

SOFT SKILLS PROGRAM: A MANDATORY ESP CURRICULUM FOR WORKFORCE READINESS OF ENGINEERS

Ms. Shruti Shrivastava, Research scholar, AIESR Department, AMITY University
Ms. Rakhi Sameer, Associate Professor, AIESR Department, AMITY University

Abstract:

This paper is an attempt to emphasize the necessity of incorporating soft skills training programs in ESP curriculum for Engineering English, aiding the workforce readiness of engineering graduates especially from the B schools. India is one of the fastest developing economies having a huge manpower resource but it is not being properly utilized owing to the lack of employability skills in the youth. The young generation is having sufficient qualification and an appreciable percentage of youth are getting good job opportunities also. But the category of students who are of average level employment, a good job is just a dream for them. Employers prefer to hire and promote those candidates who are resourceful, ethical and self-directed with good soft skills. Hard skills and experience are not sufficient for the sustainability and progress in the corporate world. In spite of such great significance of soft skills many institutions are reluctant to include soft skills training in the curriculum. The growth of technical education has escalated since the privatization of higher education in India. Almost all technical colleges attract students who meet the required eligibility criteria for enrolling in an engineering college, but unfortunately they are drastically deficient in soft skills and English language proficiency, which in turn makes these students unemployable, even after they complete their four years engineering degree course. The employability may be achieved by inculcating some skills, such as: Communication Skill development, Self-Management, Communications, Managing people and tasks, Mobilizing Innovation and Right Attitude. The paper recommends some models for teaching soft skills as an integral part of engineering curriculum.

Keywords: *soft skills, training program, employability, ESP for engineers, Models soft skill training.*

1. Introduction

This paper throws light on the need of soft skills training programs to be adopted in colleges and university curriculum in order to produce industry ready workforce. The paper also puts forward some suggestions for making above initiatives more effective for developing students fully equipped with relevant soft skills.

It is largely misunderstood that engineers of the 21st century must be proficient and adept in technical tasks alone. The engineer profile has developed from the professional and scientific engineer of the last century to the enterprising engineer. This realization must also have an impact to the engineering education. While the new structure, almost certainly, continues to be based on a solid preparation in mathematics and sciences, it is also essentially emphasizing the professional role of the engineer, and the demand of soft skills in the working life of a professional. In today's world, where the survival of the fittest is the norm, it has become imperative to sharpen one's technical skills, along with more importantly, one's soft skills. Technical skills can be learnt, applied and amount to a measurable degree. But the same cannot be said of soft skills. Soft skill is a sociological term used for Emotional Intelligence (EQ) of an individual. It can be broadly defined as personal attributes that enhance an individual's interactions, job and career prospects. It entails both face to face customer interaction and also indirect correspondence over telephone

or e-mail. Employees adept at soft skills will achieve both individual as well as organizational success. Hence soft skills is critical to showcasing one's hard skills; both can be considered to be two sides of the same coin - one without the other has no impact. Serby Richard (2003)^[1] says that modern corporate requirements are such that they search specifically for those candidates who can add value to their organization with their soft skills and the ability to develop and use soft skills in their work space. This requirement of soft skills in a job has made the competition for job acquisition and job sustainability tougher. This view point is substantiated by Hewitt Sean (2008)⁷ that, employers value soft skills because they are just as good as indicator of job performance as traditional job qualifications. So today's professionals need to encompass a high soft skills quotient, apart from the domain knowledge in order to succeed in this competitive era. So for inculcating soft skills in the graduate engineers they have to be provided with trainings as a part of their curriculum. This in turn will help them to improve their holistic personality and compatibility, thereby enabling them to secure a respectable position in the corporate world.

Hard skills contribute to only 15% of one's success while remaining 85% is made by soft skill (Watts M and Watts R. K, 2008). In spite of the big relevance of soft skills in the present corporate world most of the institutions and universities are yet to introduce soft skills in their curriculum. There is a dire need of incorporating soft skills trainings in their curriculum, to ensure workforce readiness of its students.

