

India's Vocational Training System

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Abstract:

The India education system is similar to Australia in that it is a tiered system of education encompassing primary and secondary equivalents and a number of vocational skills pathway options. Beyond this are higher education Colleges, Polytechnics and Universities that provide for diploma, undergraduate and postgraduate qualifications. Many institutes are Government owned, however there is also a strong private provider market along with a number of corporate owned training centres. Some corporate training centres engage with the formal accreditation structure developing in India, while others currently remain outside of this framework for a range of reasons. In a general sense the current situation in India seems reflective of the Australia situation before the AQF and AQTF frameworks were implemented that formally accredited certificates and diplomas as awarded qualifications. Although India's current system is more complex given the volume of population, diversity of public and private providers and quantum of less educated or unskilled individuals that require education and training. Notwithstanding this complexity, based upon the experiences of the author during the execution of an Australian Endeavour Executive Award, this paper presents an argument that a number of Indian corporate owned training centres deliver vocational training to a level that would meet Australian qualification accreditations standards.

Introduction:

In 2008 the Queensland Department of Education and Training (DET), through its VET Export Office, determined that the India market was one that required further investigation regarding the potential opportunities for offshore vocational training. To acquire more information on the India vocational education and training system, and to further develop relationships between the two sectors, a number of strategies were developed. One of these strategies was the use of an Australian Endeavour Executive Award. As the successfully nominee and applicant for an award, the author spent eight weeks in India between February and April 2009. The information acquired during this visit to India provides the foundation for much of the discussions, findings and recommendations in this paper. Information was gained through presentations and discussions from a range of meetings with government, education and corporate representatives.

The India Host for the trip was the Bangalore Chamber of Industry and Commerce (BCIC). BCIC provided a base of operations and organised a number of key government, education and corporate visits in Bangalore, Mysore and Mangalore. Assistance for meetings was also arranged by Austrade and Trade Queensland staff and a third party Agent, who was particularly supportive in organising meetings in

Delhi, Chennai and Hyderabad. In total meetings and discussions were held with senior directors and managers across more than 40 different government, education and corporate organisations. The major focus was on meetings with the corporate sector.

From an education and training perspective there appear to be many similarities between the Australian and Indian systems. The Australian education system is a tiered system comprising primary and secondary schools, a vocational education system and universities (McMillan, 2007). The Australian system is a regulated system that operates under a National Skills Framework with three components: the Australian Qualifications Framework (AQF); National Training Packages; and the Australian Quality Training Framework (AQTF). Under the vision of the Indian National Policy on Skill Development, the India system aims to improve quality assurance of training through the a National Vocational Qualifications Framework, a National Accreditation Agency, Sector Skills Councils and Assessment and Certification (Global Summit on Skills Development, 2008).

While Australia has a strong emphasis on formal qualification attainment at all levels, at the entry level India is focussing on Modular Employability Skills as a means of rapidly skilling a large number of people. Similar to Australia, India is challenged in the attraction of individuals into the traditional trade or skill areas, although many people I met with indicated that, at a higher level, engineering in India is seen as the most preferred option for many graduates above business and even medicine. Notwithstanding any similarities, unlike Australia whose concern for skills shortages may be measured by a few hundred thousand, there is approximately eight to nine million individuals in India each year who cannot access any type of formal education and training (Directorate General of Employment & Training, Ministry of Labour & Employment, Government of India, 2009). India's challenge is that it is trying to skill millions of people to a basic standard of literacy, numeracy and to provide people with entry level employability skills while simultaneously responding to the growing demands of a modern industry for skill comparable to any developed nation.

Meetings with corporate India, covered such entities as BSNL, India's telecommunications giant, Maruti Suzuki, India's oldest car manufacturer, Larsen and Toubro Limited a multi-faceted, international and Indian owned company in the engineering and construction field, Bosch, Hyundai, Toyota, Ford, Flextronics and Bharti Learning Systems who provides corporate training to many thousands of telecommunications workers annually. A key intent of these meetings, from the authors perspective, was to gain an insight into how these corporations approached the development of technical and soft skills training of their staff at all levels, and to what extent they engage with the formal Indian accreditation framework and public or private training provider network.

