CHAPTER 5

Discussions Conclusion and recommendations for Innovation in Course Designing and Testing of English Language in Engineering Colleges

In this chapter the results are compared with the findings and are analyzed according to the research objectives. Based on the results and discussions, the conclusions have been drawn and recommendations are given at the end. The study was initially conceived with these basic objectives in mind:

- To examine the existing CS syllabus currently taught in the engineering colleges of MU and GTU and ascertain how far they meet the students’ communicative needs.
- To identify the academic and professional needs of engineering students in the globalized world in India and Abroad.
- To propose innovations, modifications and revisions in the existing courses and designing an innovative syllabus for Communication Skills and Presentation and Communication Techniques syllabus for engineering students, so that the communication needs of different learner groups are fulfilled.
- To make Engineering and Technology Students need to use English as a library language and they also need other skills like inter-personal and soft skills and also technical writing skills.

The study of Innovation in Course Designing and Testing of English Language in Engineering Colleges revealed that at the outset, the findings indicate the acceptance of the null hypothesis that English is needed as an effective tool to gather information for day to day use in this globalized world by engineers. Training in the effective use of language is necessary in the highly organized career structure that exists today where the kinds of situations requiring communication are becoming more and more complex. Language is used as a tool of communication and handling of any tool requires a certain skill. When we say that someone is a good user of language we mean that he/she is able to use language effectively for all his/her
communicative needs, in all kinds of situations. It cannot be said that all materials and methods labeled as communicative do in fact meet the learners’ needs for communicative language use. What language teachers today need, then, is more than a readymade method of teaching, and appreciation both of language as an expression of self and of the ways in which meanings are created and negotiated. They need to see the learner as a physical, psychological, and intellectual being with needs and interests that extend far beyond the classroom.

The present courses in the engineering colleges do not meet the needs of the learners as demanded by the globalized situation and the proficiency required to sustain in this competitive world. They also do not improve their communicative abilities, and this hinders their progress in sciences as well. In our educational setup English primarily serves the purpose of a library language though one would also want it to play the role of an effective communicative tool. We are sure that almost all want it to play such a role. However, the facts indicate otherwise. The English compulsory courses in the Engineering in GTU and MU have been found wanting on most counts. A look at the question papers seem to suggest that the question sets focus on the testing of reading and writing. This means English is taught for academic purposes, i.e. English required for study purposes in a formal educational system.

The present courses are of a very general nature. They do not address needs or skills required for placements. From the data that we have collected from the students and teachers of Communication Skills in engineering colleges the researcher has found out that learners wish to be taught all the skills in English language and those related to it with special attention on speaking and general proficiency. They say that they feel inadequate in situations if they cannot express themselves through speech, during group discussions and personal interviews. Good oral expression creates a good first impression and it generates/builds confidence. The respondents
feel that they are often (mis)judged by their inability to speak fluently in given situations. And In recent times, there has been talk of ESP courses for specific group of learners. We need to remember, however, that ESP courses run the risk of being over specific. On the other hand, Communication Skills run the risk of being too general. In spite of this most learners find even the most basic tasks in English challenging.

The ESP courses can be successful if and only if the learners have a firm grounding in their basic language skills. The students cannot be totally blamed for their inadequacies in English language. Many of the students that we find today in the English compulsory class started learning English much later as discussed in earlier chapters and compared to students of English medium schools. So there is a vast difference in their language abilities.

When one thinks of the number functions a student has to perform in English, it is without doubt an uphill task for most of the engineers. Moreover, in most homes the atmosphere is not conducive to learning English. Learners can be blamed only on one count- what learners do not do. Though the students realize that English is important for their career, they are not able to motivate themselves to put extra efforts, and give time to study the English course, leave alone doing any extra reading.

The institutions may not be able to provide more time and resources, but in a media-governed world, students cannot complain of not having enough resources. Thus they cannot process any language, for the amount of language they processed is negligible. Here we should remember that our English compulsory classes are mixed ability group, where there is a vast and marked variation in language competencies of the learners. The learners especially the ones who are weak in English find it very difficult to comprehend lectures and the textbooks, which, in most
cases are from literature and being students of engineering and technology they are far removed for these passages.

As there is no text book prescribed for the communication Skills course, the learners resort to the notes given by teachers and also some guides as an alternative. By becoming mentally dependent on such ‘guides’, the learners fail to attempt in following simple procedures like listening in classes, carefully noting down important points, underlining difficult words, phrases, improving vocabulary, dealing with real life situations in jobs etc. They know that they can afford not to listen to the teacher because they have a ‘guide’ which gives them readymade answers to the theory papers designed by CS practitioners.

We do not discount the fact that quite a few learners find the course uninteresting in their first year engineering especially when they have other 7 technical subjects to deal with. They may also find the lecture method quite monotonous, though this seems to be the most easily understood and popular method. The present syllabus is very theoretical in nature. To change this situation what we need to do is, we need to have materials/textbooks that are more learners-centered and has more case studies to deal with along with practicals. This will ensure that the learners process more language, and in doing so, they would get more exposure to the target language. This can only happen if the textbooks are based on activities or tasks.

We believe that the materials should consist of a main course book, which should have technical writing, articles from scientific and technology journals. It should take care of the emotional development of the learners and at the same time develop their personality. Along with the main course book, an activity based workbook can be prescribed which will focus on the essential grammar points and other general and specific language skills.
The data that we collected from the learners and teachers pointed out that more black board work and audio visual aids enhance and accelerate language learning. Audio-visual techniques need to be incorporated in the teaching methodology through CALL and Language Laboratory.

The fact is that all four skills should be given appropriate weighting with appropriate levels of complexity and pace. In the first year we should aim at revising and strengthening the learners’ basic knowledge of language and gradually move towards developing soft skills, interpersonal skills, career skills, and a more specialized course in the second and third year of the four year degree course.

For the success of the programme, the aims and objectives, course content, materials, methodology and evaluation should be interrelated. The aim of the courses seems to be Communication Skills syllabus, but the materials, the methodology and examination do not reflect this.

For the kind of materials that we recommend, we need teachers to act as facilitators. Moreover, the evaluation system should be based on language skills oral and written. The teachers in a given university keeping in mind the aims and objectives, and the level of the students can prepare such course books. By getting the teachers to design textbooks for their students, we can ensure more teacher participation in the curriculum process.

5.1. Syllabus Design and Students’ Communicative Needs

Different studies on the importance on needs analysis in ESP curriculum have already been conducted. The findings of these studies have focused on needs analysis based on either learner analysis or task analysis. The learner and the task become the two most critical factors while designing questionnaires and interviews for needs analysis survey, as per these researchers. The present study additionally focuses on the goals, contents and resources and materials provided in
the existing syllabus and puts emphasis on the communicative needs in a learner-centered curriculum to enable students for real life challenges in language contexts.

Lack of Communication Skills and lack of English language proficiency has been a major concern in many studies conducted. The need of writing and reading skills has been emphasized in many studies too. With globalization, the need to develop oral and written communication skills and other work-specific communication skills such as informal discussions, public speeches and interviews etc. have been the major focus for the engineers seeking jobs and have emphasized the inseparable relationship of reading and writing skills. A study by Dlaska (1999) focuses on the currently practiced course of engineering students to examine how far the teaching methods of the four skills (LSRW) cater to the communicative needs of the engineering students. There is definitely an inseparable relationship of reading and writing skills required by engineers. The need of developing effective communication skills in students as that has been desired by organizations conducting campus interviews. They suggest that engineering courses should incorporate oral and written communication skills practices throughout the curriculum. The studies by Gaur (2008) and Rayan (2008) propose to teach communication skills by an interdisciplinary approach to engineering students by borrowing from management topics and including commutainment activities.

