INDIA AWAKES TO VOCATIONAL EDUCATION

Belatedly there’s a flurry of activity within the councils of government, chambers of commerce and Indian academia about stimulating vocational education and training to infuse employment oriented skill-sets into India’s gigantic 509 million strong labour force and 450 million children. Dilip Thakore reports

Indian school leavers: low productivity inevitability

A confluence of factors — stubborn persistence of youth unemployment fuelling the rising incidence of Naxalite atrocities in India’s most socio-economically backward states, and belated awareness in the boardrooms of Indian industry about the country’s accentuating shortage of skilled employees — has vaulted vocational and skills education to the top of the nation’s education agenda. Suddenly there is growing concern and a flurry of activity within the councils of government, chambers of commerce and Indian academia about stimulating vocational education and training to infuse employment-oriented skill-sets into India’s gigantic 509 million strong labour force, and the 100 million children and youth enrolled in schools and colleges countrywide. Sixty years after independent India adopted the centrally planned model of economic development, the productivity of Indian industry and the labour force in particular, is abysmally low, the inevitable outcome of continuous neglect of vocational education and training.

Consequently despite hosting the world’s largest working age population and labour force, the Indian economy which for the past decade has been averaging unprecedented annual GDP (gross domestic product) growth rates of 8-9 percent, is experiencing the paradox of a massive — and growing — shortage of skilled and sufficiently trained personnel in agriculture, manufacturing and service industries. Confronted with the highest in-service employee training costs worldwide, intensifying shortage of skilled workers and rising wages which are jeopardising India Inc’s cost-competitiveness in world markets, alarm bells have begun to ring in somnolent government offices and the councils of Indian industry.

Therefore three years ago in his Independence Day speech delivered from the ramparts of the Red Fort, Delhi, on August 15, 2006, prime minister Dr. Manmohan Singh announced a major national drive to disseminate and upgrade vocational education and training (VET) in India. Shortly thereafter in November, he set up a task force to draw up a timetable for establishing a nationwide VET infrastructure. Since then the Union budget has consistently made provision for VET through expansion and upgrade of the country’s 1,896 government-run Industrial Training Institutes (ITIs) and 3,218 private sector Industrial Training Centres (ITCs). An additional 1,500 ITIs/ITCs are budgeted to be established by the end of the current Eleventh Plan period in 2012, in addition to 50,000 skills development centres to be promoted in the PPP (public-private partnership) mode. In the Union budget 2009-10 an additional outlay of Rs.495 crore has been made for the expansion of the country’s VET network.

Likewise in anticipation of rising demand for VET from industry and the public, several private education heavyweight companies such as the Delhi-based Educomp Solutions Ltd (ESL; revenue: Rs.507.09 crore in fiscal 2008-09) and the Bangalore/Manipal-based Manipal Education Group (MEG; estimated annual revenue: Rs.814 crore) have diversified into VET in collaboration with two UK-based education conglomerates. ESL has tied up with the
Pearson Group (the world’s largest producer of school textbooks and owner of the Financial Times and Penguin Books) to promote IndiaCan Education Pvt. Ltd. Almost simultaneously MEG has initiated a joint venture with the London-based City & Guilds which bills itself as the world’s largest VET provider offering 500 courses and programmes. Within the next few years these two ambitious alliances are expected to establish expansive networks of VET centres across the country, offering high-quality vocational education to millions of Indian youth.

“VOCATIONAL EDUCATION HAS BEEN the blindspot of the Central and state governments as well as of Indian industry for the past six decades. All over the developed world and in China as well, representative organisations of industry, business, MSMEs (micro, small and medium enterprises) and local chambers of commerce have been the driving force behind the establishment and multiplication of VET institutions in their countries, serving as bridges between government and academia. The largest of India’s chambers of commerce — the Confederation of Indian Industry — has only 7,000 members, and that mostly from the organised sector of industry. However 94 percent of the country’s industrial labour force is employed in 100 million MSMEs represented by inactive local chambers of commerce which are ignorant about the vital importance of VET for their own prosperity and competitiveness in the emerging globalised marketplace.