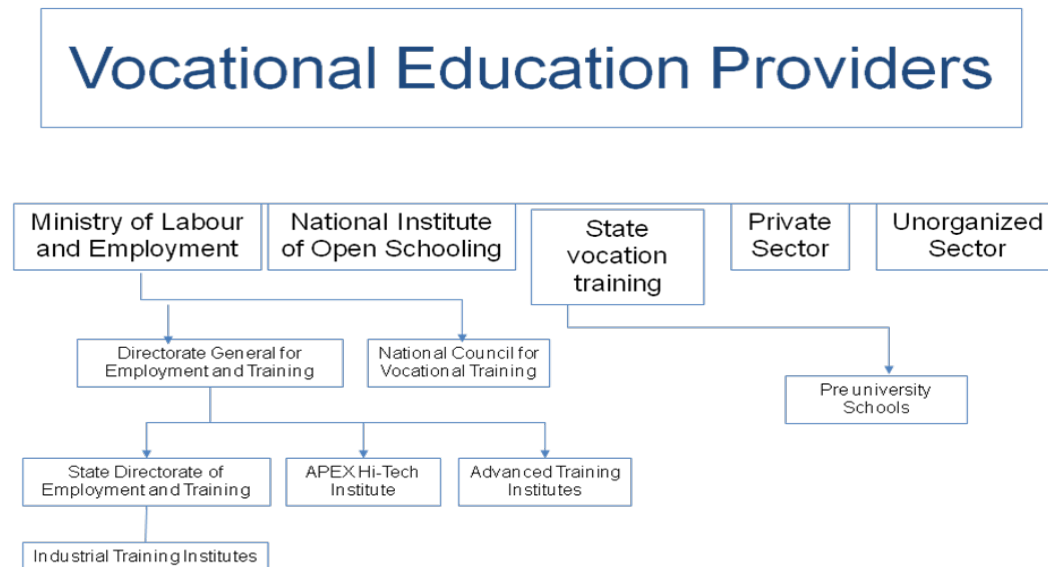
Background:

The India education system is a tiered system of education covering 10 + 2 years encompassing primary and secondary equivalents and a number of vocational skills pathway options. Beyond this there are higher education Colleges, Polytechnics and Universities that provide for diploma, undergraduate and post-graduate qualifications. Many institutes are Government owned however there is also a strong private provider market along with corporate owned training centers. Some of the corporate owned training centers I visited engage with the formal accreditation structure developing in India, while others currently remain outside of this framework for a range of reasons, including a belief that if they credential staff, then staff will more likely to leave for increased wages or career opportunities with other competing organisations.

For vocational training, the overarching control body in India is the All India Council for Technical Education (AITCE). AITCE is the statutory body, established for proper planning and coordinated development of technical education system throughout the country. AITCE also provides the accreditation framework and monitoring for the accreditation of programs in India. The management of providers occurs at a Federal and State level. At an all India level the Directorate General of Employment & Training, Ministry of Labour & Employment, Government of India takes key responsibility for vocational training that occurs within Industry Training Institutes (ITI's), Advanced Training Schools and the relatively newly developed Hi-Tech Institutes. At a state level, for example, the Karnataka Directorate of Employment and Training take responsibility for pre-university schools. There are also Private Sector organisations and Corporate Skills Centres, delivering certificate and diploma programs and non-accredited courses in a range of locations (Figure 1). There are also efforts being made by government and private providers to bring the artisans, who train themselves informally, into the certification framework.

As one Regional Director of the Ministry of Labour pointed out, India has the capacity to provide the world with skilled labour, estimated to be 470 million in the age bracket 16 to 40 years in the next 25 years. In this context part of the initial driver for India appears to be the exposure of having Indian's 'skilled and qualified' as the equivalent to marketing any other brand on the world marketplace. Therefore, India's vocational training system will perhaps be increasingly driven by a volume strategy, leveraging on the notion that Indian has the labour pool to meet an anticipated world shortage. Therefore, providing India with a competitive advantages in a world seeking qualified and skilled labour to overcome domestic labour or skill shortages. To address an anticipated domestic and world demand it is envisaged that India will require 50,000 Skill Development Centres in the next 5 years and require some 5 million vocational training providers to enter the education and training market (Global Summit on Skills Development, 2008).