5.2. Students’ Academic Needs and Professional Needs in the Engineering Studies Context

Findings of different studies based on students’ academic needs in a language learning context, revealed that the students’ frequency or ability of using the English language was low, irrespective of the types of workplace or levels of study. Many students face or feel fear or anxiety due to lack of proficiency in target language. Learner autonomy and effective learning strategies to optimize language learning had been conducted especially in task based learning to cater to different academic needs.

Nunan (1988a) states that for a needs analysis, information will need to be collected, not only on why learners want to learn the target language, but also about such things as societal expectations and constraints and resources available for implementing the syllabus. The present study models on this and likewise considers the previous level of English language competence and socio-cultural backgrounds of students. Fulfillment of various academic needs in language learning context, such as guidance and motivation, learner autonomy, mode of instruction, previous
language learning background etc. are also examined from students views.

Different studies related to the study of professional needs of language learners limit their findings to the need of students’ exposure to various genres that leads to expanding their vocabulary for professional courses. Other studies have suggested the need of ESP practitioners to collaborate with subject matter experts from specific professional areas such as business or engineering related subjects to better execute the communication tasks expected from students.

The language related needs of technical students of India conducted in 1990, by the Language Cell Unit, Indian Institute of Technology (IIT), Kharagpur, has put their main focus on technical communication and technical writing. The need of technical communication skills, especially technical writing skills is stressed. Lack of appropriate soft-skills for workplace needs create problems as the text books do not satisfy the students’ needs. This study, in addition to the above factors stresses the need of integrating technology in doing tasks, projects and assignments so that students get exposure to communication skills as in professional context which would prepare them for workplace needs. This study thus focuses on the technological needs of digital age learners in language learning context. The need of technology integrated language learning is stressed for digital age language learners.

Different aspects of teachers’ needs in language teaching context for engineering students and innovations in the teaching-learning process are explored. The studies conducted on how teachers conduct examinations and assessment has also been considered (Wellington, 2002; West, 2002). The present study, along with focusing on the teachers’ needs from all these angles, further researches on methodologies and procedures to effectively meet the challenges teachers face in mixed-ability classes and large classes. Above all it considers the teachers’ needs to keep them updated with teaching methodologies, especially in needs analysis techniques, curriculum design and assessment patterns. They should thereby gain proficiency in designing tasks to enrich students with different life skills. This would essentially help them to meet the demands of language learners in the digital era. In addition to above factors, the learners’ needs, from teachers’ view points and also teachers’ needs to make the language teaching a positive experience has also been explored.

This study thus yielded certain results for a proper assessment of the Communication Skills syllabi currently taught at the undergraduate engineering programs of Gujarat and Maharashtra.
It also attempts to find out how language skills along with life-skills can be learnt effectively by engineering students for proper utilization by them in real life situations.

On the basis of the first-hand teaching experience gained by working closely with engineering students from several disciplines in different engineering colleges of Orissa for five years, and by conducting field study for a year, this researcher could contextualize the following results from this study. The discussions are based on the findings related to the information collected from both quantitative and qualitative data. It has been collected from the questionnaire survey conducted among engineering college students and teachers of different engineering colleges of Mumbai University and Gujarat University. The findings from the data are discussed under few research questions. The notable findings from the students’ and teachers’ questionnaires that support each research question are already discussed in chapter 4 with the outcome below. Accordingly recommendations on the basis of the shortcomings to improve the teaching of EST in Orissa are discussed. The variables for discussion are (1) Syllabus design and related issues and (2) Students’ needs - academic and professional.

5.3. Discussion on the Students’ Questionnaire:

5.3.1. Students’ Views on the First Research Question

*Which aspects of the present Communication Skills course (goals, content, materials used, technology involved etc) in engineering colleges of MU and GTU need to be modified to meet the engineering students communicative needs to apply it corporate situations?*

5.3.1.1. The answers to the Syllabus Design and Students’ Communicative Needs are

The needs related to modification of the existing syllabus are skills related to life skills development, Interactive sessions, Personality development sessions and Learner autonomy. The supportive statements related to the syllabus design and related issues are discussed below:

- Team activities are to be promoted to inculcate team spirit and leadership qualities.
- Different task-based activities for skills development should be conducted. This will help tackle any adverse situation in future.
• Training in decision-making skills, problem-solving abilities, linguistic proficiency, fluency in thinking and expressing etc. are essential to engineers for success.

• The requirement of interactive sessions like role-plays, group discussions etc. has been stressed by most of the respondents. The need for proper interaction between teachers and students should be given priority.

• Activities in CS classes should be as interesting and as challenging as playing games.

• Theory classes should be replaced with interactive lab classes.

• English should be taught by taking learners needs into consideration.

• Students’ opinions regarding syllabus design are also to be taken into account. These opinions of students indicate their preference for interactive classes full of activities rather than passive listening as mute spectators to text-based lecturing.

5.3.1.2. Teaching through Computer Assisted Language Learning (CALL).

• In many cases equipment available are not properly used for lack of trained personnel or lack of interest.

• Audio-visual aids leave a more lasting impression on learners than written documents

• Use of modern technology for teaching can motivate students.

• Digital language labs with internet facilities are essential for increasing language skills.

5.3.2. Students’ Views on the Second Research Question

*What are the academic needs and professional needs of the engineering students at different engineering colleges of MU and GTU?*

5.3.2.1. The answer to the above questions regarding Academic Needs is as below:

• Students needed proper guidance to enhance English grammar and vocabulary.

• Teachers need to consider the requirements of learners coming from different language backgrounds.
• Students must be assigned self-study articles and reading materials should be available in plenty.
• Teaching should be student-oriented and lectures should be interactive and intelligible.
• Individual attention in communicating in classroom situations to discuss answers/solutions properly has been stressed.
• Personality Development Sessions through soft skills
• CS courses should aim at developing self-esteem and self-confidence level.
• Good reading materials are to be provided to the students.
• There is a requirement of qualified and experienced teachers who can motivate the students.
• Feedback is necessary to improve the acquisition of language skills.

In professional areas the needs of the students are as follow:

• Activities to improve English fluency should be imparted to develop confidence in communicating effectively in real life situations.

• English classes must include the technical aspects of language learning (vocabulary, documentation, technical vocabulary) along with guidance in developing one’s personality, for better job prospects.

• English course should concentrate on imparting business English training to handle business communication in corporate world.

• Group discussions on current affairs will enhance their speaking skills and leadership qualities. More oral tests are to be conducted.

• Practical application of language skills is needed through role-plays, speeches, situational speeches

• Individual competitions like debate; elocution etc. should be conducted in the classes.
• Soft-skills training should be imparted in all the 8 semesters.

5.3.3. Students’ Views on the Third Research Question

Does the present Communication syllabus in the engineering colleges meet students’ academic and professional needs?

5.3.3.1. The students’ opinions where their academic and professional needs are not met are discussed below:

• Group/individual presentations are to be arranged in the class as every student does not get opportunity to take part in the technical paper presentations.

