THEME–4

Industry Expectations from Academia

A Study on Industry Expectations from Professional Student's with Reference to Engineering Institute in India

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ABSTRACT

Skill shortage remains one of the major constraints to continued growth of the Indian economy. However, very little research has been conducted to identify which specific skills are in high demand and which skills is in short supply. Their skills influence the organization mostly in developing, hiring and training; both the new and the experienced resources. The present study tries to explore gap between industry expectations and quality of recent college graduates. The main aim of the study is to create a model for interaction interface between industry and academia. This paper also reveals the skills expected by the corporate from the engineering students. The study also suggests some recommendations and strategies for improving curriculum, instructional processes and development of engineering students.

Keywords: Industry, Institution, Expectation, Skills, Quality, Curriculum.

INTRODUCTION

The government of India and state governments there has undertaken reforms in higher education. In particular, the engineering education sector has launched reform initiatives within the current legislative framework through the Technical Education Quality Improvement Program (TEQIP). Participating institutions have been selected through a norm-based funding mechanism after meeting criteria for the reforms, which promote, for instance, autonomy, the decentralization of the financial framework, the establishment of a functioning board of governors, and the strengthening of partnerships with the private sector. There are many expectations in the young minds of graduating engineers in India today. This can also be referred to as their perception of the scenario after college. The main aim of university education today is molding and furnishing students to be ready to face the challenges and responsibilities in their future. This therefore requires the education be value based with the ability to synthesize the morals of the student individually. It has been very compelling to the education system to give high quality education which meets the international standards this is with regard to the global demands, technology and scenario on the inception of skills on the input side and the fast changing products and services on the output side. It" s a very unfortunate case that Indian universities have not featured in the world top universities list with the main reasons being lack of advanced teaching and learning process, reduced investments, and missing out in research involvement. Due to this ever growing demand for high quality education and the minimal resources being provided by the government the private sector has venture in this field in a mighty way in India today. In the world at large, the top universities

are the major influencers of the results in the private sector; these are such as Stanford and Harvard. The acquisition of employment in the competitive environment and sustaining the same demands a high degree of adaptability in today" s fresh engineers. The quick and dynamic changes in the industry globally may be attributed to the workforce worldwide, dynamically changing specifications of products and services, heightened competition and changing technology. Employers today prefer to hire young and energetic engineers who have the potential of becoming future leaders and possess skills to motivate the team members to take sensible resourcefulness. Now that we have covered the demand side of this situation, when we come to the supply side, we encounter a multifaceted system of academics and the output. It is evident that the stress of education in universities has moved more towards training for jobs and trying to make graduates Job-fit" as a result of their program of study and laboratory/project practice at the learning centers from the commencement of the this century.

REVIEW OF LITERATURE

Rajsekaran and Rajasingh (**2009**) have concluded that the perception gap between industry and faculty must be bridged to improve the employability of students and enhance the quality of higher education. Industry leaders presume that only 15% of people coming out of Indian colleges are employable. Greendefined the quality of higher education as "producing graduates to meet the human resources needs of an organization in the business, industrial and service sectors."

Winbladh (**2004**) has focussed on the requirement engineering that involves capturing, structuring, and accurately representing the client's requirements in a manner that can be effectively implemented in a system that will conform to the client's specifications. He also suggested project based & collaborative learning to upgrade the students. He concluded that new graduates are ill equipped to enter and survive a market with recessions because they do not exhibit the qualities the qualities that the industry treasures.

Hamatteh and Jufout (**2003**) described that a national level committee, comprising members from educational and industrial sectors be formed to match the demands and needs required by the labour market with the educational portfolio. This must be implemented by regular analysis, skill level determination, revision of the curriculums and finally to follow up and control, on the basis of individual specialization. This model may reduce the expenses of pre- employment training, which financially overburden the industrial sector & increases the proficiency level of graduates, leading to trust in the educational sector and enhance the economic growth.

Burell & Grizzell (**2008**) explained that institutions must be responsive to demographic shifts that have occurred in higher education by engaging in ongoing strategic planning similar to that which is done in the business world. Smith and Tamer (1984) said the historically, colleges and universities have been extremely slow in adopting to social change.

PROBLEM STATEMENT

India has one of the largest Higher Education System in the World, with more than 700 Universities and 35,500+ colleges out of which 115 Universities and 5672 colleges teach various engineering disciplines. With more than 12 million students on their rolls, and half a million

teachers teaching in all disciplines, More than 85% of these students are enrolled in bachelor" s degree programmes and about one sixth of all Indian Students are enrolled in Engineering\Technology degree programmes. Engineering colleges in the country have been growing at 20% and business schools growing at 60%.Even after Having 1000' s of Educational Institutions in place, Unemployment is a biggest threat for the Country 25% of technical graduates are having potential for employable and 10-15% of other graduates are considered employable. So the reason of "Unemployment" is not the lack of demand or lack of supply, but

It's the lack of "Quality Supply." The reasons behind is Lack of regular industry academia interface Lack of Job oriented & Skill based Curriculum, Lack of proper evaluation & Certification of practical skills, Lack of internship/ apprenticeship opportunities in industry.

