There is a great shortage of people with employable skills. But vocational training is neither popular nor seen to be offering good job options. The challenge is to overcome this perception, writes Megha Aggarwal.

31 March 2010 - Most policy decisions in India invoke the 'guns and butter' trade-off - we have limited resources, many conflicting uses for these resources and our policy makers therefore have to make hard choices. However, there are some critical issues, the solutions for which lie less in resource allocation, and more with a change in policy and mindset. This article focuses on one such issue - the severe need that India has for skilled workers, and the inability of our existing vast educational system to produce them.

According to the International Labour Organisation, India has approximately 39 million registered unemployed persons. There are probably another 260 million who are underemployed or unemployed in the age group of 18-50 years, according to iWatch, a Mumbai-based voluntary organisation. At the same time, the organised private sector is struggling to find skilled workers, which in turn is impacting its ability to compete on a global scale.

Take the example of steel. India is targeting an increase in steel capacity by 120 per cent, to 120 million tons by 2019-2020. To achieve this, in the next few years more than eight million skilled people will be required to work in this sector. According to industry experts such as Tata Steel's HR head B N Sarangi, the country lacks the skill development centres to supply these human resources. This is the tragedy of our labour scenario - a large number of unemployed and unemployable young Indians, who are hungry to learn, but who lack the skills needed to participate in the Indian growth story.

What is the solution to this glaring mismatch? A cursory glance at several industrialised nations indicates that a thriving, dominant Vocational Education and Training (VET) system can play a significant role in reducing this imbalance. Vocational education focuses on the creation of skills in specific trades that generate employability. Its focus is significantly different from higher education in that it recognises a very basic fact from operations theory - our products, services,
and potentially our long-run welfare are only as good as the weakest link in the chain. Offering quality vocational education to our youth today is of paramount importance to India's economic and social development, if we want India to become a force to be reckoned with globally.

We live in a world with diverse and evolving production lines, which in turn require diverse skill sets. While a country needs someone to produce research on say, how to build the best goods, it also needs someone who is trained to a world-class level, to man and operate the technical apparatus used to produce and maintain these world-class goods and services. The weakest link in India today is not a lack of engineers and doctors, business school students or IT professionals. It is the lack of young skilled-workers to make our steel factories run, to provide top-notch ancillary services from automobile repair and white-goods installation to planning our cities better and improving our revenues from tourism.

**Large numbers, little impact**

World-wide, about 80 per cent of the population between 15 to 35 years of age learns a vocation, a skill or a trade, with a choice of 3000 VET programs. India has only identified about 500 courses and according to a recent World Bank study, less than 3 per cent of our population undergoes formal VET training.
Our ambitious growth forecasts are partly based on what is known as the 'demographic dividend'. India is a very young country with over 770 million people under the age of 35. The average age in India is 25 years, compared to China, where the average age is 34 years and Europe, America or Japan, where it is 40-45 years. We expect this to translate into higher growth, via improved output, production and consumption. But the 'dividend' cannot come from the numbers alone; the nation will also require its young population to have the skills that increase productivity and output.

According to the Modular Employment Skills (MES) initiative by the Directorate General of Employment and Training, (DGET) only about 2.5 million vocational training seats are available in the country, whereas about 12.8 million people enter the labour market every year. The large gap is partly due to the lack of high-quality VET institutions. However, there is also another reason; the student population does not perceive VET as an option that gets them what they aspire for. An optimal strategy has to address both why more Indian students are not taking up vocational education, as well as aim to correct the ineffectiveness of existing providers to attract and equip motivated students with skills to become part of a productive workforce.

The good news is that vocational education is making its way on to the radar of the various influential bodies that have the power to generate change. For instance, the Prime Minister's National Council on Skill Development has been established with a target of creating 500 million skilled people by 2022. There is growing engagement by the World Bank, the Human Resource Development Ministry, industry organisations like the FICCI and CII and various consultants who recognize the importance of a skilled and employable youth population.