2. Soft Skills: Definition

Soft skills are the people's skills or personality specific skills in one's personality. According to Hewitt Sean (2008)^[2] soft skills are "non-technical, intangible, personality specific skills" which determines an individual's strength as "a leader, listener and negotiator, or as a conflict mediator". Soft skills are the traits and abilities of attitude and behavior rather than of knowledge or technical aptitude (Tobin, 2006)^[3]. Purdue University defines soft skills as "the cluster of personality traits, social graces, facility with language, personal habits, friendliness, and optimism that mark each of us to varying degrees." Soft skills are different and distinct from Hard Skills. Soft skills are those skills that add more value to the hard skills adorned by an individual. Martin Carole (2008)^[4] comments that hard skills are more "along the lines of what might appear on your resume" whereas soft skills are "cluster of personality traits, social graces, personal habits, friendliness and optimism." Soft skills are not a substitute for hard or technical skills, but they act as balancing skills that serve up to unlock the prospective for highly effective performance in people even with good hard skills.

3. Necessity of Developing Soft Skills: Literature Review

Technical and job-related skills are essential, but they are not enough when it comes to progressing up the ladder. Soft skills play a very important role in this rigorous commercial epoch world. Today there is a large pool of qualified job seekers in the engineering stream and the competition within them for job acquisition and its sustainability is getting tougher. To get an edge over the competitors they are left with no other choice but to add worth to their hard skills option than to hone their soft skills to exhibit their true acumen. Thacker and Yost (2002)^[5] noted that students require training to be effective team members. Employers often iterate that "business graduates lack good team leadership skills". Similarly, according to Knell and et.al. (2007) employers are continually asking for a work force rich in creativity, communication skills and cultural understanding. The National Employers Skills Survey 2003, reported that employers regard shortages in soft skills, including communication, teamwork, and customer focus and responsiveness as far more crucial than hard or technical skills (Watkins, 2004). Poor soft skills like communication skills create a negative impression with employers during the recruitment phase and may exclude a graduate with good technical skills from being selected for employment (Pauw and et al, 2006). This is resulting in increase in the Industry Academia gap. On one hand there is emerging requirement of skilled manpower in Industry, but on the other hand engineers churning out of colleges are unemployable coz of lack of required industry ready skills in them.

4. Soft Skills Curriculum- A Basic Need

It is no news that lack of competence in soft skill is marked as one of the reasons of poor rate of employability of technical graduates. Though it is true that soft skill needs to be induced at a very young age at home but the role of soft skill training in schools and colleges cannot be underrated. Irrespective of the target group or the institution where it is imparted, soft skills training programs aims to improve a whole range of skills, like confidence, negotiation skills, communication skills and the skill to establish and maintain interpersonal relationships. Soft skills are perceived as those capabilities that are intrinsic in an individual. These competencies exist in every individual to a particular level. But if these skills are left unused then that individual will lose on utilizing his / her inherent skills. The aim of any soft skills training program is to remove these blocks or the barriers that prevent the individual from utilizing his/ her skills. Such trainings will make the individual aware of his / her latent capabilities and to refine it for the holistic development and success of the individual. Everyone can get benefit from the soft skills training irrespective of the skills they have inherited.

5. Outcome of soft skills training program

Aim of such programs is that the students should be able to:

1. To develop Right Attitude needed to survive in Corporate
2. To learn & practice effective communication skills
 - a. To develop effective presentation skills.
 - b. To learn effective business correspondence and prepare business reports which produce results.
3. To become self-confident individuals by mastering inter-personal, team management, and leadership skills.
4. To develop holistic personality with a mature outlook to function effectively in different circumstances.
5. To develop skills such as critical thinking, problem solving and situation handling.
6. To participate effectively in various selection procedures laid by the recruiters.