“For instance, against India’s bleak scorecard, rural China boasts 350,000 VET centres which train over 50 million farmers annually in agriculture, animal husbandry, horticulture, floriculture, farm equipment repair and maintenance, and better agriculture practices. This has enabled China, with less arable land than India, to better India’s foodgrains and agriculture production by a factor of three per hectare of area sown. We need to immediately promote 250,000 VET centres — one in every panchayat jurisdiction in rural India,” says Krishan Khanna, an alumnus of IIT-Kharagpur and former director of several blue-chip companies including Hoganas India Ltd and DeNora India Ltd who forsook a promising career in Indian industry to promote the iWatch Foundation in 1993, which has since emerged as the most prominent proponent of VET in India.

Unfortunately, Khanna has been a voice in the wilderness. And the Indian economy has paid a heavy price for neglecting vocational education and training. Currently there are 41 million youth registered with the employment bureaux of the country’s 28 state government and seven Union territories, and according to iWatch data another 260 million are either in disguised unemployment or under-employed.

The phenomenon of educated unemployment in a fast-track economy is peculiar to India. According to a 2005 NASSCOM-McKinsey World Institute study, over 75 percent of engineering and 85 percent of arts, science and commerce graduates in India are unemployable. Neither is the education they are prescribed up-to-date, nor are they taught marketable skills during their three-to-four years in college. “If despite this abysmal education system, the Indian economy is averaging 8-9 percent GDP growth annually, it is within the realm of possibility to double it, given education reform and universal VET,” says Khanna who urges government, industry and voluntary civil society organisations to urgently agree to introduce VET options in school curriculums from class VIII onwards. Fortunately Khanna’s sustained advocacy of VET has finally struck a responsive chord within the Union government and India Inc. Together they have begun to seriously plan to make good the neglect of the past 60 years and disseminate VET on a mass scale. In October last year, the Union government and several representative associations of industry including CII, FICCI and Assocham promoted the National Skills Development Corporation (NSDC), a first-of-its-type PPP (public private partnership) not-for-profit organisation to facilitate skills development education countrywide. Established with a corpus of Rs.1,000 crore, of which 51 percent is contributed by the private sector, NSDC will fund competent education entrepreneurs and NGOs to promote vocational education and training centres across India.

“NSDC’s goal is to contribute significantly — at least 50 percent — to the overall skilling and upskilling target of 500 million citizens by the year 2022.

**Vocational education: How India compares**

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<th>Pop (million)</th>
<th>GDP ($ per capita PPP)</th>
<th>Literacy (% over age 15)</th>
<th>Higher education (% of age group)</th>
<th>VET net enrolment (million)</th>
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Source: The Human Development Report 2007-08; Unesco, iWatch
set by prime minister Dr. Manmohan Singh, by fostering private sector initiatives in skills development. To this end the corporation has initiated a process to invite proposals and proposal submission templates, guides and funding guidelines are already available on the NSDC website (www.nsdcindia.org). We are in a hurry to activate NSDC and a study to identify skills gaps in 20 high-growth sectors has been completed. Moreover NSDC is in the process of establishing a pilot Sector Skills Council to draw up accreditation standards and curricula which will pave the way for promoting more such councils in the future, and a large number of captains of industry have agreed to share their expertise, infrastructure and domain knowledge in their areas of skills development to contribute to NSDC's overall mandate. India's skills gap is huge and scalable business models are urgently required to bridge the gap," says M.V. Subbiah, chairman of the Chennai-based Murugappa Group of companies (estimated annual revenue: Rs. 14,000 crore) who has been appointed the first chairman of NSDC.

The novelty of NSDC which inspires hope that ambitious outlays and rhetoric will actually translate into privately promoted VET and skills development centres, is that the corporation is managed by India Inc rather than a Union government ministry. Moreover it is a measure of the seriousness of intent of its promoters – the Union government and Indian industry – that it is being led by Subbiah who has a good track record of having steadily expanded and diversified the operations of the Murugappa Group (which includes EID Parry, Coromandel Fertiliser and Cholamandalam Finance) during the past two decades. It is also significant that NSDC is being led by a chairman based in Chennai which has perhaps the best engineering colleges and VET institutes countrywide, with its automotive components industry in particular having established a globally respected reputation.

