

English Curriculum and Employment: A Case Study of Telangana Engineering Students.

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Abstract: This study is focused on the role of English Language Skills and Soft Skills in providing employability to the Engineering students. The objective of this study is also to instigate and examine the both academic needs and professional needs of the engineering students. It also explain how these both needs bridge the skill gap of employment of Engineering graduates in the region of Osmania University, Telangana State. The researcher used a structured student questionnaire and found that there are manifold skill gaps of academic needs and professional needs of the students which render the Engineering graduates to remain unemployable. The researcher also classified the Engineering graduates as skilled, semi-skilled and unskilled categories. The universities like Osmania and JNTUH, Hyderabad had given a little importance to the workplace related skills like Soft Skills & Employability Skills during the framing of Engineering English curriculum for one or two year(s) of the study. It has been resulting lower employable engineering and clueless engineering graduates. To fill the skill gap of these unemployed Engineering graduates the Universities must integrate Soft Skills and Employability Skills in Engineering English curriculum and also design it for the span of four year course or at least one semester a year, as they always can be related with English Communication Skills.

Keywords– *Employability of Engineering Graduates in India, Engineering Education in Telangana, ICT Use for Language Teaching/Learning, Learner Centered Curriculum, Redesign of Engineering English Curriculum, Soft Skills for Employability.*

I. INTRODUCTION

The most troubling issue in India is un-employability. It has strong roots ever pre independence and post independence. Now-a-days most of the companies both national and international have been sprawling over the issue of unemployable youth and their profound percentage over a period of years. The MNCs' stress that only 20% of engineering graduates are employable and the remaining are unemployable. The basic requirements of stepping into MNC's are communication skills, quantitative and mathematical, logical skills, set of soft skills along with core skills. But most of the engineering graduates lack any combination of the above mentioned skills and its obviously leading them to large pool of unemployable category. This is not only with India and also with other majority of countries across the globe. The steps were initiated by the govt. Of India in this issue had not reaped fruitful results and still the graph of unemployable youth has been rising to its maximum level. Undoubtedly, India is a country should be on the top of the world with its huge manpower but in reality it is not. Due to un-employability India is depleting in the top rated country list. Though the steady growth of gross domestic product (GDP) from past years now India will be on the top rated country list and also on population basis after a few decades.

In a gathering of vice-chancellors during the 82nd annual meeting of the Association of Indian Universities in 2008, former President of India, Dr. APJ Abdul Kalam, asserted that only 25 per cent of graduating students were employable, and that students were lacking in areas such as technical knowledge, English proficiency and critical thinking.

National Skills Development Agency (NSDA), Government of India and British Council of India have initiated the program In 2008-09, the Government of India launched the National Skills Development Council (NSDC), set up as part of a national skill development mission to fulfil the growing need in India for skilled manpower across sectors, and to narrow the existing gap between the demand and supply of skills. Research conducted by the NSDC indicates skills gaps both in functional, vocational and workplace skills as well as Soft Skills, with English featuring as an essential skill to complement core domain skills in over half of the 21 focus sectors such as IT and ITES, media, hospitality, beauty and wellness, retail, financial services and healthcare.

To address the growing need for English Skills for Employability in India, the British Council and the NSDA invited key UK and Indian stakeholders to join an English Skills for Employability (ESfE) Think Tank. The objective

of the ESfE Think Tank is to provide a platform for stakeholders to discuss needs, share experiences and identify ways of working together to address the key priorities emerging from the discussions. With a view to addressing the growing need for English Skills for Employability in India, the British Council and Mr S Ramadorai, Chairman of NSDA, invited key UK and Indian stakeholders to join “ESfE Think Tank.”

This study considers the extent to which the prescribed English course fulfills the students’ needs of acquiring the four basic language skills successfully integrating the Soft Skills for undergraduates, in engineering colleges of Telangana. This study examines the issues and problems of English skill acquisition and the need of teaching Soft Skills for the engineering students situated in different regions of the state and also try to address the issues. Many employers seek communication competence from engineering graduates for both informal and formal communication using Soft Skills to be stamped as industry ready. Hence engineering students need to be trained in these practical skills for using it in their career ladder to become employable.