6. Delivery Ways

Soft Skills training programs training should be imparted to improvise the students' attitudes, values, beliefs, motivation, desires, feelings, eagerness to learn, willingness to share and embrace new ideas, goal orientation, flexibility, persuasion, futuristic thinking, diplomacy, and various skill sets of communication, manners, and etiquette so that they will be able to deal with different work situations. The training in soft skills has two parts. The first part involves development of ones attitudes and attributes, and the second part involves sharpening ones communication skills to express attitudes, ideas, and thoughts well. The crucial part is to successfully work at perfecting integration of ideas and attitudes with effective communication skills in verbal, written, and non-verbal areas. Attitudes and skills are integral to soft skills. Each one influences and complements the other.

7. Methodology:

Training of the students should begin with a preliminary test in the English language to determine their language competence in the use of English for effective communication both verbal and written. The idea is to ensure that students are oriented to understand that a manager's key job is to be able to express him clearly, correctly, and concisely. To achieve best and effective results modules have to be devised for training programs giving emphasis on language, communication skills and behavioral skills.

Personality Development through Soft Skills Training should be conducted in three modules:

- 1) Business communication
- 2) Attitudinal and Behavioral Skills
- 3) Training in Group Discussion and Personal Interview Skills

4) Training in Entrepreneurship; Encouraging job creation and entrepreneurial leaders

1. Business Communication: This covers the following areas: Communications skills, current English usage, debates, language games, situational dialogues, précis writing, essay writing, presentations. (Preparing for effective presentations, presentation for small groups and large groups, marketing and business presentations.) Business Correspondence (Principles of clear writing, often misused words, applications and requests, routine messages, memos, report writing, organizing meetings, preparation of agenda and minutes, business etiquette, telephone etiquette, e-mail etiquette).

This result in realization that fluency and command over speaking and writing gives them an edge in interacting with people at all levels in the professional world.

2. Attitude & Behavioral skills: These are set of skills related to personal growth for efficient functioning of one's mental and response faculties. Students are made to realize their strengths and weaknesses so that they are able to grasp the true essence of development. This module covers the following areas:

Psychological Tests: Aptitude and personality assessment, suggestions for improvement.

Team Skills: Team building and leadership, transformation of groups into teams, group dynamics, intra-group dynamics, inter-group dynamics, emergence of leadership, conflict management, inter dependency and assessment of team-based projects.

Time Management: Parkinson's Laws, Murphy's Laws, Pareto's Principle, Law of Clutter, prioritization, goal setting, effective time management.

Interpersonal Skills: Social skills, assertive skills, negotiations, listening skills and cross-cultural communications.

Leadership Skills: Concepts of leadership, leadership styles, insights from great leaders.

This also results in student realization that punctuality, collaborative team skills, goal management, and listening skills, are important facets of a holistic personality. Self-awareness programs enhance the students' personality. Such soft skills are enormously valued in business organizations. As employment situations become tougher, potential recruiters assess and desire personal attributes like attitude and values in their employees.

3. Training in Group Discussion (GD) and Personal Interview (PI)

Before the students go through real job interviews, they must be made to go through a series of practice sessions on GD and PI... Feedback is given to the students later for a realistic understanding of industry expectations. It covers the following areas:

Selection Process: Overview of selection process, practice of psychological tests, effective resume writing, dealing with placement consultants and headhunters, references - how to get effective references from past and current employers.

Group Discussions: Concepts and Practice.

Interview Techniques: Effective interview techniques, mock interviews, stress interviews, review and feedback.

4. Training in Entrepreneurship; Encouraging job creation and entrepreneurial leaders:

A very important skill set to learn as a part of one's soft skills training is learning the art of working for oneself with a deep sense of personal responsibility and onus. Across globe this skill is aggressively tested and searched for, by an employer during job interviews. The training on campus for developing an entrepreneurial attitude is very critical in 21st century and onwards. And development of such skills can only be harbored when the ecosystem around campus is made conducive for all such skill set learning will happen, when the students are exposed to real time while they are on their campus. An emerging concept of learning such skills is happening by way of soft skills modules which also entail running a campus company at college or engaging in live activities which helps students broaden their exposure and improve their mindset and gain right work attitude. In the process many big campuses have also been successful in creating potential student startups who have launched themselves in market right after they pass out. Such

a learning experience is the need of the hour today and all eminent campuses are realizing it and incorporating entrepreneurship education in their curriculum. Since a major

