A Study on Decline in Engineering Graduates

Ketan Wankar¹, Vaidheyee Khawse²

MBA, Dr. Ambedkar Institute of Management Studies & Research, Deekshabhoomi, Nagpur, India, 440010

Abstract- The numbers of students studying engineering have declined in recent years in India. The factors which are responsible for decline are the difficulty of the curriculum, job opportunity, salary offers, working environment, etc. Unemployment in engineering education has affected engineers to get placed in related jobs. Choosing the right career path is becoming more and more important for young graduates today. This study will focus on current situation in engineering and able to make decision for selection of graduation course for students. The research is based on random survey method in which Junior college and graduate students were taken into consideration, a total of 237 responses were collected. The major finding from the study was that engineers has to upgrade skills for which quality of teaching must be provided also business activities and government plays a major role in job creations.

Keywords: - working environment, career path, business activities

I- INTRODUCTION

Initially engineering stream was priority for students then a period came when it becomes stagnant and now it is declining with increasing rate. Except IITs and other top technology institutes in most of engineering colleges in India are unable to provide quality education and skills to the students which would offers them a suitable job opportunity. Since demonetization, many small and medium scale industries were closed so there are no job available as a result students shift their interest to other field. Undergraduate courses like B.B.A,B.COM have appears to be the preference of many students because of booming banking and finance sector with law and management courses which have increased enrolment compared to previous years. According to data given by AICTE, last year 80,000 seats were unoccupied and due to strict rules and regulation of AICTE more than 410 colleges across India has been closed in last 4 years.

From year 2011-12 there is increased in number of students in engineering as well as in other graduation courses however in year 2014-15 the admission in engineering becomes steady and then starts declining. The situation is same in other courses also but percentage fall in engineering is more compare to other graduation courses. Graduates are only collecting their degrees and not getting enough skill to be productive and contribute to the Indian economy. Most of the engineer after completing engineering shifts their interest to other field and starts working in banking and non-engineering sectors given in Table 1.

II- METHODOLOGY

This study use survey method where random sample of 237 respondents has been taken from students of various colleges. The personal interview of students from various junior and graduation colleges were taken, in that some of them respondent while few could excuse themselves to respond to the question. The students who were not interested in engineering education is taken into consideration. Duration of data collection, gathering, analysis within the country was 45 days. Data were collected from both primary and secondary sources but research were mainly based on primary source of data collection. The data is collected through questionnaire and the responses of each individual have been noted down. Google forms were created for getting the responses. Meanwhile all participants were well informed about the purpose of the study and their voluntary participation and their rights to self determination were guaranteed. Out of total 237 respondent, 185 were eligible for analysis while 52 were discarded due to improper and incomplete respond. Data were analyzed using descriptive and frequency distribution.

The list of questions and their respond are noted down as given in table 2 below.

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Years	Students in engineering & technology 27,74,828	Students in Art, Social science and Humanities 66,35,945		
2011-12				
2012-13	34,71,488	81,98,107		
2013-14	40,68,476	94,65,527		
2014-15	42,27,528	1,07,07,305		
2015-16	42,50,183	106,66,931		
2016-17	41,61,252	105,65,728		
2017-18	40,19,379	106,28,380		

Table 1-Yearly Admission Comparison In Graduation Courses.

Table 2-Responses of students.

Questions	Response	Frequency	percentage
	B.E	30	12.65
	BBA	32	13.50
I am doing/want to do my graduation in.	BCOM	39	16.45
-	BSC	33	13.92
	OTHERS	103	43.45
	Job guarantee	73	39.43
Reasons for selecting courses other than	Duration of course	30	16.21
engineering.	Following trend	49	26.48
-	Other reasons	33	17.83
	Hard	93	50.27
Difficulty level of engineering course.	Moderate	68	36.75
	Easy	24	12.97
Do you think engineering colleges provide	Yes	78	42.16
sufficient knowledge and skills.	No	107	57.83
I think there are sufficient jobs for engineering	Yes	55	29.72
graduates.	No	130	70.27
Engineering graduates are provided with high	Yes	47	25.41
salary package	No	138	74.59
Will you appost others to get for anging sting	Yes	43	23.24
Will you suggest others to opt for engineering	No	142	76.75

III-RESULTS

The data collected in this research shows in table-2,the results are extracted as out of total students which are selected for research only 12.65% are opt for engineering and remaining 87.35% are opt for courses other than engineering courses. The reasons for selecting graduations course other than engineering is job guarantee, duration of course, following trend and other reasons are 69.43%,16.21%,26.48%, and 17.83% respectively. In addition to above reasons another reasons is that more than 50% students think that difficulty level of engineering course is hard. According to survey, engineering colleges are not providing sufficient knowledge and skills. Around 75% respondent think that high salary packages are not provided to most of the engineering graduates. Approximately 77% respondents do not want to suggest others to select engineering career.

IV-CONCLUSION

After the research and analysis of data, our findings are that engineering graduates are not upgrading their knowledge and required skills and also the quality of teaching is not up to the mark. One of the reasons for selecting graduation course other than engineering is their perception about current employment environment where an engineer appears to be treated as workers. Job opportunity being one major reason behind decline in admission and jobs which were offered are not paying high salaries so students no more wants to waste 4 years at a engineering institute. Also engineers have to study theory and perform practical and projects were included in syllabus based on technical knowledge.

However universities, business organizations and government leaders must take appropriate action to assure quality of engineers and jobs offers to them are necessary to make changes in present condition.

REFERENCES

- Azami zaharim et al., "Engineering employability skills required by employers in asia", proceedings of the 6th WSEAS International Conference on Engineering Education.
- [2] G.Swamy, "The need and importance of Employability skills at UG level: a study of private degree colleges of telangana state", International Journal of English Language, Literature and Translation Studies, Vol.2.Issue 3, 2015(july-sept).

- [3] Arun patil et al., "Re-engineering graduate skills-a case study", European Journal of engineering education vol.34, No.2, may 2009,131-139.
- [4] Number of engineering seats to go down by 80,000 this year, http://m.timesofindia.com>articleshow (accessed on 5 Jan 2020).
- [5] 94% of engineering graduates are not fit for hiring, https://m.economictimes.com/jobs(accessed on 5 Jan 2020).
- [6] Engineering education in India, short and medium term perspective, https://www.aicte-india.org>files (accessed on 6 Jan 2020).
- [7] National academy of engineering, 2004, The engineer of 2020:visions of Engineering in the NEW century, Washington DC,118 pages.
- [8] Inter Academy council, 2004, Inventing a Better Future: A strategy for Building Worldwide Capacities in Science and Technology, Amsterdam, The Netherlands, January 2004, 144 pages.
- [9] Jones and Oberst, 2000, "International trend in engineering accreditation and quality assurance", Russell C.Jones and Bethany S.Oberst, The many facets of international education of engineers.