II. REVIEW OF LITERATURE

According to NASSCOM’s recent survey almost 15 lakhs engineering students are graduating every year in India but surprisingly 20% of those huge numbers are only getting employability. The shocking fact is that only 45% of engineering graduates can write/speak correct English sentences which are very much related to the everyday expressions /phrases /clauses /sentences. India’s Ex-president and a great scientist Dr. APJ. Kalam rightly said that India does not have any problem with unemployment but with lack of employability skills. India’s youth population (i.e., age below 30) is almost 70% of its total population and with such figures India has to be the centre of skilled manpower and knowledge but we are far behind of it.

Prof. U. R. Rao, a renowned ISRO Scientist headed a five member committee by UGC in 2002 stated that not enough qualified teaching faculty, outdated curriculum, weak accreditation structures, lack of classroom and industry linkage, high levels of unemployed and underemployment in engineering graduates etc. were the major concerns in Indian Engineering Framework, thus he urged AICTE to Revitalize Technical Education standards in India. But still now it is not happening.

“Employability of engineering students should be increased while they are studying. They should be trained by industries where they will get an understanding of the actual work that goes on. This will prepare them for the future,” the Chief Minister of Telangana state KCR recently told officials of the technical department in the inauguration of “Telngana Academy of Skills and Knowledge (TASK)”. Recently, the Govt. of Telangana has

decided to make “Industry Internship” mandatory for every engineering graduate in their course of study. Definitely, it will not only reap better results in the coming years but also boost employment scenario of engineering graduates.

Telangana state had 404 technical colleges in 2014-15. But now that huge number has come down to only just 315 engineering colleges in 2017-18 due to huge vacant seats in many engineering colleges. JNTUH, Hyderabad has disaffiliated around 174 engineering colleges and not allowed to web counseling process in the admissions for the academic year 2017-18. In the year 2017-18, it is reported that there are 97961 intake engineering seats are available but only 68594 students have taken admission and the remaining 29367 seats are vacant (over 30%).

The well-known fact that English is the lingua franca of engineering education and thus an essential prerequisite for gaining employment has been substantiated by several studies across the world [cited in Bjorkman (2008)]. However, employability practices in India, which focus on depositing English and communication skill sets in individuals, have attracted a fair share of criticism (Datta et al, 2007). Many have been studied on the role of English in engineering education and its essential role in employability. According to Young (1991), teachers can start with finding out what students are anxious about. Then teachers can help them ease some of their irrational fears and teach them strategies such as self-talks and doing relaxation exercises to deal with fears. Find out all the students who really feel shy, reluctant and diffident in the class room while they learn.

Core vocational skills and Soft Skills such as English can be taught together, but they can be assessed separately. For example, the NSDC has worked with Liqvid to identify the English required for 130 job roles; the vocational skills will be assessed against the appropriate mapped levels of the NSQF, and English will be assessed against the mapped levels on the CEFR. The alignment of UK and Indian standards can be achieved through mapping exercises such as this one, and the CEFR has been designed to be used and adapted flexibly in this way. (ESfE-Think Tank, British Council and NSDA Initiative, 2014).

Engineering Accreditation Commission (EAC) of Accreditation Board for Engineering and Technology (ABET), United States (ABET, 2004, pp. 2-3) recommends that engineering graduates must attain:

- a. an ability to apply knowledge of math, science, and engineering;
- b. an ability to design and conduct experiments, as well as analyze and interpret data;
- c. an ability to design a system, component or process to meet desired needs;
- d. an ability to function in multidisciplinary team;
- e. an ability to identify, formulate and solve engineering problems;



- f. an understanding professional and ethical responsibilities;
- g. an ability to communicate effectively;
- h. an understanding the impact of engineering solutions in a global and societal context.
- i. a recognition of need and ability to engage in life-long learning;
- j. a knowledge of contemporary issues; and
- k. an ability to use the techniques, skills and modern engineering tools necessary for engineering practice.

