



Skills Mismatch between Industry needs and Institutions Output- Challenges for Higher Education in India

KEYWORDS

Skill mismatch, Industrial requirements, Higher education challenges and Bridging the gap

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ABSTRACT India as a nation which have huge population base and out of the total population nearly 35% are between the age group of 15 to 21 where they are in a situation to enter the work place once they finish the education stream. But, due to lack of skill requirement and mismatch for industry, many people fail to enter in to the job market. There is need of higher education role to fill the gap. The main of role for the higher education sector is to supply suitably skilled graduates to the work place. However, the ability of the higher education sector to achieve this task has been questioned. Consequently, there is need some change in higher education curricula. Education is considered to be a process of skill formation and in this aspect it is treated at par with the process of capital formation. Economists argue that as demand for educational training increases, the systems need to meet the country's requirement for people with high levels of skill and knowledge. But the major stumbling block in this growth path is the inadequate skill set of the workforce. While on the one side we have the world's large stock of scientists, engineers and management graduates, we have been unable to derive full economic benefit from this talent base because of the mismatch between industry needs and institutions output.

Introduction

India has one of the largest higher education systems in the world, and has been witnessing healthy growth in its number of institutions and enrollment in the last few decades. The Higher Education system in India grew rapidly after independence. By 1980, there were 132 universities and, 738 colleges in the country enrolling around 5% of the eligible age group in Higher Education. Today, in terms of enrolment, India is the third largest Higher Education system in the world. Much of the state of Higher Education in the country can be attributed to the system of governance and regulation. One of the striking features of the development of Higher Education in India over the last few decades has been the extent to which private institutions have attempted to respond to the massive demand for education at post-secondary and tertiary level. Though the enrolment increases but there is Skill shortage remains one of the major constraints to continued growth of the Indian economy. Too many young people in the India fail to gain the basic, employability and lower level skills needed to progress in work. Current employment and skills systems in the India are neither fully integrated, nor sufficiently aligned to labor market needs. Insufficient supply of quality skills is one of the main impediments to further economic growth in India. The Indian economy grew more than 8% on average over the past 5 years, including the year of the unprecedented financial crisis in 2009. However, the skill shortage is still one of the major constraints in most industries in India (World Bank, 2009b). Many employers emphasized the importance of soft skills during interviews. Also other studies have discussed that many employers spend significant amount of resources to provide employees with training for improvement in not only technical but also soft skills (Wadhwa, Kim deVitton, Gereffi, 2008).

Literature Review

The biggest challenge that all organizations are identifying today is talent. At the same time there are a large number of individuals who are looking for employment but are not finding opportunities. The skills glut seemed to have turned rapidly into a severe shortage. Separately, policy makers, employers, and the public expressed alarm at what they saw as declining academic skills among young people, reflected in falling test scores and the perceived decline of public schools. This is a huge paradox. Mission 10X conducted a survey to understand the reasons for the existence of such a paradox in which 300 placement officers and 53 heads of institutions participated. The survey revealed that there are two important areas where the human capital lacks. The first is application of skills which is a major challenge. Second, multiple aspects of skills are required to work in a team which are neither assessed nor taught at the engineering colleges. The heads of educational institutions have presented the argument that there is a dearth of Good faculty. So the challenge is really to get capable faculty to bring about the change process in the institutions. Mission 10X recognized from this survey that faculty is the key. It is important for them to get trained on innovative teaching methodology through a layered set of workshops. This is the objective that the Faculty Empowerment Programme created by Mission 10X achieves. The outcomes expected from this programme is a more empowered faculty, higher level understanding of subjects by students, and transference of key behavioural skills – skills that need to be built right from the graduate/professional course education.

Research Methodology

Research Gap

The evident of literature supports that the employability skill and soft skills proficiency is important to potential employers. However, employees of many fields are reported

to be deficient in employability skill. Through the literature, the education institutions should aware about their curricula design and they all should furthermore, the literature revealed that research is needed in the area of employability skill so that improved instructional methodology may be developed and applied by the educators.

Research frame

This study was based on the data collected from Journals, articles, books, news papers and web sites. It is purely analytical in nature

Need and importance

The recent attention on employability skill development has been brought about for various reasons. Askov and Gordon (1999) noted such reasons. They stated that "welfare reform legislation, major demographic shifts in the labor market and the continual expansion of economy have led to major changes in business sectors, which has seen unemployment rates fall in many regions to twenty-five year lows". With employment rates on the decline since the early 1990s (Morley, 2001), employers have become concerned more than ever with locating and preparing good workers (Robinson, 2000). According to Surmacz (2005), those who do provide such training are failing "because they do not improve individual comprehension, understanding, insight, or motivation" Tetreault (1997) argued that employability skills are lacking in the workplace because people are not prepared prior to entering the workforce. Employers blame higher education institutions for not preparing graduates for work beyond the classroom. Therefore, higher education institutions should exert more effort in preparing graduates in their employability skills.