Figure 1 Vocational Education Providers



Modular Employable Skills (MES)

A key platform to address a current skills issue in India is the focus on Modular Employability Skills (MES). Underpinning this strategy is the fundamental belief that:

Knowledge without skills = unemployable Knowledge plus skills = employable

MES offers opportunities for formal skill acquisition to early school drop-outs, previously child labour and their families, workers and ITI graduates seeking skill upgrades and existing workers seeking certification of skills acquired informally. For workers, existing skills will be tested and certified under this scheme by industry assessors. The initial focus of course areas are in sectors such as Automobile, Banking and Accounting, Beauty Culture & Hair Dressing, Chemical, Electrical, Electronics, Fabrication, Garment Making, Gem and Jewelry, Hospitality, ICT, Medical & Nursing, Printing, Production and Manufacturing, Retail and Construction. While India's population exceed 1.2 billion, only about 5% of the India labour force in the 20-24 years age bracket have vocational skills recognised or gained through formal processes. This is low compared to industrialised countries that have between 60 and 96% achievement. Approximately 63% of school students drop out before Australia's year 10 equivalent. A greater challenge is that while there are an estimated 12.8 million people entering the labour market each year there are only an estimated 2.5 million vocational training places available (Directorate General of Employment & Training, Ministry of Labour & Employment, Government of India, 2009).

MES tackles these challenges on two levels. Firstly, by providing shorter skills focussed training designed for employability, rather than a focus on longer term qualifications, it is anticipated that drop-out rates will diminish. Secondly, the current

primary target for new jobs in India are expected to come from the 93% of employment activity in the ‘unorganised’ sectors (approx: 433 million in 04-05); however formal or structured training (qualifications) are more aligned to the organised sectors representing only 7% of employment opportunities (26 million people). A major concern is that India’s current capacity for skills development programs is 3.1 million per annum; however India is currently working to a target of skilling 500 million people by 2022 (Directorate General of Employment & Training, Ministry of Labour & Employment, Government of India, 2009).

Upgrading of Industry Training Institutes into Centres of Excellence

The Industry Training Institutes (ITI’s) are the India Government owned centres for the development of skills training in India. There has been a strategy shift to align these institutes to meet the needs of industry by upgrading ITI’s to Centre of Excellence (CoE). Centres of Excellence will be managed by an Institute Management Committee (IMC) and operate under a broader Steering Committee that will include industry representation. For each ITI to be covered under this scheme, one Industry Partner will be associated to lead process of up-gradation in the ITI. The Industry Partner will be identified by the State Government in consultation with Industry Associations. The Administrative control of the staff of the ITI will remain with the State Government.

Quality and Accreditation

While MES is a strategy focussed on managing the volume training requirements for entry positions, India has moved towards a skills framework of equivalence to diplomas and degrees. The recently created National Vocational Qualification Framework (NVQF) will provide open and flexible pathways for individuals that also recognises knowledge and skills through testing and certification into higher diplomas and degrees. Similar to the Australian AQTF system, the NVQF has performance objectives on ensuring that qualifications reflect market needs and workplace requirements; that training processes are validated; that assessment is based upon national competencies and that training is delivered by competent and qualified trainers in appropriately managed and resourced institutions.

There are two main accrediting bodies in India: the All India Council of Technical Education (AICTE) and the National Board of Accreditation (NBA). The AICTE oversees the technical education sector in India generally. The NBA was constituted by the AICTE as an autonomous body to develop a quality conscious system of technical education. The AICTE’s domain includes both institutions and programs, and the scope covers engineering, technology, architecture, town planning, management, pharmacy, applied arts and crafts and hotel management and catering.

