
EMPLOYABILITY SKILLS IN HIGHER EDUCATION IN INDIA- A REVIEW

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INTRODUCTION:

Official figures assembled by the International Labor Organization say that 73.4m young people are unemployed, or 12.6% of all 15 to 24-year-olds. But going by youth inactivity, which includes all those who are neither in work nor education, things look even worse. The OECD, an intergovernmental think-tank, counts 26m young people in the rich world as “NEETS”: Not in Employment, Education or Training. A World Bank database compiled from households shows more than 260m young people in developing economies are similarly “inactive”. The economist calculates that, all told, almost 290m are neither working nor studying: almost a quarter of the planet’s youth (The Economist, 2013).

The current employment crisis is not just a short-term problem caused by the recession. Changes in levels of employment and the nature of work caused by advances in technology suggest longer term structural changes, which have led to a global crisis where unemployment and skills shortages are occurring simultaneously.

Technology is playing a major role in unemployment today. The disruptive technology is changing the pattern of work and the skill demanded. According to The Economist, the world is about to experience a further wave of technology-enabled innovation. “Technology’s impact will feel like a tornado, hitting the rich world first, but eventually sweeping through poorer countries too. No government is prepared for it.

In India also, Majority of educated and uneducated job seekers in rural and urban areas have no skills. 90% of employment is in unorganized sector. By 2020, 220 million students will pass out from school - out of which 150 mill will not enroll for college education; they need training in vocational trade. Those entering into higher education require skill building to be employable in industry.

The Planning Commission of India has estimated that around 500 million skilled persons are required by 2022 while the current capacity of the skill development program is 3.1 million. Considering issues like population growth, unplanned rural-urban migration causing urban poverty, high school dropout rates, India is likely to witness a deficit of 5.25 million employable graduates and vocationally trained workforce in next few years (Deloitte, 2013). It also aims to increase produce workforce in organized and unorganized sectors especially among youth, women, disables, disadvantage sections. Out of this 500 million, National Skill Development Corporation (NSDC) will train 150 million, Ministry of Labour will train 100 million, MHRD 50 million and the rest 230 million shall be trained by 21 ministries, departments and various other organizations.

India would need skilled HR over across following sectors: Auto and Auto Components, Building and Construction Materials, Building and Construction, Real Estate Services, Electronics and IT Hardware, Education and Skill Development Services, Food Processing, Gems and Jewelry, Healthcare, Textiles, Leather and Leather Goods, Organised Retail, Tourism and Hospitality, Transportation and Logistics, Media and Entertainment, BFSI, Chemicals and Pharmaceuticals, Furniture and Furnishings, IT and ITES. While there are millions of jobs opportunities across these sectors; industry continues to struggle for skilled talent.

Keeping in view the growing concern of employability of the educated youth in India, this paper focused on reviewing the efforts of government in skill development in higher

education sector in India and also focusing on the review of existing literature. Further it moves on to the suggestions what needs to be done further.

Research Methodology:

Various building blocks of the research work are as under:

Nature of Research: The present research is qualitative in nature as it explores the existing systems and literature related to the employability skill development in higher education sector in India.

Data Collection: Since the nature of research is qualitative, the data for understanding skill development scenario in India will be collected mainly from government websites and various research papers on the present topic.

Analysis Scheme: Various themes from the data would be extracted for the purpose of deeper understanding of the subject.

EMPLOYABILITY SKILLS DEVELOPMENT IN INDIA: GENERAL SCENERIO

Skills and knowledge are the dynamic forces of economic growth and social development for a country. Countries with higher and better levels of education and skills are more likely to adjust effectively to the challenges and opportunities of the world. Following dramatic increases in enrolment in higher education in India and fundamental shifts in the graduate recruitment market, a degree is no longer enough to guarantee a graduate a satisfying future career. The skill shortage is still one of the major constraints in most industries in India, (World Bank, 2009).

Stake holders of skill development in any economy are-

1. Informal education
2. Formal education
3. Employers at work place.

The informal or hereditary mode of education for skill development in India is mainly through passing on cascading skill sets from one generation to the next and difficult to be tapped although government of India is putting lots of efforts to identify and categorize such set of skills.

Employers also facilitates on campus training and development of personnel in various ways but this paper is mainly focused on the skill development in formal education sector mainly in higher education and what needs to be done.