What is skill mismatch?

The term skills mismatch can describe situations in which workers' skills exceed or lag behind those employers seek. Indeed, social scientists' views of the state of the labor market shifted from one position to the other in a relatively short time. During the 1970s, a range of disciplines believed workforce skill levels exceeded the levels that jobs could utilize. Credentialist theories within sociology argued that employers' inflated hiring requirements led American workers to obtain more education than they really needed for their jobs (Berg 1971, Collins 1979). Signaling and queuing theories within economics also cast a skeptical eye toward the meaningfulness of educational credentials; econometric studies of the falling college-high school wage differential led to the conclusion that Americans were overeducated (Freeman 1976). A prominent government report considered the dilemma of how to make work more satisfying when job complexity at all levels seemed to fall short of workers' rising education levels and aspirations for meaningful work (US Department of Health, Education, and Welfare 1973). Deskilling theory claimed that the skill content of most jobs was actually declining, even as educational attainment continued to increase (Braverman 1974). Bowles & Gintis (1976) argued that schools socialize students into the different work norms appropriate for jobs at different levels of the class hierarchy and that this function overshadows its contribution to human capital formation in the determination of wages and related outcomes.

WHY THE GAP

Demand-supply mismatch

Low Student Mobilization The enrolment in skill institutes like ITIs, ITCs and polytechnics, has remained relatively low. Private skill institutes often face very high drop-

out rates, in excess of 50% at some institutes. The current Gross Enrolment Ratio for tertiary education in India stands at 12.4% and is low compared to the world average of 23.2% and 36.5% for developing countries. In addition, only 3% of the rural youth and 6% of the urban youth have been vocationally trained. Fewer than 3% of the 14 million students in grades 11–12 are enrolled in vocational education. There is a mismatch between the demand and supply of labour at different skill levels – while there is excess supply of labour with L3 and L4 skill levels, there is excess demand in the industry for people with L1 and L2 skills.

Inadequate Industry Linkages

The overall performance of skill institutes and their attractiveness to students largely depend on industry linkages and whether they are able to provide good placements on completion of the training program. Strong industry linkages also have a positive impact on the quality of skill training by ensuring that the curriculum is relevant to the industry. Despite high industry demand for a skilled workforce, the Indian skill development sector currently suffers from poor placement records and low starting salaries, indicating low quality and the lack of industry relevance of the skills imparted.

Absence of Aptitude Tests

One of the major causes for poor delivery of training is the low incidence of pre-assessment or aptitude tests before admission of students at skill institutes. Arbitrarily choosing courses leads to a mismatch between a student's inherent abilities and interests and the skill training imparted. This is one of the reasons for high drop-out rates – students are unable to cope with the course requirements. In the absence of any formal testing of the students' scholastic abilities, the courses often impart training at a level that is either too basic or too advanced to meet the students' requirements.

Lack of Infrastructure

The existing training infrastructure in India consists of over 5,000 ITIs, 1,200 polytechnics, 20,000 public and private establishments that provide apprenticeships, 10,000 schools for pre-vocational education and 2,500 rural development and self-employment training institutes. Combined, these organizations produce 3.5 million trained personnel per annum against the 12.8 million new entrants into the workforce each year. Most of the infrastructure in the skill development sector today is government-owned, and not many private players are willing to enter the sector due to the uncertain financial sustainability of skill development models.

Shortage of Quality Trainers

One of the major challenges faced by skill institutes is the lack of good trainers. Student-teacher ratios vary from 9 to 50 at different ITIs depending on capacity utilization. Training teachers/trainers and retaining them is expensive. Innovation in training delivery methods can lead to substantial improvements in the quality of the training imparted to the students. The delivery of skills to the students depends, to a large extent, on the competence of the trainers. The lack of industry-faculty interaction on course curricula often leads to irrelevant training modules. The absence of an autonomous system for monitoring the quality of training imparted makes it very difficult to assess the value addition from the programs and the performance of the trainers.

Curriculum inflexibility

The skill institutes have poor placement records is that the curriculum does not provide training that is relevant to job requirements. Outdated curricula or technology cause the training programs to become redundant. Inflexibility in the curriculum would negate the purpose of a demand-driven skill acquisition system and lead to excess supply in some trades and excess demand in others. Designing a flexible curriculum and constantly upgrading training infrastructure and pedagogy is not only expensive, but also complex since it requires the trainers to learn the new incorporations in the course content.

