

## ROLE OF ENGLISH IN TECHNICAL EDUCATION

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### ABSTRACT

India as an emerging eminent nation in the field of technical and quality education requires certain new areas of enhancement and improvements for its growth. This paper highlights the strengths, weakness and focus on quality of English education with certain suggestions to create a vibrant research culture in the present scenario.

**Keyword:** English, Technical Education, Importance, Strength, Weak points.

### INTRODUCTION

India has a vast infrastructure of higher education to support India's advancement toward a developed economy and knowledge super power in the coming years. There are a good number of universities including seven IITs, six IIMs which have emerged as global brands in the world of education and research.

In addition, the UGC has taken initiative to develop centers of excellence in higher education in selected universities in the country. In 2004 there were 16885 colleges in India in addition to the university teaching department with 100 million students at the university level programmes as per UGC report 2003-04.

As per AICTE report 2004-05, the enrolment in the engineering and technology at UG degree level stood around 4.5 lakh while in the PG programme the intake was 32,500. Much of the expansion of higher technical and managerial education has occurred during the last ten years. Table 1 and 2 depicts the growth of technical education at the degree and PG level respectively during 1995 to 2004.

Despite of such an impressive growth of technical education, India is still not in a position to meet the demand of quality man power for the industries at home and abroad. According to the expert opinions 75% fresh engineering graduate in India are unfit for jobs. Reasons given for this are very poor English, shallow skills in technology, lack of oral presentation, etc.

**Table: 1 Growth of technical education at degree level during 1995-2004**

	1995		2004		% growth	
	No. of institution	Intake	No. of institution	Intake	No. of institution	Intake
Degree (Engineering)	375	90773	1317	411660	251.2	353.5
Degree (Pharmacy)	128	5930	389	21515	203.9	262.8
Degree (Arch)	91	3827	78	2592	-14.2	-32.3
Degree (HMCT)	7	420	61	3660	771	771.4

**Table: 2 Growth of technical education at P.G. level during 1995-2004**

	1995		2004		% growth	
	No. of institution	Intake	No. of institution	Intake	No. of institution	Intake
M.tech	131	6004	389	32571	196.9	442.5
M.Pharma	-	-	132	2686	-	-
M.Arch	-	-	7	159	-	-
MBA	312	26874	936	69200	200	142.6
MCA	146	4627	1012	54167	593.2	1070.7

English is now the international language. Even non speaking countries have accepted this fact and open their doors to English particularly for engineering disciplines.

Therefore, we need to develop world class institutions focusing on world class quality education and research so as to empower the society with S and T capabilities and equipped to excel in the global knowledge society of tomorrow. This requires a major shift in both the outlook and approach in planning and execution of India's expansion in technical education and research horizons.

#### **Importance of English in Technical Education**

English in engineering education does not at present, fulfill the requirement and need of the students as well as professionals. The curriculum falls short and misses many important topics which are foundation and corner stones. Learning of engineering disciplines and the practice of the profession any where in the world are nearly dependent on English language and its application. The focus of the new courses remains on class room teaching methodology which can make or mark the main aims of designing such curriculum even the importance of English has been realized by even national/regional

print media of Hindi language. With the advent of new technologies, the world is shrinking in to a global village. Therefore, there is need for effective communication which is becoming almost essential.

### **Strength of Technical Education:**

Our country's youth is very much attracted towards persuasion of higher education. There are IISc, IITs, IIMs and few other reputed institutions which are global brands having formal as well as open education, excellent research facilities, suitable environment for technology innovation also there are certain research center emerging at UG level.

### **Some Weak Points in Technical Education System:**

All the universities require the major overall of curriculum as well as significant up gradation of academic infrastructure in many of its institutions. Even there is very small component private participation for large corporate house. The weak institution -industry partnership and accreditation proved it as the major weakness and also there is a shortage of qualified faculty in new and the emerging areas. There is still a wide gap between graduate engineer and professional engineer.

### **Opportunities in this field**

1. Large global education market opportunity for India.
2. Linking education to economic system and industry need.
3. Building corporate academic partnership in education.
4. Developing a global mindset.
5. Major flip to world- class research setting up globally distributed research nodes.
6. Making India a global knowledge hub.

### **Threats to Technical Education System:**

1. Conform to world-class quality in higher education or else face exodus of talent to foreign university campuses in India.
2. Unattractive teaching profession in colleges and universities is driving talented graduates to turn away from career in technical and research in the universities and colleges, reverse this by proactive measures.
3. Lack of use of technology in the educational delivery is making Indian higher education system less productive.
4. Lack of focus on ethics and values in technical education has created educated class of people less responsive to society and good governance.