• Students should get choices to do projects and assignments.

• Co-operation between teachers and students has been stressed.

• A task-based approach with variety of options in doing assignments should be given as students have different language learning backgrounds.

• Reading materials of students’ choice should be made available.

• Remedial teaching for below-average students should be added in the academic calendar.

• Ability to deal with future professional situations is to be built up.

• Need of ample practice in designing documents on computers including format-designing principles, standardization, etc.

• Technical English knowledge is required for interpreting data, draft memos etc.

• Communication with business professionals needed for practical exposure.

• In lab sessions more Group discussions, record writing, summarizing, and graphical data analysis are to be practiced.

• Technical English vocabulary needs to be practiced in oral communication too.

5.4. Discussion on the Teachers’ Questionnaire:

Which aspects of the present English language course (goals, content, materials used,
technology involved etc.) in engineering colleges of Indian state of Gujarat and Maharashtra need to be modified to meet the engineering students communicative needs to apply it in real life situations?

5.4.1. Teachers’ Views on the First Research Question

- Interactive sessions for developing communication skills and exposure to job related skills
- Practice in grammar and basic LSRW skills
- Usage of relevant software for developing language skills Internet integrated language activities.

5.4.2. Teachers’ Views on the Second Research Question

What are the academic needs and professional needs of the engineering students at different engineering colleges in MU and GTU?

- Teaching methodologies (individual attention, challenges of mixed ability classes)
- Teaching resources (identifying learning styles, using relevant software etc.
- Professional development programs to train engineering students (training in latest visual aids, designing activities for the language labs, integrating technology etc.

5.4.3. Teachers’ Views on the Third Research Question

Does the English language syllabus in the engineering colleges meet students’ academic and professional needs?

The collated data thus identifies the academic and professional needs that are not being met in the language learning context as

- Provision for latest ICT integrated learning resources
- Training in interview skills
• Exposure in job related skills
• Practice in developing soft skills
• Practice in group discussions etc
• Technical English skills especially writing skills using latest technology

5.5. Conclusion

The findings of the study indicate that engineering students need not only linguistic competence in English, but also certain life skills and technical skills related to language learning that need to be included into the syllabus to handle real-life situations on completion of their engineering course. This study thus probed the fulfillment of ELT related goals with reference to the context of engineering students. The existing syllabus of Communication Skills course fulfils the goals and objectives only partially. There is a need to improve the syllabus contents so as to make our students ready for the corporate world.

From the ongoing review it is reflected that ELT and ESP are very vital areas of upgrading technocrats especially engineers to their effective human resource to disseminate technology for its effective use and implementation. The work of scholars like Nunan D. 1991, and Cunningsworth 1995, emphasized the need to bridge the gap between the English language and Technology in terms of communication. The need for communicative language for engineers was although emphasized rightly, the academicians failed to carry the same for the spread of Science and Technology and failed to make technocrats. However brilliant they were they had no means to express the knowledge they earned. In present days of globalization these aspects of knowledge versus Communication Skills with respect to accurate, precise, free from grammatical errors and having highest potential of expressing and communicating technology cannot be compromised. The workshops, conferences, global summits for business and transfer of technologies between countries of official level is required to be effective. It is worthwhile to note, the English non speaking developed countries have adopted these skills of ELT and CS and is best seen in terms of progress in production and marketing exhibited by Europeans and now even by Chinese. Lately, China has been able to push better goods of engineering and technology in the global market which would not have been possible if they were not able to experience and validate the output. One must believe the engineering education in English language is an
ultimate cross section and strongest parameter of success of technology to the extent that it is a singular factor to boost global economy.

As we are aware the global economy was very vulnerable and it is technology that is the very basis to control the growth and recession of economy and thus technology stands as the regulatory factor. In this context as already suggested in chapter 2 it is necessary to gather information and views on target needs of engineering students from various stakeholders to prepare an innovative model of building curriculum. If we observe retrospectively we notice that the engineers have failed to get employment and even failed to achieve progression due to lack of Communication Skills. Therefore we really need to explore the innovative methods through research methodology to eliminate this threat of unemployment to engineers in spite of their well-equipped knowledge and skills of engineering and technology. The problem becomes more complicated in a multilingual country where education is imparted through varied and different media and thus getting an access to education even of the lowest quality and standard becomes more complicated in a poor and developing country like India. Over 90% of children suffer as do not get the basic knowledge of English and develop fear psychosis of going to school where English is a compulsory language. Even with an optional subject in many states there is a belief to some extent that everyone has to conglomerate and reach to learning Engineering and Technology through English medium as such countries have failed to produce syllabi of engineering in their own languages. Engineering education is readily available, so literature writings, designing of instruments, catalogues, publications, and patents everything is in English language. Moreover country like India had a colonial empire over two centuries thus they completely mesmerized the learning system in India and reduced the understandability of understanding and implementing the technology. Therefore under these circumstances we need to have Elite engineers having the ability to outreach the technology to every caste and community, no matter they do not know the ABC of English language. For example take the case of words like tractor, car, television, heavy machinery, medical equipment, appliances, electrical and electronic gadgets, the technocrats needs to be extra ordinary to make them tech savvy or in other words user friendly. This can be done by engineering student who is a master at the back of the development of the machinery and thus his expertise in communications skills and English language can do the needful.
The researcher has found the situation in Gujarat and Maharashtra as equally complicated in the chosen areas of studies. In these states people of each state speak hundreds of dialects of known vernacular languages. Universities therefore need to reflect at these problems while making the syllabi for the engineering graduates to the extent that they must have modules which will translate and communicate the technology and skills. We shall be very close to the relevant machines the vernacular words which are more prevalent in to their day to day usage of language. Examples like plate, visor, tube, gear, piston, pressure, engine, so that an engineering graduate coming to these universities for studies across the country will find it easy in the prevailing word of technology being practiced in India. This will also facilitate integrating the skills and technology for implementation and marketing.

In order to evaluate and examine the current practices of making syllabi for communication skills and Presentation and Communication Techniques the researcher is of the opinion that innovations are required in the field of preparing the syllabi. The cross section of over 26 parameters and evaluation of each one gives an insight of designing an innovative model. It is inferred that the communicative approach to ELT is recognized as the predominant factor. This implies to the teaching of language as skills and means of communication. In communicative context it should be based on authentic materials and accordingly design the modules. It is observed that majority of English classes look dry and are non-communicative in nature. The teachings lack communicative activities like discussions, role plays, interviews, presentations, phonetics and accents, vocabulary, one word substitutes, synonyms, comprehending technical passages etc. If the syllabi emphasizes on these aspects through soft skills, developing intelligent quotient, to develop ability of expression and communication, then some of these drawbacks can be overcome, and thus it will make the engineers ready for the corporate world, as this is what is missing in the syllabus of both the universities.

It is further observed that communicating with students in English language by the teachers is also lacking in Maharashtra and Gujarat as the students and teachers are more comfortable communicating in the local language.