Industry insiders, however, are aware that mechanisms for promoting vocational education have been around in the Government for ages, in different shapes and forms, and have failed dismally for the most part. There are close to 7000 ITIs, where training is imparted in 128 trades. The period of training varies from 6 months to 3 years, while the entry qualifications are academic and vary - from those who have passed Class 8 to 12. These institutions are widely perceived - both by students and the industry - as being ineffective and out of touch with industry needs. Of the 128 trades they teach, many such as turners, machinists and grinders have been rendered obsolete by technological advances. The curriculum for several of the others e.g. several engineering trades has not been revised in several decades.

This has led to a mass-churn of graduates who are not needed by the industry and are not equipped with the basic technical know-how of their trade and as a result are becoming a part of India's vast unemployment pool. At the same time, the government is encouraging
private sector participation in the form of Public-Private-Partnerships (PPPs). However, due to the lack of a transparent and intuitive accreditation system, a multitude of unaccredited institutions have sprung up in places, and a lack of any formal accreditation makes accountability and quality control impossible. There are several thousand community polytechnics that are training about 450,000 people a year, and none of these programs has been evaluated rigorously.

Unfortunately, simply reducing existing government inefficiencies and involving the private sector will not automatically ensure that parents will want their children to take up vocational education. It is dangerous to discount the very deep-rooted stigma associated with vocational training. It is common perception amongst parents and students that going for any sort of vocational or skills-based training would lead to eventual employment (if at all) in a 'blue collar' job, which is considered less respectable. Also, vocational education is perceived as a dead-end, with no existing linkages to the formal higher education system.

Given these challenges, the critical message to get across is that not everyone should (as opposed to can) become an engineer, MBA, lawyer or a doctor. It is only by demonstrating that vocational education allows people to improve their livelihoods by getting jobs they desire that this mindset can be shifted.

At this stage, as the next new wave of vocational education and training approaches us, we need to ensure that we do not repeat mistakes from the past. This is all the more critical as the Government is planning to invest significant resources to scale up VET in India. It is critical that we step back and ask ourselves what key principles policy makers have to keep in mind while developing a model for the "perfect" institute for vocational education, which will be able to deal with both demand and supply hurdles faced by skills-based training today.

The Golden Rules for policy-makers

Vocational education has evolved over the last few decades in other countries, and their experiences are extremely valuable resources for our policy makers. The "golden rules" that a system of vocational education should follow are:

- Institutions should be able to understand and evolve alongside industry needs, through a dynamic structure and deep involvement of industry practitioners in institution design and function.
• Institutions should avoid narrow focus on just one skill, by equipping students with generic skills such as problem-solving, basic computer literacy, language and communication skills to make them employable.
• Institutions should incorporate motivation into criteria for admission, as opposed to using purely academic benchmarks.
• Components of general education within vocational education should be established, and institutions should have links with traditional higher education institutions.
• The policy making process for vocational education should be streamlined, with transparent accountable mandates established for various supervisory entities.
• Accreditation bodies should be publicly accountable and monitored on a regular basis.

Vocational education has evolved along different paths in different countries. For instance, Germany and Switzerland are amongst the best known for the close and successful involvement of governments and policy makers in developing a high quality system of training.

In Switzerland, over two-thirds of the young population goes in for vocational education, which is a mission shouldered jointly and transparently by the following entities: (a) Confederation (at the 'federal' level) - responsible for strategic management and development; (b) Cantons (at the 'state' level) - responsible for implementation and supervision; and (c) professional organisations - responsible for curricula and apprenticeships.

There is a national framework that is transparent and intuitive, in place for evaluation of quality, and there are well established linkages with industry and general higher education. VET follows a dual-track approach to learning, with students attending courses at vocational schools and developing practical skills by doing an apprenticeship at a host company.

Vocational education in Japan on the other hand, is mostly run by the private sector and boasts of some of the most innovative and responsive vocational training institutes. They offer some very compelling case-studies on the critical need for institutions to be able to evolve to meet the requirements of the economic landscape. Their focus has continually shifted in response to Japan's changing output profile. This was made possible by very strong linkages with industry, with courses on offer being dictated by societal needs coming from industry.
Also, motivation of the students is the sole basis for admission into several of these colleges, not academic ability. They accept all those who are motivated, and whenever the capacity is filled they close applications. Their teaching staff is learning constantly, and there is a healthy turnover in staff that often goes back to industry.