Lack of Mobility between Formal and Vocational Education Systems

The current formal education system provides limited options for vocational training, while vocational training systems have limited options involving mathematics and language learning. This lack of options makes it very difficult for a person enrolled in the formal education system to get industry relevant skills and leaves a person enrolled in vocational training with limited soft skills. Vocational courses restrict mobility to formal education and do not allow students to migrate to other institutions of higher education.

Lack of Standardization

There is no standardization of course content, training delivery systems or curricula. Students and employers do not have a clear understanding of the skills that will be imparted under a specific course at a training institute and it is difficult to compare courses across institutes due to the absence of precise definitions for deliverables and the lack of accreditation systems. This is one of the reasons for the preference for formal education since such qualifications are better understood and recognized than skill development programs.

Lack of Clarity on Industry's Skill Requirements

The skill institutes do not appear to clearly understand the skill requirements of the industry. There is no faculty-industry collaboration to ensure that the skill development courses help students imbibe skills that are important for performing the available jobs. Of the trained candidates, the labour market outcomes in terms of placement records or the rate of absorption into the industry of skill institute graduates is very low, thereby reducing the incentive for students to enroll in such programs.

Opportunities for bridging the gap

The incorporation of graduate employability skills is a key issue in education policy and has served to calm industry concerns over poorly performing graduates and employer dissent. A series of recommendations - made by BIHECC in 2007 to the Minister of Education, Science and Training - included the need to explicitly identify graduate employability skills in all university curricula, in addition to enhancing their teaching and assessment. Specifically, the conclusion reached was that 'the changing nature of higher education, teaching and learning professionals, in that the teaching of skills has become as important as the teaching of content' (Cooper 2005, cited in BIHECC 2007: 24). Competency development in business education now appears to be the focal point of curricula content, assessment and teaching method.

Bridging the gap through work integrated learning (WIL)

Initiatives in WIL programs - such as sandwich years,

work placements, internships and cooperative education - demonstrate the turning wheel of continuous improvement in undergraduate students education and, in combination with the phenomenal rise of part-time working may increase the real-life experience. Kim, Markham and Kangelosi (2002: 32) argue WIL programs 'allow students to develop valuable skills such as leadership and communication while applying classroom learning to the real world' and serve as a valuable promotional tool for business schools in the increasingly competitive environment of higher education.

Bridging the gap through curricula involvement

Universities are now increasingly recognizing the value in recruiting professionals as guest lecturers, 'giving students greater awareness of real life work issues to round out their theoretical knowledge (Hogg (2004: 4). As learning under these initiatives involves analysing and reflecting on experiences in both the classroom and the workplace. The institutions may link with the industries in term of curriculum preparation. Cent percent industry involvement is not possible; at least forty percentage of interaction and involvement of industry in the curriculum settings will address the issue of skill mismatch between the industry and institutions.

Bridging the gap through generic attributes

The term generic attribute refers to an underlying characteristic - encompassing competency, skill, knowledge, trait, value, capability and ability - used to contribute to the community on a professional or societal level in a range of different contexts. The West Review (DETYA 1998) provided a framework of attributes which should be developed in every graduate attending a higher education. These comprised technical competence and a set of generic attributes including, but not limited to: critical thinking, intellectual curiosity, communication skills, information management skills team working skills and high ethical values.

Bridging the gap through train the trainer

The first and foremost step of the institutions is to train the trainer. Many surveys strongly argues that the trainer/tutors are not aware the current requirements of labour market. And they are not updating their knowledge and their students, this leads to lack of quality trainers in the field of education. These trainers are placed under industry-faculty interaction on course content and the training modules. The institutions willing to tie up with reputed industries for faculty development programme, internships and joint hand of research and development in the context of skill development.

Bridging the gap through an hour

Allotting an hour in the regular time table will address the half of the issues. In order to equip the students, the institutions must start coaching in term of aptitude and career readiness at the stage of first year of graduation. Generally, colleges start coaching in the beginning of final year or before the placement. This kind of effort is not bringing bright footfall in the recruitment. So students and the institutions are ready to take part of an hour will surely bring successes in skill development and bridge the gap of skill mismatch.

Conclusion

The shortage of appropriately skilled labor across many industries is emerging as a significant and complex challenge to India's growth and future. Increasingly, it is being felt that there is a large skill gap. This can be reduced

gradually by initiating and taking vigorous steps. Join hands to create a pool of industry best practices to maximize learning for all. The best solution is to increase the collaboration between industry and academia to tackle the skill gap problem. Diversification of curriculum, novel courses, optional papers based on choice based credit system and training teachers in logical thinking and English aptitude skills are essential to bridge the gap.

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