The output of questionnaires indicates none of the important skills that is speaking, reading, writing, listening, soft skills, problem solving, critical thinking, do not meet the expectations of the students while studying the syllabi. The weightage given to them is in the order of speaking
Therefore 100% students wants speaking skill as most important to listening than soft skills etc. whereas lowest that is 53% students are ready to compromise on grammar. No syllabi fulfills these criteria. The views expressed by professional engineers have endorsed their opinion and have given important suggestions for making curricula of these subjects for learning engineers. The emphasis is on providing a language laboratory and have strongly recommended to take continuous suggestions from students in the form of feedback. The syllabi of both the universities lack the speaking skills in their curricula. There is also a lack of writing routine letters and taking up business correspondence fully. Thus students fail to communicate effectively in their work place thus they are unable to establish good communication for their personal progression and also for change in placements.

Training through workshops and courses is a very important parameter which should be adopted by institutions. The focus is only on the examinations and the scores of the students. There is no element of management of taking reviews and revivals and of constantly updating the modules.

The questionnaire distributed to HR personnel clearly reveals that there is lack of logical skills, personality development skills, expression of positive attitude and in the syllabi resulting in to lack of confidence among students.

The treatment given to a subject like communication skills and presentation and communication techniques is just taken as a subject of arts stream and students during their B.E. do not realize the importance of developing these skills. For them technical subjects always take a priority compared to ELT as they are been continuously told by the engineering faculty that it is the technical skills that matters compared to communication skills.

Looking at the syllabi content the converse is proved as per the weightage of these skills is given in terms of lectures in these areas. The Communication Skills which is required to be highest by every student have been given weightage of 18 hours for theory and 18 hours for technique which is about 50%. This needs to be enhanced or reorganized in terms of methodology. The PCT course evaluation indicates that 56% students are not satisfied with the course content. The understanding of over 40% students that English shall not be required for the future job is very detrimental in achieving excellence in PCT and they would obviously fail to escalate the business for which Presentation and Communication Techniques are the most important in
meetings and conferences for promoting business. The senior officers / managers hardly get 5 to 10 minutes for presentation of a product in an international meet. Therefore one has to express in volumes in minimum time and contents. PCT is required not only to improve the students but they have to be counselled upon, that it is more important for higher positions in the industry.

It is surprising to know the other weaknesses of students thinking that writing reports watching videos presentations and project report writing have no value. This is an absolute mis understanding of students which leads to non-development of these skills. Therefore students are to be rigorously exposed to practices on these skills. It is often known that skilled persons like engineers knows the subject well but fails to write a good report and also fails on writing project report on expansion of industry.

• One of the important goals of the Communication Skills course is to equip the students with proper English for effective usage in everyday situations and also to manage future workplace situations. The analysis of the data collected from students reveal that this goal has been achieved only partially and the teaching and learning practices are to be reoriented to improve the outcome.

• The course on PCT prescribed for the fourth semester students is quite ambitious in that it aims at exposing the students to actual work-place environment. It consists of formal and informal communication training, exposure to various soft-skills creative activities, project reports, report writing etc. But the teachers here mainly focus on the theory part of it. The activities have not been specified in the syllabus, many teachers prepare their own teaching materials to attain these goals.

• Needs assessment of the students with regard to their schooling background, previous language competency, language learning capability etc. should be taken up before the beginning of the course through a Basic English language test. Needs analysis through written questionnaires or formal discussions may be conducted and the syllabus modified to make it flexible to suit the needs of the learners. Ultimately, the teachers should design the curriculum and for weak students offer flexibility of their course or conduct special English language teaching courses in vacation.
• The absence of linguistic competency assessment before the beginning of a language training program disadvantages students who have no exposure to basic language skills. The basic language skills such as listening, speaking, reading and writing should be practiced in classrooms and teachers have to provide personal attention in developing these skills in a systematic way (Krashen, 1992) This can be attempted in the lab classes and vacation time where time constraints do not stand in the way. Therefore, appropriate measures from this stand point should be taken into consideration.

• Choice in doing assignments should be provided to make the learners autonomous (Nunan, 1995). Students need guidance and constructive feedback so that they could evaluate the activities they involve in, by themselves. This can be done through self-evaluation or peer evaluation. Teachers can adopt measures as per available classroom conditions to evaluate the activities and finalize the results. Teachers should adopt an ongoing assessment strategy. This step could increase the motivational levels of the students to achieve the targeted goals of learning.

• The findings reveal that students are in urgent need of soft-skills training for personality development, training in interview-skills, intra and interpersonal communication etc. This would help them to develop their self-esteem and attend job interviews and communication tasks related to project training. English teachers can take the lead to manage these centers. “The teachers should learn to be facilitators, not instructors and help learners take responsibility for their own learning.” (Larsen and Freeman, 2000, p.53). This shall suit different learning needs of students if the teachers follow interactive, supportive and co-operative teaching techniques.

• The teachers’ proficiency in handling such sessions would highly rely on the orientation they receive from experts. This would improve the employability and humanistic faculties of future engineers. Teachers need to practice differentiated instruction to suit varying learning styles of students.

• The engineering colleges of Mumbai University and Gujarat Technical University follow the traditional mode of assessment that conducts written examinations during each
semester at the college level and at the end of each semester by the University. The assessment of tasks and activities, supposed to be taking place in the lab classes, which carry half of the credits in English subject, suffers from several frailties due to the inbuilt failures of the prevailing assessment mechanism. As no feedback is taken systematically, corrective methods of teaching are not employed often and thereby individual attention is hampered.

- The need for individual attention and learner autonomy has been rightly stressed by students, especially, final year students during the survey. Learner autonomy, which is the key to cater to a mixed-ability class (Tarone & Yule, 1989), is not being addressed now. Most students do not get proper guidance to complete the assignments given to them in the lab classes nor get adequate feedback as a result of which they are unable to rectify the errors.

- The teacher can create positive learning experiences once the teacher is trained to select suitable materials and design lessons and worksheets as per the needs of the learners. Teachers should promote students to reflect on their strengths and weaknesses. The teacher can design group tasks and conduct peer assessment and hence use appropriate learning resources on these lines.

- Communication Skills should include tasks that involve technology related activities like e-mails, chats, online discussions, power point presentations, video conferencing, and use of internet. The need of acquisition of good communication skills is international in nature. Therefore, the present CS course in engineering syllabus needs to develop a set of generic skills along with technical skills.

### 5.6. Recommendations

On the basis of the recent research findings, the researcher recommends to, ESP teachers, curriculum designers, college administrators and policy makers:

- The researcher recommends that the English syllabus include tasks that reinforce the achievement of generic skills/life skills like leadership skills, teamwork, critical thinking
and problem-solving abilities along with effective communication skills. To develop professional competence the awareness of social and cultural aspects related to the engineers’ workplace can be exercised in the classroom by selecting authentic materials. The teachers of English can take the lead in organizing such interactive sessions and work on it successfully in follow-up sessions. Such exercises are useful to strengthen the communicative competence of students. When they face real life situations in future, they would be able to handle it with ease.

- If the students are provided facilities and guidance in developing technical English skills with proper orientation and practice they can develop a broad perspective to face future workplace needs. Exposure to corporate culture, interaction with experts from business and industry, management experts, academicians specializing in various fields, scientists and technologists can empower engineering students to be better communicators in their workplaces. The teachers of English can take the lead in organizing such interactive sessions and work on it successfully and conduct follow-up sessions if necessary.

- The researcher recommends the CS teachers to give ample practice to students in language laboratory thorough BBC English software and also to give power point presentations, report writing, project report preparation etc. individually and in groups. Software relating to corporate etiquettes, communication, documentation, presentations, interview sessions, or selected movies with related themes etc. should be made available in the language laboratories and students should be able to access it in their own time.