There are three target groups government has identified for vocational/ Technical education in India -



PRESENT EDUCATION SYSTEM IN INDIA

Here is a chart giving idea of present education system in India-

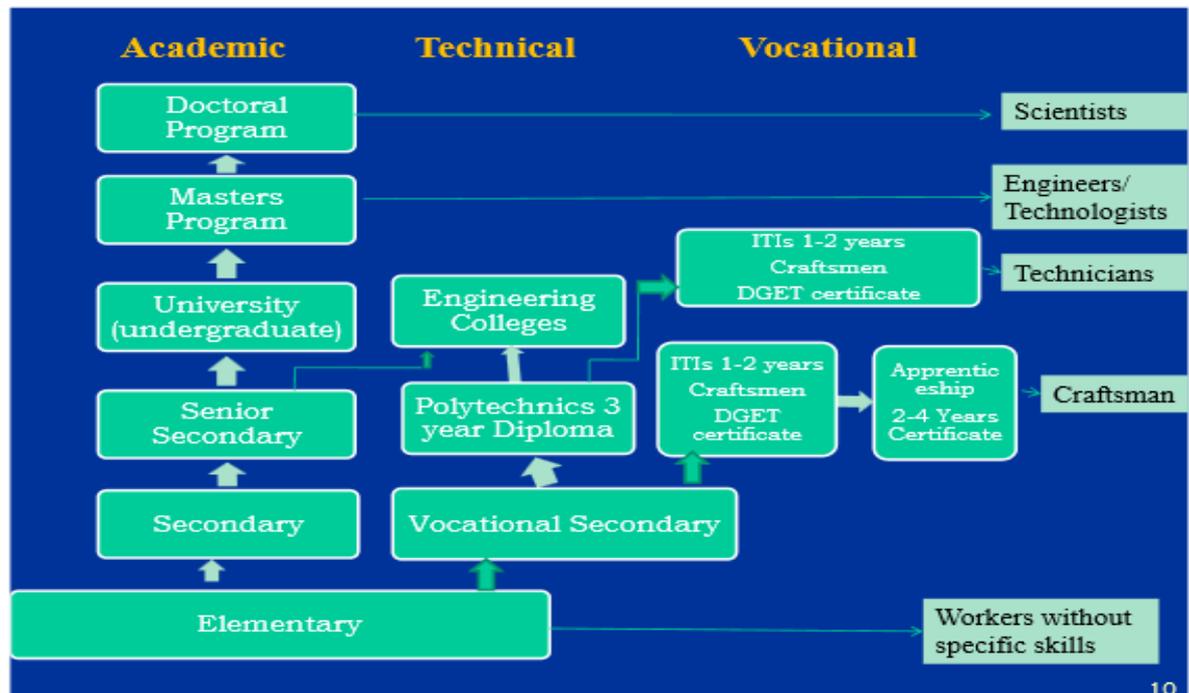


Fig.1: Academic, Technical and Vocational parallel training structure/system in India-a flowchart

Source: Skill development in India: The vocational education and training system report no.-22 World Bank

The present education system in India mainly comprises of primary education, secondary education, senior secondary education and higher education. Elementary education consists of eight years of education. Each of secondary and senior secondary education consists of two years of education. Higher education in India starts after passing the higher secondary education or the 12th standard. Depending on the stream, doing graduation in India can take three to five years. Post graduate courses are generally of two to three years of duration. After completing post-graduation, scope for doing research in various educational institutes also remains open.

TECHNICAL AND VOCATIONAL EDUCATION SYSTEM IN INDIA

After independence, a number of committees and commissions came into the vocational education system. National Policy of Education (1968) by Kothari commission and Central advisory board of education in 1975, which adopted the 10+2+3 pattern of education are notable in this respect. The focus of such initiatives was to build a sustainable skill based education system.

The term Technical Education and Vocational Training are sometimes used synonymously. However, as per present practice, the term TE refers to post-secondary courses of study and practical training aimed at preparation of technicians to work as supervisory staff. The term VT refers to lower level education and training for the population of skilled or semi-skilled workers in various trades and it does not enhance their level with respect to general education. Vocational courses are primarily designed in such a way that they impart a thorough application-based study wherein theoretical concepts of a field are not studied independently but are subordinated to the understanding of techno-operational aspects of specific job. The main agencies involved in TVET policy formulation and its implementation include:

Central Government

- National Skills Development Council
- Ministry of Human Resource Development
- Department of School Education and Literacy (for TVET programmes in senior secondary schools)
- Department of Higher Education (for Technical Education)
- Ministry of Labour and Employment, Directorate General of Employment and Training (for Vocational Training)

There are some other 20 Central Ministries and Departments which have running some small TVET programmes.