Refreshing as well is the deep involvement of the Delhi-based Confederation of Indian Industry (CII), the country's largest and most active industry representative organisation, with the country's rolling VET bandwagon. "In India very few young persons enter the world of work with any type of formal or informal vocational training. Indeed the proportion of formally trained youth in our labour force is among the lowest in the world. Currently the VET system has the capacity to train only 3 million youth against industry's requirement of 13 million annually. Therefore attainment of the target set by the prime minister of skilling 500 million youth by 2022 necessitates large-scale skills development initiatives for which government-industry collaboration is necessary. Consequently CII has already taken the initiative to adopt 240 ITIs countrywide under the government's public-private partnership programme. Moreover we

have been proactive in the areas of assessing skilled youth from government ITIs under the modular employable skills (MES) programme and providing the institutes industry linkages, revenue stream solutions and admin and management advice. Thus far CII has assessed more than 75,000 skilled youth across the country under the MES programme. CII is wholly committed to the national skills development initiative which requires serious collaboration and convergence between all stakeholders in the national development effort," says B. Santhanam, the Chennai-based managing director of St. Gobain Glass India, a subsidiary of St. Gobain Group, France (annual revenue: Euros 40 billion or Rs. 256,000 crore). An alumnus of IIT-Madras and IIM-Ahmedabad, Santhanam is also chairman of CII's National Committee on Skills and Resources.

With government in New Delhi shedding its ideological baggage and prejudices and inviting private sector involvement, indeed takeover, of the national skills development mission, VET is all set to take off in a big way within the moribund government dominated education sector. With a large and growing number of private ICT (information communication technology) companies such as Everonn Education, Educomp Solutions, NIIT and Helix Technologies among others, having already entered India's vast and high-potential education space with innovative products and service delivery models, a new genre of entrepreneurs ready, willing and equipped to enter the VET sector to train the country's massive 509 million labour force and its 100 million school children, has appeared on the education scene.

An alum of D Mét, Mumbai and IMT, Ghaziabad, Delhi-based Navin Bhatia is the founder-chief executive of three pan-India VET companies — NIS Sparta (1993-2003), Reliance Academy (2004-06) and Bharti Learning Systems Ltd which he describes as "amongst the 15 largest training companies worldwide with 600 full-time trainers and (annual) sales turnover exceeding Rs. 100 crore". Deeply involved with CII's national human resource and skills
development initiatives, and currently engaged in building a sectoral skills council model for state governments. Bhaita believes that if the Union government's DGET (Director General of education and training), CII and Indian industry work assiduously together, it is possible to transform India into the world's largest pool of trained and skilled labour by the year 2022.

ARGUING THAT POST-INDEPENDENCE

India has adopted a "unique growth trajectory" in that it is the world's only large economy which has transformed from an agricultural society into a services dominated economy leapfrogging the manufacturing phase. Bhaita states that this makes "large scale skills development an imminent national imperative". "History is lived forward, but written backwards. In the next decade India will write a new history by transforming into the skills development epicentre of the world. In the year 2022, its 75th year of independence, India will host a population of 200 million university graduates and 500 million skilled professionals, and will export 50-55 million skilled professionals to the rest of the world," he predicts, suggesting an eight-point plan to attain this desideratum (see box p.78).

Another promising private sector initiative which has entered the VET sector is IndiaCan Education Pvt. Ltd — a joint venture between India's ICT-in-education heavyweight Educomp Solutions Ltd and the UK-based Pearson Group, one of the world's largest school textbooks publishing majors which also owns the Financial Times and Penguin Books. According to Anjan Dutta, senior president of IndiaCan Education, the joint venture promoted in 2008, which provides "bridge education programmes linked to industry demand" of four weeks to six months duration in entry-level spoken English, retail, insurance, banking etc. to youth in the age group 18-26, has already established 40 VET centres with an enrolment of over 4,000 students. "Within the next few years we intend to promote 500 centres with sophisticated equipment and shopfloor environments across the country with a targeted enrolment of 500,000 VET students," says Dutta.

With the benefit of hindsight, it's painfully clear that the failure of post-independence India's education and central planners to include vocational and skills education into school and college curricula was a grave error. The consequence of this act of omission is a severely handicapped population heavily dependent upon a largely untrained, learning-by-doing labour force for simple tasks such as mending an electrical fuse, connecting a car battery or changing a flat tyre. The wider social outcome is an economy characterised by abysmally low farm, manufacturing and service sector productivity which has transformed post-independence India into a society of perennial shortages and high prices. Little wonder that despite being abundantly endowed with factors more than tripled. Consequently for the first time in recent history the Indian economy has begun to experience shortages of skilled professionals and labour, a phenomenon which is sharply driving up wages and salaries and hurting India's price competitiveness in the emerging global market.