- Group discussions on different facets of corporate culture, current affairs, technical topics, debates, elocutions, extempore talks relating to corporate/business topics, slogan/poster writing competitions, write ups for commercial advertisements, simulated Board Meetings, writing proposals, Business communication etc. can be organized by students so that they will be in touch with corporate environment. These activities would be of help in promoting oral communication and workplace communication skills.

- The researcher recommends a continuous evaluation system that gives scope for
improvement. In engineering context, portfolios or e-portfolios of assignments conducted need to be maintained. The fairness of the assessment can be maintained by reducing the number of questions on the assessment, making the feedback process simpler.

- Professional development of the teachers of English is one of the most neglected aspects in engineering colleges. There is the need to establish a Resource Centre for imparting training in language teaching by integrating technology. Teachers need to be trained in syllabus design, material production and formative assessment systems in Communicative and Business English aspects so that they can apply these in classrooms. Regular orientations for teachers of CS should be organized at the university level.

5.7. Formation of an Innovative Model Syllabus in Communication Skills for Engineering students:

The researcher has here tried to present and introduce those influential types of syllabus which are feasible in the domain of teaching English Language to engineering students through ESL/ESP and provides a rationale for the integration of these courses as well. In the context of engineering and technology students, the selection of Communication Skills syllabus requires a deep understanding, a comprehensive knowledge of various syllabus designs and a mature insight into the issue of the type of syllabus which is indispensable to design, so that it could fulfill all the requirements of the learners.

There are two major types of syllabuses:

1. Product-oriented syllabus


A good and valid syllabus covers more or less all aspects of both these types, therefore, proper and appropriate implementation of syllabus in language teaching is expected. Without proper implementation of syllabus, on the one hand, desired objectives will be hard to obtain and on the other hand students will suffer from a lack of appropriate syllabus which could fulfill their immediate pedagogical requirements and sharpen their abilities in different areas of language. In
this perspective, the characteristics of each syllabus are discussed in a nutshell. All these syllabuses will prove beneficial if carefully implemented.

1. Product-Oriented Syllabus:

Product-oriented syllabus focuses on what the learners will know as a result at the end of the teaching learning process. The grammatical, situational and notional-functional are the examples of product-oriented syllabus.

a. Grammatical:

This type of syllabus is designed when the purpose is to teach the systematic development of grammatical structures. Learners are exposed to these structures step by step and it is expected that they will enhance their grammar collection by memorizing different grammar rules. The internalization of these rules is considered a prerequisite to grasp the technicalities of a language.

b. Situational:

The primary purpose of this syllabus is to teach the language that occurs in real-life situations. Here, the emphasis is on the learner, who will actively participate in different situations where Communication Skills is being practiced. Examples of situations include, seeing the doctor, making an appointment, meeting people at the party, buying clothes and so on. One advantage of the situational approach is that motivation will be heightened, since it is learning-centered rather than subject-centered.

c. Notional-Functional:

A notional-functional syllabus is a practical way of organizing language learning syllabus, rather than an approach or method to teach instructions of notions and functions. In this design, a ‘notion’ is a particular context in which people communicate. A ‘function’ is a specific purpose in a given context. For example, the notion of shopping requires numerous language functions, such as asking about prices or features of a product and bargaining. An important point regarding notional-functional syllabus is that the needs of the students have to be analyzed and explored by different types of interaction and communication. Hence, needs analysis is central to design such syllabuses.
2. Process-Oriented Syllabus:

Process-oriented syllabus focuses on the pedagogical processes leading to the language outcomes. The task-based, skill-based and content-based types of syllabus are included in it.

a. Task-Based Syllabus:

This syllabus is designed when the purpose is to complete some complex and meaningful tasks. Even though, the primary purpose is to complete tasks, however, language competence is developed through the process of performing of the task. The language learnt comes out of the linguistic demands of the activity. Learners perform various tasks together in a cooperative environment. Task-based syllabus promotes and encourages collaborative learning. Since language learning is considered subordinate to task performance, therefore, language teaching also occurs as the need arises during the performance of the particular task.

b. Skill-Based Syllabus:

The purpose of this syllabus is to teach some specific skills that are considered necessary or useful in using a language. Skill-based syllabus focuses on skills and gradual development of skills gives learners the confidence. This syllabus must be designed and implemented keeping in mind the learners’ cognitive levels. Skill-based syllabus group linguistic competencies (pronunciation, grammar, vocabulary and discourse) together into generalized types of behavior, such as listening to the spoken language for the main idea, writing-well formed paragraphs, specific purpose writing and so on.

c. Content-Based Syllabus:

This syllabus is designed when the purpose is to teach some content or information in a language that students are also learning. The students are simultaneously the language students and the students of whatever content is being taught. In this type of syllabus, the language is enhanced through different contents and/or in the context of various types of information. Although the subject matter is of primary and vital importance, language learning occurs concurrently with content learning.
d. The Evaluation of syllabus:

Here the researcher has examined the currents running through syllabus design and to highlight the issues relevant to teachers considering creating their own curriculum with specific reference introducing an innovative method. It will hopefully also help instructors better evaluate their own programs and course books. It is therefore concerned with linguistic theory and theories of language learning and how they are applied to the classroom.

e. Learner-Led Syllabuses

Here the emphasis lies with the learner, who it is hoped will be involved in the implementation of the syllabus design as far as that is practically possible. By being fully aware of the course they are studying it is believed that their interest and motivation will increase, coupled with the positive effect of nurturing the skills required to learn.

f. The Proportional Approach

It consists of a number of elements with theme playing a linking role through the units. This theme is designated by the learners. It is expected initially that form will be of central value, but later, the focus will veer towards interactional components. Clearly, there is a vast amount of material to disseminate when considering syllabus design. The numerous approaches touched on here all offer valuable insights into creating a language programme. It is wise to adopt an eclectic approach, taking what is useful from each theory and trusting also the evidence of one’s own experience as a teacher. Thus, to what extent has an integration of the various approaches that has taken place? Does the syllabus specification include all aspects? If yes, how is priority established? These questions must also form part of the criteria when designing or assessing the syllabus.

5.8. Engineering and Technological needs:

Engineering and Technological graduates are expected to be good in interpersonal communication skills, Presentation skills, convincing skills, and organizational etiquettes. Here, researcher would like to emphasize upon understanding technical writing, technical speech, and writing technical articles or letters. Those who are planning to go for post graduation programmes (M.TECH, M.S, M.B.A) need to write examinations. All these examinations
contain general English. In fact, during the engineering study itself, the Communication Skills teacher and CS and PCT syllabus should try to create a foundation for career based students. At the same time, the entire selection process is highly dependent on aptitude test (Group discussion and Personal Interview). So preparing students for live group discussion and personal interview is one of the major responsibilities of the Communications Skills teachers and form the syllabus for the same accordingly. Preparing students for résumé writing and application writing is equally essential. In short, the needs of Engineering and Technology graduates are as follows:

a. Sound Vocabulary

b. Apt Reading Comprehension Skills

c. Verbal logic

d. Writing Skills

e. General awareness

f. Listening Skills

g. Organizational skills

The need of Communication Skills course is to come out with all the definitions like what is communication, types of communication, and prepare a sound syllabus which can motivate students for a better career.