However, these threats can be taken up as opportunities to respond to the local and global challenges knocking at the door steps of the technical education. We need to turn India's technical education system towards making India a global knowledge hub without further loss of time.

### **Teaching Priority Required for Betterment of English in Technical Education**

The main requirement of learning English are for reading the print/electronic material as a top priority. In India, there are many engineering colleges where even teaching spoken English is not up to the mark and yet teaching continues with comprehensive thoughts reading and writing in English. Same is the case with engineering students who are shy or reluctant in English conversation. The third priority is writing efficiently strictly as per requirements in simple but not complex and ambiguous language.

The spoken capabilities are many times required in the classroom teaching for asking the questions explaining the material and oral presentations. Accent twists spoken language making it ambiguous and sometimes difficult to handle. It can be brought under command only by practice through hearing for longer period and frequently.

### **Major Requirements of Industry**

Industries require people of knowledge, capable of working in today's knowledge and technology intensive work environment, capable of handling the complexities of the work place, capable of learning new knowledge having adaptability to adjust to new and emerging technology environment in the industries and organizations. Industry also wants that engineering graduates equipped with knowledge and skills should have an attitude to work in interdisciplinary team and must necessarily possess high managerial acumen so that they are able to contribute to the growth of productivity and nurture values for which the organization stand for it.

The leading institution the country such as the IITs , IIITs , NITs and most of other premier institutions such as BITS Pilani, DCE and such other institutions which have carried out for themselves a niche position in technical in the country continue to attract the very best of school leavers to join them after 10+2.

### **Focus on Quality and Knowledge Information:**

As India advances into the knowledge age the technical education in India should focus on the quality aspects of education and research. The investment in the technical education is to be viewed as an investment in crating a letter tomorrow for India. This requires the engineering institution to invest heavily on knowledge infrastructure which in turn will provide a fertile ground for nurturing the innovative and creative genius of India youth, shall unleash the power of knowledge to create added prosperity both to the students and faculty as well as to the management of the institutions.

A point of serious concern related to the multiplicity of entrance examination for admission to engineering courses. We should converge towards national level entrance test for admission to engineering and technology courses. Multiplicity of entrance examination is a major irritant as it buckles the back and often ruptures the nerves of otherwise highly enthusiastic school leavers that turn towards

engineering education with high level of enthusiasm and invest. The only people who gain are the coaching institutions which make the candidate retort question and their answer for various entrance examinations. We need to create the urge in the minds of those aspiring for entry into engineering is a profession that demands high levels of creativity, flights of imaginations, capability to arrive at an optimum decision making and scientific tools of decision making and profession demanding high level commitment to public services and personal professional integrity. These aspects of nobility of engineering are lost in the mad rush to prepare for the multiple entrance examination.

### **Some Suggestions to Improve Technical English Course**

The complete course in technical English needs alteration/addition/modification before finalizing it in a suitable form. This has to be in accordance with exciting standards of Hindi/English medium student of different parts of country.

A wide discussion among all the expects shall be useful in formulating the favorable and useful course applicable countrywide if possible, for the majority of areas. It happens that diploma student get admission direct in second year of four year degree course and hence do not study English / communication at all. Such courses are over in first year. It is necessary to have some arrangement so that proposed courses could be included for diploma students as well. There should be emphasis on practical applications rather than on theory rules. Even the class room situation has to be kept in mind while designing the course to fulfill its requirements.

Rajiv Gandhi Technical university developed a new vision document focuses on shaping RGTU as knowledge university of the third millennium where in both the faculty and student elevate their levels more higher than other state level universities. The faculties here are attaining the status of an eminent teacher and as the world class researchers while the students acquire capabilities of innovation and creative research along side with world quality education. The enabling environment for such a world class university provides a strong knowledge infrastructure including a knowledge parked to foster ideation and knowledge incubation

### **CONCLUSION**

Teaching English to the engineering students must be up to the point, compact and result oriented. It should not, in any way disturb the existing balance with the concurrent or contemporary engineering subjects.

The excessive use of high technology, difficult methodology and complications in the name of high standard would kill the sprit of learning for life time.

The students might loss interest or just study English for the sake of passing examination and getting rid of academic compulsions.

It is the applications of English for engineering students/professionals which is required to be on higher pedestal rather than aiming at specialisat of the language.

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