institutes the language teacher is always on the margin. He/she is considered inferior as compared to the so-called technical fraternity. The case is same with the norms of technical bodies like AICTE or UGC which has a clear line of discrimination between the Humanities and Applied Sciences, and Technical Departments. The demarcation can be seen in the pattern of the examination paper and valuation as well. Due to these and many such elements, even the students are reluctant to invest their time in the subject of Humanities. This leads to their dependence on Question-Banks, Guides and Made-Easy books. All of these factors combine together and make English teaching all the more fractious.

Barriers and hurdles in the path of an English teacher are manifold, but they can be overcome with conscious and genuine approach. Not one but all will have to take steps in order to make the task of English teaching rewarding and beneficial.

The first remedy is to make the engineering students understand the importance and vitality of the subject. This can be done by various moves. First of all the move should be taken by the higher governing bodies like AICTE, UGC, DTE, RGTU etc. the authorities should give more and more weightage to the subject, in terms of marks and mandatory activities. However, the university(RGTU) has taken some good moves in the form of Language Lab in the curriculum; and increasing the internal marks, but still it has a long way to go. With the continuous decline in the level of the question paper and valuation pattern, students are still not that much aware of the importance of English as they should be. The university should design the syllabus in a manner so that more and more emphasis can be given on development of a 'communicative approach' rather than a mere English learning. This communicative approach mainly concentrates on mutual understanding. Understandable and acceptable usages are more important rather than the perfect version of language. With the world-wide trends in English, this approach has become all the more important. The main aim of the teacher should be to make the student a good communicator rather than merely a good English speaker.

VII. BRIDGING THE GAP

For this implementation the teachers need to be trained with a specific motto. Other than the training, constant motivation is also very vital. This motivation is required from the management, if the institute is a private one; and also from the governing bodies. Some specific norms should be framed relating to increments, promotion etc. The morale of the English teacher should be elevated by both monetary and non-monetary measures so that their place can be shifted from the margin towards the centre.

In order to bridge the gap between technical subjects and the subjects of Humanities & Social Sciences, the definition of technical subjects needs to be re-framed. English is as technical as the other hard-core subjects. Without proper communication, without a global approach all the technical knowledge of a student is futile. This approach needs to be understood by both the students and the management.

Once the lack of motivation is treated amongst the teacher community, the job is half done. However, problem of disparity in the level of students is hard to cope with, yet some efforts on the part of the teacher can prove useful in filling this lacuna. The present pattern of teaching is missing the forest for the trees. This pattern concentrates on the details of English language but, unfortunately, misses the concentration on the overall desired result i.e. development of a mutual communicative approach. To overcome this, the teacher should use some innovative teaching methodologies. The stress should be on practical aspects of communication skills. Role plays, Debates, Group Discussions, Oral Presentations, Object Description, Conversation Practice etc. are some activities on which the teacher should pay attention. Such activities prepare the student for the real life English. Even the theoretical parts like reports and letters can be activity based. The main concern of a teacher should be to mould the students so that they can start 'thinking' in English. Such attempts can help in grabbing the attention and interest of the student along with developing his skills of communication.

VIII.CONCLUSION

The track is very intricate and demanding, but not insurmountable. Both the higher and the lower level; the authorities and the teaching fraternity will have to get the wheels turning. With such mutual efforts the task of English teaching in engineering education can be made halcyon. The requirement is giving it a careful and thoughtful try rather than jumping the gun.

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