5. Teaching ways & methods

The teaching methods in the soft skills training should include lectures, projects, role plays, quizzes, and various other participatory sessions. The emphasis is on learning by doing. Since the method of training is experiential and highly interactive, the students imbibe the skills and attributes in a gradual and subtle way over the duration of the program. The students will internalize the skills and attributes learnt over a period of time. The Business communication and Behavioral training is recommended starting from first year to pre final year, whereby the Interview training and preparation techniques must be emphasized in the final year.

6. Method of Assessment

The Soft Skills training program must be a credit course and the evaluation of the students can take place on a continuous basis. The Active participation in activities, enthusiasm displayed by the students in acquiring the necessary attributes and skills, and their commitment to improve in terms of attitudes should be the prime criteria for evaluation. The effectiveness of the training session is enhanced through a two-way feedback. Wherever necessary, the trainer gives feedback to individual students on their performance and to the class in general. In turn, the students also give feedback on the training sessions. They are encouraged to give suggestions regarding the content and the delivery of the training sessions so that improvements can be made in the modules from time to time if necessary. The counselors will also give a feedback to the students on their strengths and the areas where development is needed.

7. Models Used in Soft Skills Training

The three models are generally used in imparting Soft Skills training in Engineering Colleges:

- In House Training by Regular Faculty Members
- Out Sourced Training Model by Private Training Companies/ Vendors
- Hybrid Model -In House Training on Regular Basis for 2/4/6 semesters with expert padding up inputs from external agencies/Industry professionals before Placements in 7th/ 8th semester.

I. The In-house Training Models

In house faculty for soft skills training is essential in every technical educational Institute. These faculty members should be carefully selected keeping in view that the faculty should not only be well qualified in English language but also be effective soft Skills trainers. These in-house faculty members should periodically undergo suitable faculty development programmes, to hone their language skills and soft skills training delivery methods. A trainer with Industry experience is the demand of the hour.

Advantages of In House Training Model

- The in house faculty has many advantages. Since they are generally highly qualified academically and are in constant contact with the students, they are able to give valuable guidance to the students on a regular basis. Their presence in the campus is for long hours, which gives the students a chance to approach them whenever they need guidance. The outsourced trainers devote limited time, as they cater to various colleges simultaneously to earn more business.

Being permanent faculty members, they are loyal employees who have a good grip on various effective teaching methods. They are also aware about the acumen of the students of various classes and sections. The outsourced trainers are recruited from various far flung areas and subsequently they are sent to many colleges simultaneously. The students of every region have a different level of English proficiency and different problems of pronunciation. Such fly by night trainers are unable to get a grip of these problems. The in house faculty is constantly in the same region, and hence they have better understanding of the pronunciation and other deficiencies in the students' problems in communication.

- The permanent faculty understands that every student is unique and needs to be taught in a different

manner. They improvise and modify their lectures keeping in mind the level of each group of students. The training companies on the other hand formulate structured lectures in the form of modules, and deliver it in every class, irrespective of the level and understanding of the students.

- The internal faculty members have a passion for teaching, whereas the main motive of the outsourced companies is to earn money.
- The in house faculty is readily available in the campus for any placement related training
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Disadvantages of In house training Model

- Teachers are not always very well trained themselves, or even if they are capable, they lose motivation because of the casual attitude of the students. This problem can be addressed by giving the in house faculty a chance to attend Faculty Development Programs periodically.
- Students do not take interest in the PD classes as they feel that these are less important than the technical subjects. Students will take the course seriously if the course is allotted due credits and attendance is made mandatory. .
- Evaluation of soft skills poses a great challenge, since unlike hard skills they are difficult to measure.
- The in-house faculty may develop a comfort zone, and take least interest in upgrading their skills. Regular FDP is needed to keep the faculty abreast with the latest corporate culture in different industries / groups.