III. RESEARCH METHODOLOGY

This section is aimed to find out the lacuna of engineering English syllabus and its impact throughout the course of study. The researcher chose 10 engineering colleges across the Telangana state and conducted questionnaire survey on a Likert's Scale of 5 points to the students and recorded the responses of them in a nutshell. The purpose of this study is to achieve in-depth understanding and complexities of the engineering English and its' role in employment. This study also discusses the possibility of incorporating soft skills in the English curriculum. In this qualitative method of inquiry, the need of soft skills inclusion, extending English syllabus to four years or four semesters and to increase the employability of the engineering graduates in Telangana state.

Data was collected and assessed based on the structured questionnaire provided to the students. The questions were framed carefully keeping in mind the about the importance of Soft Skills teaching alongside English in engineering curriculum and its' impact on the wider aspect called employability.

IV. RESULTS AND FINDINGS

Most of the major findings of the questionnaire survey brought out new dimensions in engineering English curriculum. The most seen findings are as discussed below:

- Almost 68% of the students disagreed that English syllabus of engineering is overloaded.
- Over 50% of the students agreed upon that English hours have been focussed only on syllabus completion.
- 55% of the students felt that no individual attention is given during the language classes.
- More than 40% students believed that LSRW skills had not been learnt by them after the completion of each lesson.

Engineering graduates in Telangana state is associated with three universities namely the Osmania University, Hyderabad, the Jawaharlal Nehru Technological University, Hyderabad (JNTUH, Hyderabad) and the Kakatiya University, Warangal. There are only ten (10) engineering institutions affiliated to Osmania University, Hyderabad and only seven (7) institutions affiliated to

Kakatiya University, Warangal. Among 388 technical institutions most of the engineering institutions (approximately 230) affiliated to JNTUH, Hyderabad. It is found that in Osmania University and Kakatiya University constituted engineering colleges engineering English has prescribed for only one year (two semesters) i.e., first year of the B.E/B.Tech program whereas JNTUH, Hyderabad has three semesters of engineering English for first year and third year (lab).

The engineering students of the above said three university affiliated engineering colleges are in urgent need of inclusion of English communication skills alongside workforce skills (Soft Skills/employability skills) during the remaining years of their course of study keeping at least one semester for every year comprising additional three semesters of Soft Skills and English communication skills laboratory so that their touch with English language may not be receded. Based on the researchers investigations with the engineering students' he found that English language laboratories be made compulsory for all the four years as the both universities prescribed only one laboratory for entire B.E/B.Tech course students'. Telangana state engineering students' levels of language learning/acquisition during the course of study is questionable.

It was found that language lab was a place where students enjoy utmost in learning concepts of language. Most of the students voted for lab sessions of language as they had chance of practicing what they learnt and taught. Over 87 percent students agreed upon that language labs were to be extended and continued during entire engineering course (for all four years).

Professional needs of the students' are to be equipped in English communication skills curriculum. Many employers and researchers prompted that only 18% of the engineering graduates are 'readily employable' without any training sessions on both technical and Soft Skills. The remaining percentage of engineering graduates falls under the sections of 'trainable (50%) and not trainable (32%)'. The trainable section of 50% are to be taken into the workplace by the employers by investing time and money on their training sessions during the initial years to make them competent. And to address the final section of not trainable (32%) engineering graduates, most of them are forced to join non-technical jobs of lower cadre or other jobs unlike to their educational qualifications or remain unemployable.

The last two sections of engineering students' are tested, measured and tagged as 'trainable and un trainable' due to their lack of communication skills, decision making skills, creative skills, logical skills, leadership skills, emotional intelligence, technical writing skills and so on during the job interviews or competitive examinations. Let us imagine that if they were given all the above skills during their engineering study (integrating with their technical subjects or English communication skills) they would have not had

fallen into these sections. These results show the significance of Soft Skills teaching through English communication skills for engineering graduates in India. All the surveys conducted in the country also outburst that the engineering curriculum followed by the most of engineering colleges are outdated and to be modified according to the learners' needs.

Many studies on this syllabus design and learner centered approach have been already conducted and stated the importance of them in engineering English curriculum. According to Nunan (1988), English curriculum should be made on the learners' needs and analysis through task oriented teaching. It was strongly suggested by Hutchinson & Waters (1987), Michael Long (2005) and other researchers.