The AICTE’s involvement in these areas spans from certificate level through to post-graduate research levels. If a foreign education provider wants to offer a technical program in India, there are several preliminary steps that must be completed. First,

the foreign institution will have to find an Indian partner that is already approved by the AICTE and that has had its program accredited by the NBA. Next, the Indian institution will have to apply to the AICTE to have the foreign institution registered. Finally, the joint program will have to be accredited by the National Board of Accreditation (NBA) after the course has been running in India for several years. The programs are accredited for 3 or 5 years.

RESEARCH

As discussed earlier, at the entry level of the job market the Indian Government's emphasis is on employability skills rather than full qualifications as a key strategy to make a large number of individuals employable. A number of individuals in government and education institutes indicated to me that, as with Australia, there is a strong focus on achieving higher education qualifications and a lesser desire to undertake a vocational training pathway. For the entry level skills training area in India, the term 'education' has been removed from vocational education and training and emphasis placed on vocational training. A number of people did suggest to me that many students indicate they would rather fail an exam for college or university entrance than take a vocational pathway. While not formally evaluated, I anticipate that the higher the social-economic status of individuals, the greater the expectation and emphasis on attending at least a College Institute.

The non-government Colleges that I visited were generally well equipped, and in some cases facilities were of an extremely high standard. A practice within a number of engineering colleges, both public and private, was to incorporate a production process as an adjunct to delivery. On one hand this provides an immediate pathway to employment, and 'real' skills training for individuals; however, it also blurred the boundaries between the primary purpose of the entity, that being either training or production for revenue purposes. Notwithstanding, the private colleges or training centres were generally better equipped than the India Government funded industry training Institutes (ITI's) that I visited.

I also had the opportunity to visit a number of organisation who had comprehensive in-house professional development programs and/or with their own in-house skills training centres. For these organisations some worked in partnership with government and used the government accreditation, others used 3rd party organisations for accreditation (Indian or overseas), while others provided no accreditation for the training undertaken. In discussions with these corporations, a number expressed some reluctance working with the government accredited framework including concern about government audit interference if seeking accredited training and concern about losing staff if provided with accredited training.

In an informal, or non-accredited context, there was a general sense that any corporate training required face-to-face activity with trainers; however, there was also a need to have comprehensive e-learning materials to support face-to-face training. A number of organisations expressed interest in advice and training on establishing and

implementing a TQM and total management system training. Some of the production process I observed of an extremely high standard with lean manufacturing principles implemented in several locations. Notwithstanding, and particularly for those organisations who are not multi-national, there appear to be long-term opportunities to assist organisations move their production process from manual to semi-automated to robotic, and subsequently provide training or training support in developing more efficient processes. Where these lean manufacturing principles are already be imbedded in the production process, there is opportunities for skills recognition and qualifications to be provided. Where they are not, there is broader scope for assisting organisations improve production processes and raise the credential level of staff.

Almost without exception, every large organisation I visited raised the idea of soft skills training. Significantly what was also raised was the need for the trainer stories and learning materials to be contextualised to the sector and that a generic trainer of soft skills was not wanted. Apparently this generic approach has been tried by a number of organisations with little affect. Training areas included negotiations skills; listening skills; time management skills, problem solving and dealing with difficult circumstances and people. Generally corporate views expressed to me indicated that the skills coming from the ITI's were inadequate for more modern production processes and while they recognising that the India and State Government's are intent on improving the ITI's, they were not yet equipped to cope with modern skills; and that the ITI' higher qualifications of diplomas, undergraduates and MBA invariable produced individuals with contemporary theory knowledge but practical skills were lacking to perform the roles required.

The following provides three examples of organisations who have developed extensive in-house training programs to support the knowledge and skill development of their employees. Each of these organisations recruit unskilled individuals, often recently relocated from a village environment to a city, and train these individuals to equip them with the knowledge and skills required to undertake the skilled or technical roles required by the organisation.

Example One

This organisation is part of a multi-national company in the car manufacturing sector. Manufacturing occurs on a large scale and this organisation is one of the three largest in India. As with other international companies visited, the production process is aligned to the parent company's standards of production. In this case, the emphasis for ongoing vocational training presented by senior executives is in three keys areas: TQM, Lean Manufacturing and Soft Skills Training. While the production process is managed through an in-house school, no formal accreditation is provided for production workers. Of particular interest to this organisation was the organisational need to transform some 2000 staff middle level management into more effective leaders and managers. In-house training was the responsibility of each Department, rather than being organised or coordinated through a centre unit.