5.9. Challenges of Communication Skills Experts and the Engineering Students learning the course:

As far as need of the CS is concerned it is multi dimensional. It is not only preparing a syllabus but simultaneously preparing them for the challenging career they are going to face in the near future. However the entire process includes training of teachers. Teachers are the backbone of this entire teaching-learning process. Unless they take up entire CS as an essential subject for engineers, it would be a Herculean task to translate it into the desired objective for Engineering and Technology graduates. Teachers need to do research and development. They should move towards finding out changes and updated methods of examinations held in the recent past. Accordingly they should prepare their course and conduct examinations accordingly. As we

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know learning language is not a matter of a year. In a country like India as it our second language it takes many years. For an engineer to me marketable it takes at least three years as said by students and the Ex students to whom the questionnaire was given. Here, students start appearing in the above mentioned examinations from the first semester with Communication Skills as a course. It means if we include another 3 years of advanced Communication Skills as career development course, or as Mumbai University has Presentation and Communication Skills course as a part of preparation, we would be able to help them in making an appropriate career. As we know our teachers they belong to arts stream or general stream. The lecturers or assistant professors who join for CS teachers in these engineering colleges are either Masters in English Literature or Masters in Language with Literature components. Therefore, specific training programmes for teachers are essential.

5.10. Model syllabus preparation:

In an effort to do a detailed analysis of the development of an innovative model of CS and PCT curriculum for particular target groups and to ensure that it is flexible and responsive to the changes in engineering education criteria and professional demands, the following methodology was be implemented:

- Review of relevant literature and publications concerning English and communication studies, and existing courses in ESP:
- Review of books, journals and conference publications;
- Review of relevant documents;
- Internet searches, etc.

This will definitely provide further endorsements about the importance of Communication Skills for highly qualified 21st Century engineers and give the possibility to identify key activities required in engineering fields. It will provide the ground to carry out comprehensive needs analyses in order to determine the appropriate content for Communication Skills curriculum, which is designed to meet the specific needs of learners.

The thorough analyses and evaluation of the present status of CS curricula has helped to reflect on the range of possible models, adopt successful practice, learn about the challenges and thereby develop a *hybrid* curriculum that is appropriate for improving the communication skills
of engineering students in developing countries. Engineering education has the responsibility to prepare future engineers to be able to practice their profession efficiently. So the crucial objective to enhance communication and soft skills is required in the practical aspect of engineering. In other words, it should be considered as important as any other subject matter in engineering and technology courses. CS should be based on a multidisciplinary or integrative approach. Therefore, it is a complex task to combine the professionalism and experience of engineering, language, and Communication Skills. The application of CS and English Language Teaching in engineering education, especially its functions and features, requires comprehensive research to be carried out that involves the analyses of engineering and technology courses. This should help to determine the appropriate content for CS and English Language curriculum that is especially tailored for engineering and technology courses. Moreover, such analyses should be helpful in defining the most effective teaching and learning techniques, including the implementation of information and communication technologies. The best response to the educational needs for English and communication studies in engineering and technology courses would be to design of a well-sequenced curriculum, (as opposed to the range of existing CS teaching models) appropriate for improving the communication skills of engineering students. However, until about five years ago, the syllabus followed a structural, grammar-based approach, with topics falling within the scope of what is usually described as Basic English, i.e., no subject-specific materials were used. This approach had a negative effect on students’ motivation towards English. To begin with, all our students have a scientific background and usually consider themselves as “very bad at foreign languages.” Their past experience as language learners were unsuccessful in most cases and this created a biased attitude towards the subject, which neither the content nor the methodology of the old syllabus helped to dispel. Low motivation of students, shown by a high level of absenteeism and occasional outbursts of negative comments, led to a re-evaluation of the syllabus. Some steps were taken to find out about our students’ target needs, and an effort to confer some face validity was carried out by including thematic units. Although this incipient new syllabus managed, at least to some extent, to boost students’ motivation, but the changes were mainly cosmetic. It seems that neither appropriateness of topic according to specialization nor a close interpretation of data yielded by an analysis of the target situation necessarily guaranteed students’ motivation, or, for that matter, effective learning.
5.10.1. Lateral Approaches

As I have mentioned above, the main criterion for selecting materials for the Communication skills is appropriateness of topic. But somewhere along the arduous process of collecting bits and pieces from a large number of sources (both authentic materials and textbooks), methodological considerations often have been relegated to a secondary position. The potential of the materials as tools for learning and as generators of lively, intellectually engaging activities has been overshadowed by our concern to give English equal standing with the other subjects in the curriculum; a goal we assumed could only be achieved by overloading the syllabus with subject-specific, target-related information. Our main misconception, as Swales neatly puts it, was “We thought much of materials, less of methodology, and little of expectations”. (1984:15).

5.10.2 Subject knowledge

It is now widely accepted that the CS teachers should not be expected to be an expert in all necessity of the English Language & Communication Skills in Engineering Technology. However, it has also been said that it falls within our professional requirements to be at least interested in the subject, either for purely intellectual or more practical reasons. What normally happens in a teaching situation, as common in many CS situations, is that teachers of English in Communication skills have amassed a considerable amount of information about the students’ specialty. There is no reason why this knowledge should not be put to use in the English classroom; in fact, our students usually appreciate it as a sign of both our interest in their subject and our recognition of the relevance of their field of study. However, it is now understood that although our specific knowledge may be used to advantage, it should be handled carefully in the CS classroom. To begin with, the ESP teacher should resist the temptation to act as an expert on the subject, for the common-sense reason that his/her knowledge, so often picked up in a superficial and piecemeal way, may result in the loss of face and possibly of confidence on the part of the students. Secondly, the teacher should not be lured into using highly specialized materials, whose language and content s/he can hardly grasp, let alone be conversant with.

5.10.3. Materials for Communication skills

At this point this work will suggest a sample of the kind of teaching materials that can be used in Communication skills, which may clearly illustrate the shortcomings referred to with regard to
methodology. It will also try to show alternative ways to exploit the material, bearing in mind students’ wants and learning needs. The suggestions for tasks are not intended as a set of procedure for all the materials used in different situations. On the contrary, flexibility should be the key word for classroom activities, and teaching materials should (gracefully) allow for changes in order to accommodate different circumstances. In this research work, model Syllabus formation in CS would focus on basics. Hence, preparing students for the following challenging career (short term and long term), options are going to meet the needs of the engineering graduates:

1. “Graduate Aptitude Test for Engineers (GATE),
2. Union Public Service Commission (U.P.S.C),
3. Gujarat Public Service Commission(G.P.S.C.),
4. Graduate Record Examination (GRE),
5. Graduate Management Aptitude Test (GMAT),
6. Management Admission Tests (CAT, XAT, MAT, SNAP), etc.
7. University Entry Scheme (UES), Combined Defense Services (CDS),
8. Public Sector units (BHEL, TELCO, DRDO etc) and
9. Campus Recruitment”
10. Test of English as a foreign language (TOEFL)

After analyzing the course structure of all competitive examinations listed above, the following common points are observed in these examinations:

1. Analogy
2. Reading Comprehension
3. Paragraph formation
4. Paragraph completion
5. Homonyms and Homophones based alternatives

6. Fill in the blanks (grammar/wordlist based)

7. Critical Reasoning

8. Group Discussion

9. Personal Interview

10. Presentation skills

11. Psychometrics skills

12. Emotional quotient

13. Corporate etiquettes

14. Letter Writing skills

15. Technical writing

Nowadays most of the Engineering & Technology graduates start preparation for competitive examinations in the VIth semester itself. And normally English language & Communication Skills at Engineering & Technology curriculum is offered at either the first level or the second level. This indicates that a rigorous courseware and a systematic teaching approach in EL&CS can make a noteworthy difference. Here, all training modules of verbal section and grooming section begin with vocabulary sessions. Unless students have sufficient word power and an approach to learn new words, they can’t improve their Communication Skills. Therefore, almost all examinations emphasize upon testing of vocabulary skills.