II. Out-Sourced Training Model

Advantages

- Good Training Agencies can have great expertise in imparting Soft Skills Training since they are professionals and experts in their field. They have vast experience and use more modern and innovative techniques of teaching.
- Generally, these agencies charge exorbitant fee, and hence they are able to invest some money in developing study material in the form of workbooks, etc. These modules, if used properly can benefit the students.
- Their teaching methodology is non-conventional. They use various activities to teach the students. This method attracts students and induces them towards better learning.
- Some trainers belong to the corporate world. They are familiar with corporate culture and can help in the placement of students.

Disadvantages

- The out sourced agencies cater to many colleges simultaneously. The trainers are often rotated to suit the schedule of various colleges. As a result, trainers are often changed in the middle of academic sessions. This results in poor quality of training.
- Since the training agencies are on contract, mostly the aim is to make money rather than benefit the students by providing quality education.
- It has been observed that before earning the contract, these agencies give impressive demonstrations, presentations and put forward extraordinary study schemes. In the actual classes, the standard is not maintained and the gap between presentations and actual delivery is quite big.
- The outsourced agencies are very expensive, since their charges are on hourly basis. Even if the attendance in the classes is low, they charge for the whole class. This makes the out sourced option very expensive and unviable.
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The agencies do not give proper training to their trainers. They pick up any graduate with a pleasing personality and put them in classes to be soft skills trainers. .

Soft Skills classes require infrastructure like projectors, seminar rooms, video recording facility, language labs, which is not available in most colleges. If the infrastructure is there, it is not sufficient for the large number of engineering students admitted in the college.

III. Hybrid Method

The hybrid training method involves training by in house faculty throughout I, II year, with special inputs by very experienced trainers from a professional agency during the pre-final and final year before the placement drive. This method has proved to be very effective for the students.

Advantages of Hybrid Model

- Investing in developing and enhancing the skills of regular faculty for the hybrid model will be beneficial in the long term basis. All the problems faced due to involving external agencies can be eliminated by recruiting and developing regular faculty for this purpose.

It will also be economical in the long run.

The Hybrid Model aids the students in receiving the best of the both worlds. A sincere approach in developing an environment of teaching learning in the first two formative years of engineering backed up and supported by the sophisticated and state of art training by professionals in pre final and final years will surely enhance the employability skills of an engineer. This shall be a big step towards reducing the Industry Academia gap in terms of job readiness in students.

Hence this model is strongly recommended to be included as a credit course in the engineering curriculum in prevailing Universities and institutions.

11. Recommendations:

The discussed hybrid model is strongly recommended for all premier professional institutes. To start with the course may be floated as an elective under a choice based credit system so that the outcome can be measured. Few other key recommendations are:

- The faculty plays a crucial role and must be a passionate one. Faculty can be someone who herself has strong inter personal skills and should be a fluent communicator with state of art knowledge on the ecosystem and its changing ways. Stress should be given on regular Faculty training and refresher courses to keep them abreast with world happening and emerging trends and tools in English Language Training scenario.
- The batches can be made on basis of common English proficiency level for best results. All the training may be done in teams to keep up a healthy and competitive environment. Live activities and real time exposure should be given to the students using the authentic materials.
- Live case studies of some successful Intrapreneur and Entrepreneurs should be discussed in sessions which will align the students to a progressive thought process and attitude. Speaker sessions from Student Alumnus and Entrepreneurs is always very inspiring for students as they are easy to emulate as role models.
- Special attention should be given to the students hailing from Hindi belts with low proficiency in English. Several students share this pain point of suffering from hesitation and fear of public speaking and expression. Such students need special and focused attention and should be dealt separately. They must be given rigorous practice in communication labs stressing on their listening and reading skills. Before involving them in a soft skill training session their language proficiency is essential to be worked upon.
- Along with the training sessions for students, it is also recommended that they should be exposed to speaker sessions from Industry /domain experts. This activity should be taken up regularly and the

Industry expert can be associated as an Adjunct support to an institute. The students can be engaged into taking up mock interview sessions with these experts which will help them in working on their areas of improvement way before their final recruitment process is on.