The production process aligns generically to similar process used within the Automotive training package in Australia. Providing an accreditation for a Certificate III level qualification for production workers would be no more problematic than providing it for an Australian based employee of the same organisation. Likewise, lean manufacturing competency standards are arguably universal and transferable as the focus is on production processes. The issue for soft skill training is more problematic. If the training provided was non-accredited then training is informal and would merely need to be contextualised to an Indian based company's requirements. If the issuing of a formal qualification such as a Certificate IV in Front-line Management from the Australian Business Services training package was to be issued, then the due regard to the full scope of assessment criteria specified in the training package would need to be adhered to.

Example Two

As with Example 1, this organisation is a large multi-national automotive car manufacturer. The production process of this plant is aligned to the production standards of its parent company. The organisation has two training centres. The first provides a focus on training individuals to meet the requirements of a skilled production worker. However, it is more aligned to the MES principles of developing the core skills required to undertake a role as quickly as possible. The second training school is a Technical Training Institute that was established in partnership with the Indian Government under the Centres of Excellence strategy. With this organisation, the students undertake training in automotive welding, painting, assembly and plant maintenance. Students are effectively indentured to the organisation for 3 years of training before join the full-time workforce of the company. During the training period, students are paid a stipend and provided food and accommodation.

As with Example One, the training is formal and structured and directly aligned to the production processes of the organisation. Again there is strong synergy between the Australian accredited training package for automotive and the competencies required of individual working on the production process of this organisation.

Example Three

This organisation is one of India largest private sector companies that operates within the technology, engineering, construction and manufacturing sectors. What is particularly relevant about this organisation was their approach to the career pathways and professional development of their staff at all levels. This organisation has developed a comprehensive understanding of each role within the organisation, the knowledge and skills relevant to that role and the levels of performance required in each role to be deemed as competent at that role. Subsequently, the professional development training recommended for any individual is aligned to their performance alignment to the performance requirements of their particular role

What has not yet been developed was a matching of the various levels of knowledge and skills and a formal, accredited range of qualifications relevant to the sectors covered by these employees, either at the operational or technical levels, or at supervisory or management levels.

CONCLUSIONS

India has an existing education and training system; however it is one that is under significant pressure to meet the growing demands of industry to support India economic growth for the future. There is evidence that the India Governments are supporting the education and training system with policy development and financial support for rapid change and evolution from Government. With Australia's strength in accreditation, developed competency standards, teacher professional standards and in curriculum design, a number of Indian government, education and cooperate representatives expressed surprise that Australia was not more engaged with India around providing expertise in these areas. This may be one of those rhetorical versus willingness to pay issues; however with World Bank and India government funding commitments there are funds available to support proposals that enhance India's professional capacity in the skills agenda (Global Summit on Skills Development, 2008).

Interestingly, while India has a high demand for training, many training institutes I visited operated with relatively small number of students and they operate under very structured time frames (ie: 1 year certificates, 3 year diplomas). While this provides the opportunity for knowledge and skill development to be refined it is not necessarily time that defines the skill acquisition required to meet industry standards for employability or to undertake the role required at a particular level. It would be presumptuous to assume that India doesn't have the skills within its current system to develop their own standards. However, the opportunity for Australia, or Australian education and training providers, is that they can assist the process of India developing qualification frameworks and outcomes more quickly or efficiently as Australia has already addressed many of the issues of developing industry standards, competencies and qualifications within its own AQTF system

The government funded ITI's I visited had facilities and equipment were often significantly behind what 'modern' India corporations required. It would be problematic to try to develop an accreditation arrangement with these types of training centres given the focus is to provide employability skills rather than accredited training or qualifications. However, the corporate training centres visited provide high quality and structured training that directly aligns to their industry requirements. This was particularly evident where the company was part of an multi-international and the production or manufacturing processes were adopted from the parent companies standard.

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