Yet given the pathetic record of the government-dominated education system to implement the simplest policies for the benefit of the nation's children and youth, there is considerable skepticism whether the sudden rediscovery of the value and importance of VET will translate into institutions delivering accessible, short-term, hands-on education and training programmes.

VET class in session: grave neglect error

of production — land, labour, capital and native spirit of enterprise — 21st century India is among the world's most laggard nations widely pitied for its illiteracy, high child mortality, child malnutrition and labour, social inequality and pervasive corruption.

However following the belated liberalisation of the Indian economy and loosening of the infamous licence-permit-quota regime — which sentenced the population to the 3 percent per year "Hindu rate" of GDP growth for almost four decades — since the historic Union budget of July 1991, the annual rate of GDP growth has more to the country's millions of under-employed, low-productivity youth. In this context it's pertinent to note that VET is hardly a new idea. Way back in the 1950s, the first Industrial Training Institutes (ITIs) were promoted by state governments countrywide and their number has multiplied to 5,700 currently. Yet encumbered with under-investment in infrastructure and equipment, outdated curricula and poor quality teachers, they have failed to entice Indian industry, with most of their graduates wending their way into low-performance public sector enterprises and state government departments.
“Mindset change is very important”

Dilip Thakore interviewed Krishan Khanna, chairman of the Mumbai-based i Watch Foundation, which has been advocating VET education since its promotion in 1993. Excerpts:

Since 1993 you have become a whole-time missionary in the cause of vocational education and training (VET), what factors prompted this advocacy decision?

By the year 1993, I had worked for 32 years in Indian industry as department head, general manager, chief executive and finally promoted two companies. I had also worked for six years in Germany and Japan, both of which had been devastated in World War II, but had sprung back to become the second and third largest economies of the world. This experience left a permanent impression on my world view. Every time I came back to India I was disappointed! It slowly dawned on me that our education system as well as skills-building infrastructure was the weak link. So in 1993 I decided to do something about it and left all active business to pursue the goal of transforming India through the promotion of real education, and VET in particular.

Seventeen years later, how satisfied are you with the progress of a watch in creating awareness about the vital importance of VET for national development?

Fairly satisfied, considering that for the first seven years, we were always discouraged by friends, associates as well as civil society. Considering that we are a small foundation, with two permanent unpaid staff — me and my daughter Devika — and mostly part-time workers, it was an uphill task.

But in the past ten years we have started receiving attention and encouraging feedback from all levels of civil society. During the past five years we have been invited to participate in a number of national committees, chambers of commerce, ministries of education, labour, IT, planning commission, etc. where with our data we have been able to change mindsets, and shift focus towards skills building, vocational training and allied areas of human resource development.

In particular, Indian industry which is the largest user of skilled and trained workers, has exhibited minimal interest in formal VET. How do you explain this paradox, bearing in mind that it has the highest in-house training costs worldwide?

Number of reasons. For 44 years, between 1947-1991 large business was protected by the licence-permit-quota regime. So there was no real desire for quality improvement, labour productivity, competitiveness, export worthiness, or cost reduction. After 1991 there was a paradigm shift, and quality human capital started showing spectacular results in some companies. In the past ten years, naxalism, unemployment, slow growth of exports and agriculture started becoming areas of national concern. Slowly, the political leadership, industry and civil society started realising the big advantage of vocational training and skills development, and how it has helped the economic growth of the EU after 1945 and more recently, China and the Asian-Tiger nations.

VET is as important for improving agriculture productivity as for improving shop floor productivity in industry. What's your comment?

Absolutely right. China has 350,000 vocational centres in rural areas and only 150,000 centres in urban China. Against China's 500,000 centres skillling nearly 90 million people per year, India's estimated 17,000 centres upskill about 3 million per year. It's no wonder that China whose arable land area is smaller than India's, produces twice as much foodgrains annually.

At what stage of the education process in your opinion, should VET be introduced as a study option — during school or after class X?

Mindset change is very important. Pre-VET should start from class VIII and actual VET can start anytime after that.

Somewhat belatedly, awareness of the vital importance of VET has spread within government, civil society and academia. How optimistic are you about universalisation of VET in India in the near future?