State Government

- Directorate of Technical Education

Private Sector

NGOs

Understanding the changing needs of the world that today every company is looking for specialist and skill based employees, CBSE Central Board of Secondary Education India has included commerce, engineering, health and paramedical, home-science, agriculture, tourism and other vocational subjects in their senior secondary education.

Recently government has made provision of vertical progression of students passing out of schools with vocational education into the portals of higher and technical education including diploma and degree level courses. UGC has recently introduced B.Voc degree program in 127 universities and colleges in India. Further setting up of community colleges providing diploma courses in various sectors has been approved for 150 institutions (UGC,2015).

Despite all government efforts, majority of educated and uneducated job seekers in rural and urban areas have no skills. As per the Economic Survey 2007-08, 93% of India's workforce include the self-employed and employed in unorganized sector



Fig.7: Number of person getting vocational training per thousand person age group wise in India

Source: NSSO Report No. 517 year 2004-05

By 2020, 220 million students will pass out from schools - out of which 150 million will not enroll for college education and they would need training in vocational trade.

GOVERNMENT EFFORTS IN DEVELOPING EMPLOYABILITY SKILLS IN TECHNICAL EDUCATION IN INDIA:

Education is an area of special focus in the XII Five Year Plan. The Eleventh Plan placed the highest priority on education as a centered instrument for achieving rapid and inclusive growth. Technical Education is instrumental in making the remarkable contribution to economic growth of the Developing Countries by way of suitable manpower production according to the needs of the Industry, Society and the Global World as a whole. To produce fully skilled manpower/knowledgeable technocrats in the present era of science and technology is the need of the hour. Polytechnic education has responded to the challenges of industrialization for self-reliance.

Technical Education covers courses and programs in engineering, technology, management, architecture, town planning, pharmacy and applied arts & crafts, hotel management and catering technology. India's general, technical and managerial capabilities are on par with the best of the world countries. While the youth population is fast shrinking with higher dependency ratios in the developed world, India is blessed with the population of about 70 percent below the age of 35 years. Youths are the most vibrant and dynamic segment as well as potentially most valuable human resource.

However, despite phenomenal capabilities, India is seriously handicapped with a very weak and narrow knowledge base, with 12.3% gross enrolment ratio, as compared to 21% in China, 54.6% in developed countries and the world average of 23.2% . There is need to convert the available huge human resource potential into a reality by expanding opportunities for youngsters and that too on a massive scale and in diverse fields such as science, technology, engineering, architecture, management etc. to reap the demographic dividends. This is possible only if we seriously undertake rapid reforms in the higher and technical education sector.

The technical education system in India can be broadly classified into three categories -

- Central Government funded institutions,

- State Government/State-funded institutions &
- Self-financed institutions.

The 60 Centrally funded institution of technical and science education are as under:

IITs (including 6 new IITs set up during 2008-09)	13
IIMs	7
IISc., Bangalore	1
IISERs	5
NITs	20
IIITs	4
NITTTRs	4
Others (SPA, ISMU, NERIST, SLIET, NITIE & NIFFT)	6
TOTAL	60

Besides the above, there are four Boards of Apprenticeship Training (BOATs). In order to give a boost to higher and technical education, the government is opening new central universities, IITs and other central institutions the detail of which is as under:

SNo.	Institution	No. of Existing at the end of X Plan	Additional Proposed in the XI Plan
1	Central Universities	19	30 (16 in uncovered states & 14 aiming at world class standards)
2	IITs	7	8
3	NITs	20	10
4	IIITs	4	20
5	IISERs	2	3
6	IIMs	6	7
7	SPAa	1	2

Technical Education Quality Improvement Program (TEQIP)

Government of India has implemented a Technical Quality Improvement Program (TEQIP) with the assistance from the World Bank to improve the quality of education and enhance the capabilities of the technical institutions to become dynamic, demand-driven, quality conscious and competitive at national and international levels. The proposed reforms include faculty development, examination reforms, regular curriculum revision, introduction of semester system, focus on research and giving autonomy with the accountability.

Despite all efforts from government agencies those who are in higher and Technical education in India are facing enormous problem of “Employability” or according to market we can say that “Lack of Employability Skills”.