V. CONCLUSIONS

Many researchers and surveys have been signifying that the Indian engineering curriculum is unfit in meeting global demands of the engineers. Indian engineers' are technically acceptable but very poor in communication skills and problem solving skills, logical skills etc skill set. It is to be considered that most of the technical universities in India have not taken care of employability skills while framing engineering curriculum. In fact, the technical institutions in India are also ignoring the importance of employability skills through inbound or outbound training sessions within their college campus. The engineering institutions never care for the establishment of training and placement cell where students' needs to be recorded, collected, considered and taken care of. Engineering colleges must recruit a Soft Skills expert and through him/her the entire teaching faculty have to undergo training sessions on imparting employability skill set.

The following are a few conclusions to be adopted, instrumented to enhance employability of engineering graduates of Telangana state.

- The engineering English curriculum must cater the needs of the students in getting higher rate of employability.
- The learner autonomy is to be kept in mind while framing and designing the engineering English curriculum. This could help the students' to increase their learning of language skills.
- The results of the research show that there is an urgent demand for Soft Skills in engineering English curriculum in connection to the employability of the engineering students.
- Most of the students' agree to the fact that they want English subject to be taught for four years (at least one semester a year, i.e., four semesters) as they lack basic communication skills and Soft Skills which are much required at workplace.
- The researcher recommends need of establishment of corporate social responsibility cell or training and

placement cell or industry-institute interaction cell in each technical institute without fail.

- Faculty of English must be given rigorous training on Soft Skills or life skills or employability skills so that the effectiveness of the imparting Soft Skills can be achievable.

The teachers of language have a great role to play in this silent revolution of bringing in Soft Skills set into English communication skills syllabus. Unlike, technical skills, Soft Skills are generic skills rather than job specific which can be used like fit for all size at any point of time. The teacher could design and use tasks for encouraging and motivating students' to empower their employability skills. Thus, need of proper training on these training methodologies to language teachers' has become the need of the hour.

ACKNOWLEDGEMENTS

The author would like to thank the management, students and staff of engineering colleges for their cordial support during the questionnaire survey.

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APPENDIX-STUDENT QUESTIONNAIRE

Item	Content	Disagree	Disagree to some extent	No idea	Agree to some extent	Agree
1	English syllabus is overloaded to be completed in time.	1	2	3	4	5
2	No individual attention is given during the lecture in incorporating four basic skills (LSRW).	1	2	3	4	5
3	Most of the English hours have focused only on syllabus completion.	1	2	3	4	5
4	It helps me to understand how to communicate effectively.	1	2	3	4	5
5	Goals, objectives and aims of the specific skills have been learnt by me at the end of the each lesson.	1	2	3	4	5
6	Teachers/instructors help us in practicing the skills during the college hours.	1	2	3	4	5
7	Communicative approach is given due importance in learning language skills.	1	2	3	4	5
8	Assignments, tests are conducted and given detailed evaluation to enhance language skills.	1	2	3	4	5
9	Teacher/institution is providing us a wide range of books, magazines, notes to develop our reading skills.	1	2	3	4	5
10	There is a scope for sharpening our writing skills by participating essay writing competition, model writing etc... in our institution.	1	2	3	4	5
11	We are encouraged to speak freely in English and provided a chance for improving our speaking skills.	1	2	3	4	5
12	Extension of language labs throughout the engineering course is necessary.	1	2	3	4	5
13	English should be made as compulsory subject for all years in engineering curriculum.	1	2	3	4	5
14	English class should be learner centered.	1	2	3	4	5
15	Use of internet/multimedia in learning English.	1	2	3	4	5
16	Activity based learning is in practice in language labs.	1	2	3	4	5
17	We are given activities on creative, critical thinking skills.	1	2	3	4	5
18	Decision making skills are tested in several situations.	1	2	3	4	5
19	Soft Skills are to be given due importance in English syllabus.	1	2	3	4	5
20	English classroom is the best way to learn/practice soft skills.	1	2	3	4	5