In 2010, I've become fairly optimistic. The major chambers of commerce — CII, FICCI, ASSOCHAM and PHDCI — have taken the new VET initiative of the prime minister and NSDC very seriously, and so have all the major ministries at the Centre such as human resource development, labour and employment. This is a start, but not good enough. All state governments and Union territories need to become involved. The country's 21,000 colleges, 100,000 secondary schools, 100 million MSMEs in agriculture, services and manufacturing need to be sensitised. We have a long way to go, but the first steps have been taken.

such as PWD, state electricity boards and civic government.

But this time round the active involvement of private sector organisations such as CII and FICCI, which are working closely with the Central government and the PMO (prime minister's office), has roused hope that even if belatedly, the government-industry VET initiative will take off and Corporation with a corpus of Rs.1,000 crore to promote VET institutions in the PPP (public-private partnership) model, it is important to hear in mind that vocational education and training institutes will need to be established with the support of state governments. The challenge is to set up state level Skills Missions which will encourage the promotion of VET institutions in the
Disseminating VET: Bhatia’s prescription

**Navin Bhatia** is the chief operating officer of the Delhi-based Bharti Learning Systems Ltd, described as one of the top 15 training companies worldwide with 600 full-time trainers. Bhatia has written a prescription for upskilling 500 million citizens by 2022 to “transform India into the skills epicentre of the world”. Excerpts:

- States need to establish State Skills Development Corporations on the model of the National Skills Development Corporation.
- States should launch initiatives to skill youth and women, especially from minorities, backward castes and scheduled castes/scheduled tribes for jobs within their districts in micro, small, medium and large enterprises.
- State governments should establish systemic linkages between NREGS (National Rural Employment Guarantee Scheme) and Skills Development Corporations.
- In rural India youth and women should be encouraged to enrol for short-term vocational courses in construction, domestic help, hospitality, travel, tourism, telecom, retail, sales, customer care, insurance, food processing, and security services.
- The Central government should promote institutions in the PPP model which will continuously produce VET learning content in local languages for 5,000-8,000 industry specific short-term courses.
- State governments should permit large corporate houses to promote profit companies with ‘trainers’ and ‘skill assessors’ in each district/block of the country to deliver the 5,000-8,000 short-term courses.
- State governments need to promote employment exchanges in the PPP model for placing youth in small and medium enterprises.
- Government financial institutions such as NABARD, SIDBI, SBI, LIC, etc should disburse loans to students opting for government recognised skills courses.
- The Central government should promote a rural venture capital fund in association with institutions such as NABARD, SIDBI, SBI, etc for promotion of micro and small enterprises.

PPP mode. In the Eleventh Plan a generous outlay of Rs.28,000 crore has been made for VET. But this money will be spent by the HRD, labour and 19 other ministries and there's the omnipresent danger of outlays not being commensurate with outcomes. However in several states — notably Rajasthan, Karnataka and Gujarat — Skills Missions have been established and I am optimistic that the new government-industry partnership for VET will move into execution,” says Manish Sabharwal, the Bangalore-based chief executive of TeamLease Services Pvt. Ltd, India’s largest skilled personnel placement company, and a member of the PM’s Skills Council.

Even within the Union HRD ministry in Delhi there is evidence of unprecedented seriousness of intent about infusing VET into school syllabuses and systems. According to Subhash Khuntia, joint secretary in the HRD ministry, the options of vocational stream education as well as stand-alone vocational subjects which can be taken as electives at the higher secondary stage are already available to students of the country’s 12,000 schools affiliated with the Central Board of Secondary Education (CBSE) which is directly supervised by the ministry.

“CBSE has introduced a new course on financial market management at the Plus Two level in collaboration with the National Stock Exchange. It proposes to introduce similar courses in hospitality management in collaboration with the National Council of Catering Management and also in fashion technology and garment manufacture, film making techniques, healthcare, design and innovation. The HRD ministry is in the process of revamping the vocational education scheme to make it more demanding and needs-based in strong collaboration with industry,” says Khuntia.

**Certainly the Auguries Are Good**

That this time round the carefully crafted government-industry initiative to establish a national VET infrastructure which will provide upskilling opportunities to India’s huge 509 million low-productivity labour force will bear fruit. But this government-industry effort also needs to be supplemented by India’s educators’ community and academia. Vocational skills training needs to be integrated into school and college curriculums, and the national mindset which segregates academic education from hands-on skills requires a sea-change. That’s the bigger challenge confronting teachers and academics engaged in the task of educating and preparing the world’s largest child population for the 21st century.

With Hemalatha Raghupathi (Chennai)