5.11. Vocabulary:

Analogy is entirely based on rich word power. Therefore, for language acquisition, learner should take vocabulary as the first step. When the students do not find themselves comfortable with L2, language learning can be made interactive and interesting with the introduction of appropriate vocabulary exercises. It gives a detailed explanation of the various methodologies that can be incorporated in the teaching of vocabulary items in a language classroom. As we
know, every speaker in English wants to acquire more words but we know that most of the learners including well-known speakers get frustrated when they do have the right and suitable word at the time of speaking and writing. Sometimes it’s a matter of not being able to recall the right word; sometimes we never knew it. How much vocabulary does a teacher have? In fact, the teacher should have a bigger vocabulary. In general, we can say that a man should know all the words that are frequently used in speech and writing. In general, a learner should know a minimum of 3000 to 4000 words to speak in a language. In fact, many well-known persons and linguists have written books on the necessity of vocabulary for classroom teaching. Edward L. Thorndike published a *Teacher’s Word Book* in 1921 as an extended guide to word frequency in language. When students travel, they don’t carry grammar books, they carry dictionaries. Acquiring more vocabulary will help the learners to learn a language. Building vocabulary that is adequate to the needs of one’s reading and self-expression has to be a personal goal for every writer and speaker. Again, there are many hurdles in teaching vocabulary. Talking about patterns of difficulty in vocabulary teaching, Robert Lado (1955) highlighted key issues related to words. He stated that while dealing with vocabulary one should take into account three important aspects of words – their form, their meaning and their distribution-and one should consider various kinds of classes of words in the function of language. He said that the forms, meaning distribution and classification of words are different in different languages. He revealed that these differences might lead to vocabulary problems. In the context of learning English as a foreign language, a learner is forced to be independent and makes a conscious effort to learn vocabulary outside the classroom. Visnja Pavicic (2003) dealt with a way to improve students’ abilities to explore, store and usage of vocabulary items. He determined the role of vocabulary teaching and how a teacher could help their learners. He laid emphasis on self initiated independent learning with strategies, in which formal practices, functional practices and memorizing could be included. He said that the teacher should create activities and tasks to help students to build their vocabulary and develop strategies to learn the vocabulary on their own.

We know that learning a language means learning the rules of the language system and its use. In other words, it is learning to use vocabulary and structures in meaningful situations. Knowing meaning of a word is not sufficient. It means:

- Knowing a word is to know its spelling and meaning.
- Knowing a word means knowing the degree of probability of encountering that word in speech or print.
- Knowing a word implies knowing the limitations on the use of the word according to variations of function and situation.
- Knowing a word entails knowledge of the network of associations between that word and other in the language.

A careful selection of vocabulary and grading by the teacher will have a great effort on teaching the lessons and the revision work at a later stage. Effective vocabulary sessions need in depth knowledge of origin, suffixes and prefixes. The most basic foundation for vocabulary can be called a root. It is necessary for the teacher to decide what vocabulary and structural items she intends to teach.

5.12. Current Teaching Methodology:

The present approach to the teaching of vocabulary in engineering colleges is far from satisfactory. In the teaching and learning process, due to various reasons learners are not absorbing many words. Of course sometimes it is the students’ mistake that they are not putting effort on learning new jargons. But what could be the main reason for the lack of vocabulary in the students mind in spite of having done many courses, is that it is much complicated to teach vocabulary to the students? Teaching words is not an easy task. An average teacher may spend a considerable time in teaching words alone, yet it remains doubtful whether the student has understood the vocabulary taught. Sometimes grade level materials are out-of-the-way to readers because there are too many unfamiliar words in them. Adults can restructure the materials in several different ways to help readers comprehend them more easily. Words that are included in the guide should be highlighted or printed in bold text to direct the reader to check the vocabulary guide if the word or its meaning is unfamiliar. One should check whether the material unquestionably helps the students in learning words or not? Tests, workbooks, and reviews are common teaching methods that allow students to learn words for a short period of time. A number of teachers have said that they are not impressed with the efficiency of textbooks and workbooks. The best way for someone to improve their vocabulary is by reading words and using them on a regular basis. The student has to be exposed to these words multiple times. There is no guarantee that textbooks and workbooks can ensure retention. A teacher does not
depend on only the textbooks but he also has to the methodologies of reading books that would in turn expose the learners to new words. Most of the students these days do not have much vocabulary; because, for they concentrate on other subjects, not on vocabulary. In CAT/GRE/GMAT/TOFEL/Campus Placement and other examinations, the students get very less marks in vocabulary and reading comprehension; particularly, because they do not pay attention to learning new jargons. Reading skills plays a vital role in acquiring more lexicons. Vocabulary knowledge is critical to reading comprehension, it is important that those working with young readers help foster their development of a large “word bank” and effective vocabulary learning strategies. In fact, one should be selective in the books one chooses to read. While many people enjoy reading fiction books, non-fiction books are much more effective when it comes to enhancing your vocabulary.

5.13. How to motivate Students to Learn New Words in the CS Classroom:

Nobody can learn vocabulary in one or two days. It is a lifelong learning process. Learners usually start by noticing and recognizing a word before they are able to produce it. There are four stages in the acquisition of new vocabulary: The learner notices the new word (with help) The learner learns to recognize it (with help) The learner recognizes it on his/her own. The learner can both recognize and produce it. Students need to be motivated to learn vocabulary constantly. Therefore, it is important that the review is as interesting as possible in terms of the types of exercises, strategies and activities. The visual element is equally important.

5.13.1. Criteria:

Criteria for the selection of vocabulary should be like this:

- Word frequency
- Environment Applicability
- Structural Considerations
- Material Association
- Universality
- Range of Applicability
- Productivity of words
Word frequency means how many times a word is used in normal reading material. We know that some words will be repeated many times and some words would be rarely used. The teacher should remember the points when one wants to prepare the words for the students.

5.13.2. Teaching Vocabulary in English Language: Effective Methodologies

There are many methods in teaching grammar, literature, poetry and prose. Do we have any methods in teaching vocabulary? The important thing is that vocabulary items are imparted mostly by translation: either a list of words with their translation at the beginning of the lesson or the translation of the content having new words or glossaries at the very end. This is a wrong practice as it leads to a state of confusion for the learners. On the teaching skills of vocabulary items, Frisby (1957: 98 ) commented that: “While the teacher is not, himself, concerned with the actual selection of vocabulary for text book purposes since practically all the books we use are based on limited vocabularies, it is important that he/she (the teacher) should know the principles, which underlie vocabulary selection”. Thus a language teacher should be innovative and proficient in the application of methodologies pertaining to teaching vocabulary items in a classroom situation. Here this work proposes some points in teaching vocabulary into the CS classroom. They are, by no means exhaustive.