OBJECTIVES

- To analyze the skills expected by the corporate from the engineering graduates in India.
- To develop strategies for improving curriculum, instructional processes and development of engineering students.

METHODOLOGY

The data used in this research will be solely collected through the interview method with the industry people and academicians containing both open ended and close ended questions. With regard to this, the data used will be primary data. The secondary data referred to in this research will be from the cited areas in the literature review. The survey was carried out on academicians from colleges in the Chennai region. Most of the colleges were under the Anna university and private university and also the industry people from various sector like automobile, IT,ITes,Media & E-commerce.

ANALYSIS

By analyzing the data come to known that the major skill sets expected by the corporate from the engineering student are.

Fig. 1

Specific Skills

The specific skill means technical/ domain skills required by the particular industry, the IT industry expects basic database, basic software knowledge, automobile industry expects basic functions of technology etc. In this skill most of the engineering graduates are very poor. The expectation form industry is not matched by the engineering students in this skill category.

Core Skills

The core skills means interpersonal / management skills expected form the engineering students. Normally these skills are acquired not by books but by experience.

Personal Skills

In the competitive employment market engineering students should posses the various personal skills rather than technical skills because majority of the students are failure in the personal interview due to lack of personal skills.

Communication Skills

Communication skills are more vital part to justify the student's performance and convince the industrial clients through their oral and written communication in today scenario industry is expecting more of communication talent from engineering graduates to sustain their development and also satisfy their clients.

PROPOSED MODEL FOR INDUSTRY – ACADEMIA INTERACTION

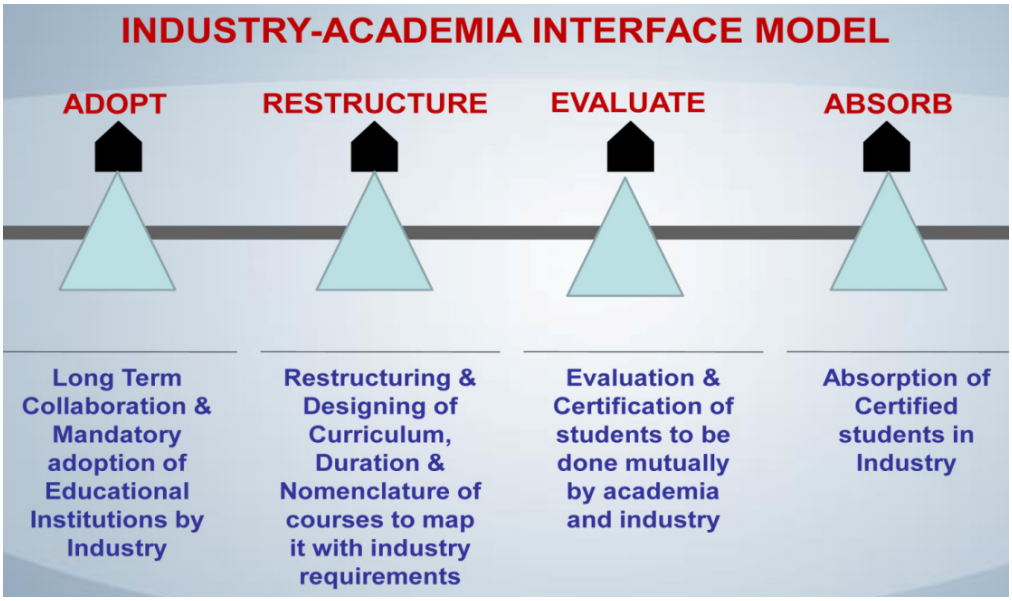

Fig. 2

CONCLUSION

This study revealed that there is ample gap between the academic output and industrial expectation. In the study, 4 factors /skills (specific, core, personal characteristics, communication skills) have emerged. To fill the gap between academic output and industrial expectation a model was developed in bridged to improve the employability of the students and enhance the quality of higher education.

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Prof.(Dr) K. Maran, working as a Professor and Director in Sri Sai Ram Engineering, Chennai, He has over one and half decades of teaching experience in post graduate management, commerce and computer application. He has Published 140 articles in referred National and International journals. He has Produced 18 Ph.D. and 50 M.Phil candidates in Business Administration. He has Acting as chief editor for one National and two International journals and also as a reviewer for various international journals. He has participated in more than 100 conferences, organized by reputed universities schools in India and overseas. He Organized 9 International conferences, 38 National conferences, 202 Seminars and 35 FDP and MDP. He has acted as a resource person and chief guest for various national and international conferences, seminars, work shop and FDP in India and Abroad. He hosted around 100 programs for youth development and career guidance for engineering, management and social science students in various Television media like Puthiyathalaimurai, Thanthi Tv Kalaignar Tv and Doordharshan. He received a Best Director Award for Management Institute 2012 – Awarded by World Education Congress, June 2012, Best Faculty Award awarded by Nehru Institute Of Management, Coimbatore, 2011, He has Organized various International student exchange program with University of Malaysia, University of Jaffna, Srilanka, Eastern University, Sri Lanka and various industries in India for past 15 years he assisted the students for getting placement in MNCs and corporate in India and abroad.

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