Currently “Skill training is too vocational and Normal education a lot academic”

Employability Status of Youth in India: Some Reports

The country has 750 universities, 38,000 colleges, one million teachers and about 25 million students, but there is a huge gap between what is being churned out every year by the institutes and producing employable candidates.

Only 34% of graduates in India are employable today as most of them lack necessary skills required for any role in the industry (The India skill report, 2014). The tests conducted in about 2,200 colleges across 28 states and seven union territories for two months in August and September in 2013, mainly concentrated on English language, cognitive skills, personality, information technology, general abilities and domain skills — finance, retail, sales and automobile — of students graduating early next year. Although, the 34% employable included only 11% females, the survey says that female employees are better in quality than their male counterparts.

Only 18% engineering graduates are employable (National Employability Report, Engineering Graduates – 2014). Of the 1.2 lakh candidates surveyed across multiple states, 91.82% lack programming and algorithm skills, 71.23% lack soft and cognitive skills, 60% lack domain skills, 73.63% lack English speaking and comprehension skills and 57.96% have poor analytical and quantitative skills. Of the 6 lakh engineers that graduate annually, only 18.43% of them are employable for the software engineer-IT services role, while just 3.95% are appropriately trained to be directly deployed on projects. For core jobs in mechanical, electronics/electrical and civil jobs, only a mere 7.49% are employable. In contrast, 53% engineers have software role as the most preferred job, whereas 44% have core engineering jobs as their preferred role. This means 97% engineers want jobs either in software or core engineering.

The National Association of Software and Services Companies, NASSCOM -McKinsey Report predicts India will confront a huge shortage of skilled workers in the next decade, particularly in the BPO industry. It also says that the IT industry currently faces a shortage of 5,00,000 skilled workers. Other industries like Retailing, Telecom, Manufacturing etc will also create 10,00,000 new jobs in the next 5 years

Putting all what was said together, a generic question of departure arises: what are, according to the published reports and previous studies in the field, the determinants of employability, and the relations between employment, employability skills and education in India?

MAJOR CHALLENGES AND ISSUES IN EMPLOYABILITY IN HIGHER EDUCATION:

There are various reasons for lack of employability skills among graduates and I have tried to list out a few below:-

Outdated Curriculum: Studying technical courses in this age is very challenging as technology is advancing at a very rapid speed. The curriculum should be dynamic in nature so as to capture the rapid changing disruptive technologies.

Lack of Hands-on experience during studying: Industry today is looking forward to industry ready graduates from the institutes but graduates coming out of colleges today do not have any exposure of the real world.

Lack of Soft Skills: Presentation of self in a multi-national culture and company requires the necessary soft skill training. Many institute today focus on theoretical curriculum thereby completely neglecting personal grooming of the students in real world.

Shortage of trained teachers and trainers: Number of vacancies in higher education is raising every-day and faculties are also not appropriately trained to adapt to the changing environment. Some other major area of concern in higher education are- Absence of a National Competency Testing and Accreditation system, Lack of infrastructure – building, modern equipment and raw

materials, Lack of vertical mobility, Inflexible curriculum, Mismatch of Demand and Supply, non-adoption of technology etc.

The challenges are immense and in order to achieve the goals there has to be substantial expansion of quality technical education and training for raising employability and productivity.

The skills provided have to be attuned to:

- New business requirements;
- Improving quality of education and trainings at all levels; and
- Make technical/ vocational education system more flexible and inclusive for sustainable growth.

Recommendations:

The disintegrated approach of government and policies are one big hurdle in the field of employability skill development in higher education. Role of education is to prepare a learner for future challenges. So the curriculum itself should include all the essential components like exposure to industry, soft skills etc as a part of curriculum so as to make students future ready. According to FICCI, 2014 report five areas critical to making the Indian Higher Education system future ready are financial innovation, innovative use of information and communication technologies (ICT), reinvigorating research, thrust on vocational education & training (VET), and regulatory reforms are potential 'Game changers' for the Indian higher education system (FICCI, 2014). Engineering schools in India should seek to improve the skill set of graduates and shift the focus toward higher-order skills and creativity (Andreas Blom and Hiroshi Saeki. 2011)

Talking about skill sets, the students today need to develop eight skill sets such as creative thinking, emotional thinking, emotional balance, communication skills, computer skills, decision making skills, interpersonal skills and time management to be employment ready in the changing environment

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