5.13.3. To the teacher

- Provide a guide book which contains guidelines about the entire curriculum and objective of the course.
- Provide advice on the methodology of teaching and evaluation system and process.
- Giving theoretical orientations
- Key to the exercises
- Provide supplementary materials to make changes as per the need to make sessions more interesting and informative.

No change can be brought without a change in the teaching methodology. Presently, our teachers appear to be exhausted with the methods and techniques of teaching, and they are looking for a totally novel methodology of teaching. They want a methodology that is modern and effective. Considering these demands, the only way out seems to be the computer. Already, attempts have been made to teach language and literature through the computer. This new field is called
Computer Assisted Language Learning and Computer Assisted Literature Learning. And at this point, it seems that language ought to be taught with the help of the computer. Already a variety of ideas and pictures are represented through the computer for those who use them. The internet is an effective source of ideas and picture display. Thus the hypothesis that language can be taught through computers is put forward here.


The English teachers of Engineering institutions face different and difficult problems either academically or non-academically. First of all, the time duration for the completion of the given task is not sufficient. The researcher finds few students completing the given task, before the time set, while the slow learners find it difficult to complete it and so expect the teacher to provide answers. The slower students spend three times as much time as the faster students. This is not conducive to learning. Secondly the levels of English proficiency vary in each class; a variety of interests and a variety of paces of studying also vary from batch to batch. So, it is impossible to lead the students through varied levels of learning, which make the students passive. For these reasons, we need to individualize the study of English in order to get more effective results. This study discusses the nature of interaction and the definition of CALL and its applications. The researcher highlights the method of promoting qualitative interaction amongst students and teachers through computer software. This work evidences the fact that computer pair work enhances interaction.


CALL is a relatively new and rapidly evolving academic field that explores the role of information and communication technologies in language learning and teaching. It provides fertile ground for leading edge, innovative and highly creative thinking and scholarly work. Because of the multiplicities and changeability of the field which include the emergence of new theoretical, methodological and learning paradigms, special understanding and expertise is required to assess the quality and the depth of such scholarly activities. Today, CALL activities explore the improved technology to produce highly interactive learning environments, providing effective support for the acquisition of listening, speaking, reading and writing skills. High-speed networks allow access to authentic cultural materials and link learners to speakers around the world. When integrated into pedagogical plan, these new technologies enhance learning
opportunities beyond anything previously possible. The number of variables associated with language learning and the difficulty in controlling those variables, in a second language learning setting is not so tedious, but it is to be designed according to the students’ attitude.

5.14.2. Individualization

Individualization is not a method or technique, but a philosophy of education. Here, learning is student-centered and the teacher assists the students in pursuing their goals. As a result, students feel secure and get satisfaction in learning. In a class with one teacher, it is impossible for the teacher to respond to each student, to give feedback immediately and to be aware of each student’s progress, problems and weaknesses. Here the computer plays a vital role in giving information and teaching the students. It is reasonable to say that it is difficult to concentrate on each student in all the three activities in the writing session. So using e-mail is more advantageous in a writing class. Teachers often find it difficult to correct files, assignments, answer sheets either in the class, college or at home. This problem is totally eliminated. Just with the click of a mouse, the teacher monitors and analyses everything logically and effectively.

5.15. Role of the teacher in Computer based learning

A language teacher may not know the definitions and descriptions of technical terms and the processes related to Technology. However, one is expected to be familiar with those matters, before one enters into the class. As the blooming generation is efficient in gathering new ideas on science and facts, they try to cross-check the teacher, whether she/he knows about the latest technology. So, the language teacher in engineering institution needs to be efficient and confident while responding to the students.

5.15.1. Solution- Computers:

The researcher believes that Language Labs should be used to make classes more effective. There are two ways to use them. One way is for the teacher to present pictures, videos and written text with or without sound. The presentation can be programmed in advance or handled manually. The other way to use computers is to have students use the computers themselves. The researchers find the second method of using computers which lead the students to a better understanding of computers as well as language learning as more feasible. In this method, the students work individually in their own areas of interest. The computer provides materials to
study and students can interact with the computer as if they are doing with a tutor or a library. The students here are encouraged to do the work either in groups or in pairs, so that they can get a spirit of cooperation and confidence in finding the answers. Interaction among the students is as important as that with a computer in learning. The researcher suggests that the application of computer based activities like assignments, tutorials can be promoted. Using computers gives way to their knowledge and promotes the nature of independence. The researcher is of the view that computer education is a beneficial one for both the slow workers and the advanced students, as it encourages one to work at one’s own pace. Slow workers can catch up, and advanced students can do extra assignments. The researcher rightly accepts the suggestions of Kitao (1993): “Students think materials are new and fresh, if they are presented on computers, and they are often interested even in routine tasks such as learning to type. They seem to be willing to spend more hours and do more exercises on a computer than by hand”.

(An extract from: Computer Assisted Language Learning (CALL)–www. Monografias.com)

Learning can be individualized using computers. Students can study materials related to their individual goals and interests, with the appropriate difficulty level and at their own pace.

5.16. Recommendations:

In this researcher has found all the stakeholders of Education need to rethink about the means and methods of English Language learning and teaching for the overall betterment & development of the society.

A. AICTE/University

The University System needs to be improved as far importance and appropriateness of CS subject in the overall grading system is concerned. A systematic and scientific evaluation system may bring quality education and fulfill the basic objective of the curriculum.

B. Academician:

Academicians can make a big revolution, if they keep their eyes open and keep updating their academic services as per requirement of the market.
C. Training and Workshops:

An appropriate comprehensive training programme for teachers on teaching methodology, evaluation process, question paper designing, counseling should be arranged on regular intervals to make professional programmes effective. N.R. Narayan Murthy, the founder of INFOSYS suggests: “We have to sensitize our teachers as well. Teacher training must include exposure to all major faiths. Unfortunately, in India, despite having institutions of excellence such as the IITs and the IIMs, we have not created a single high-quality institute for training teachers.” (N.R. Narayan Murthy, 48) There is a serious need of putting thought on creating research and training centers for professional teachers to produce well trained and objective oriented professionals for the engineering services. Of the 10.5 million students attending India’s universities, the majority of enrolment is at the undergraduate level with 88.9 percent of students enrolled in undergraduate programmes and 9.4 percent in postgraduate programmes. India produces 2.5 million graduates and 350,000 engineers every year. India’s pool of university graduates alone is 1.5 times the size of China’s and twice as large as that of the USA. India produces five to six times the number of engineers as the USA. But, despite being one of the largest producers of degrees in the world, the quality of education in India is still unsatisfactory. India has hardly produced any worthwhile inventions in recent years. Almost every technology we use is from abroad. The reason is the low quantity and quality of our doctoral programmes and our continued emphasis on rote learning. India’s engineering and medical colleges, management schools and universities are facing a serious shortage of good quality academics with faculty shortages averaging over 20 percent. Here, Murthy emphasizes on rigorous training programmes to produce best quality of teachers, and thereby we can make higher education a professional service oriented system. Quite obviously, research, inventions and patent oriented teaching and learning are not the priorities among the Indian institutions and this is an aspect that needs urgent attention of all concerned.