- Students must engage in compulsory internships in industry/work places. There are certain colleges / institutions that encourage students to go for field visits, Industrial visits in order to encourage student participation in the real world of work. This should be made compulsory and students should be monitored on their learnings and experience gained out of the Internship duration.
- During their soft skills training sessions a parallel Mentor platform is also recommended to be provided to the students to seek guidance and way forward tips from domain experts. Right counselling at a time helps boost the student's confidence and their chances in clearing job interviews is always higher. The Mentors can be people from the Industry and Corporate houses and may be roped in by an institute under their Industry Academia partnership. In some cases an Alumnus may also suitably play the role of a Mentor and facilitate mentorship for his juniors.

12. Conclusion

Effective communication and interpersonal skills are crucial to increase workforce readiness and to compete successfully in the business environment. The real key to the effectiveness of professionals is their ability to put their domain knowledge into effective practice. In these context soft skills has a crucial role to play. To enhance or to hone soft skill traits among students it has to be adopted in the curriculum at college level and University level. We are living in an ever changing world and it is high time now that our institutes realize that inculcating right attitude and skill set is mandatory to survive now. We are aware about the nature of jobs going to change drastically in the Automation led environment and in next twenty years all present jobs may completely fade away. The emerging jobs will have a key requirement for a student to be an entrepreneurial leader with innovative skill set. The job roles will be dynamic and challenging ones with humans toggling between real beings and artificial intelligence and survival shall not be easy. It is in such an evident scenario that there is a rampant need to step back and look at the quality of students reaping out of one's institute and take corrective steps now. The need to re model existing training format and revamp it with meaningful engagement with a right intent is required.

To conclude, the soft skills program is about enabling and empowerment. With these training programs students' have a smooth transition from aspiring students to young employable youth with an entrepreneurial attitude and skill set. As an emerging economy throughout the world, our pool of talent needs to be nurtured and honed with special skills that makes them adept in a world of changing economies and trends. There is a need for right intervention and re look at the present status and make core changes in the education pattern and delivery. Change is the law of the nature and in today's world it is progressive to flow with the tide and bend as need be to succeed. A change in pedagogy and approach to training is imperative now.

ARISEAWAKEANDSTOPNOTTILLTHEGOALISREACHED...is the Success Mantra!!!

References

1. Serby Richard, 'the importance of soft skills', 2003
2. Audibert, G. and James, M. *The softer side: Advisor Today* 2002, 97(2),72
3. Hewitt Sean, "9 soft skills for success", www.askmen.com.2008
4. Tobin P (2006), "Managing Ourselves-Leading Others" *Inspiring Leadership: Experiential Learning and Leadership Development*. Vol.2, pp36-42, ICEL2006,
5. Thacker A Rebecca and Yost A Christine, "Training Students to become effective workplace team leaders" *Team Performance Management*, Vol.8, No3/4, pp.89-94,2002
6. Martin Carole, "How to Stand out from a Crowd of Candidates", www.career_intelligence.com,2008

Bibliography

1. Wilkins, D.A. *Second Language Learning and Teaching*. London: Edward Arnold, 1974.
2. Hornby, A.S. *Oxford Advanced Learners Dictionary of Current English*. 5th ed. Oxford UP 1995
3. Ihsen, Susanne. Gefragt: Tüftle und Rede! ZEIT Chancen, 18, 24, Germany: ZEIT Verlag, 2003. NASSCOM report on Knowledge Professionals 2012
4. Richmond Virginia .P. and James C. Mc Croskey. *Nonverbal Behaviour in Interpersonal Relations*. USA: Pearson, 2000.
5. V Sarvanan, "Sustainable employability Skills for Engineering Professionals", *The Indian Review of World Literature in English*, Vol. 5 No.II -July, 2009
6. Yorke, M., & Knight, P. T. (2006). Embedding employability into the curriculum. York: The Higher Education Academy.