The advantages of a practitioner faculty are being widely recognized even outside the space of vocational education. A general higher education giant like the University of Phoenix subscribes almost completely to this model. Their faculty primarily comprises of industry practitioners who hold regular industry jobs and teach on a part-time basis. This model has generated shock-waves throughout the US since it goes against the traditional "knowledge-based" structure of higher education. However, the model has been a huge success where few can argue with the results as they are observed in placement statistics as well as the average quality of students.

KOREA

The Korean vocational education system has evolved considerably since it was set up in the early 1960s. While initially the emphasis was on churning out semi-skilled workers for the industry, the current focus is on equipping students with basic knowledge and skills and providing them with a foundation which will enable them to learn further. Some key features of the system include:

- Delaying streaming into vocational education till high school (for three years after grade 11). All students undertake a common national curriculum in the first year of high school, following which they choose to enter the general or vocational stream for the remaining two years - however the vocational stream includes extensive elements of general education;
- Ensuring the vocational stream is not dead-end - by allow vocational students to proceed to higher education;
- Financing vocational education through government and private resources - about 40 percent of financing for vocational education comes through entrance and tuition fees;
- Linking up vocational schools with specific industries
to ensure that curriculum and outputs match industry needs.

Source: Pillay (2005)

**Needed: A symbiotic relationship**

The challenge for Indian policymakers is to ensure that both the supply-side players i.e. the government and the private sector, enter into a symbiotic relationship to battle the perception issue plaguing the demand for vocational education. They need to work with each other to create impact on a large-scale to plug the massive human resource gap. The government has the advantage of existing infrastructure, credibility and scale, whereas the private sector is innovative, dynamic with strong links to the industry space. At the same time, industry is recognizing the importance of having skilled workers and is coming forward to actively involve itself - we can see this in the form of several industries adopting ITIs and the Confederation of Indian Industries (CII) entering into a partnership with corporate organizations such as IndiaCan.

There is no denying that the task ahead is daunting. Unsurprisingly, the single biggest source of hope lies in the youth. I recently visited Radaur, a village in Haryana with a population of under 15,000 people. The wide range of students, from Class 10 students to MBAs, were for the most part from modest backgrounds, with parents employed as sweepers, drivers and small shop owners. However, their motivation and hunger to succeed was evident, as was the recognition that in order to get employment they need to be equipped with not just a degree but with employable skills - trade based and soft.

This village is not unique in its youth desiring to "make it big." Dr. K L Johar, former Vice-Chancellor of a university in Haryana said to me, "the concept of participatory management is a panacea for educators, educational planners and administrators." Going by the same spirit, let us not just point fingers at our policy makers - they have a big responsibility, but ours is no less important. We can get the job done, together.

Megha Aggarwal
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_Megha Aggarwal is a social entrepreneur currently in the process of setting up institutions for quality dynamic and inclusive vocational education._

Comments (4)
• Posted by prashant sharma,

As in this article it is pretty clear that why we need vocational training but here we lack means for it. Overall article is good enough to understand the current situation of practical or we can say behavioural learning of Indian youth, which is very important to understand by each & every policymaker in today's spectrum of competition.

• Posted by Abhishek Jain,

I disagree with Prashant that we lack means for it. Rather, I'd say that the State's vision is so occluded that it fails to see the rest of the 87.5% of its population that does not go for higher education. The State's myopia is evident from the recent decision to allow the foreign universities to set up shop in India while we need a comprehensive education policy.

• Posted by Biswajit Mohanty,

Yes Skill shortage is a grave concern for the growth of Indian industry. This is high time for Government, Corporate and the Technical Institutes should join hands and make the skill training on a urgent basis. My only concern is about the availability of quality trainers for this program.

• Posted by Ravi Seru,

The article is revealing and yet not a news. The problem with our country is that we are still a nation which looks at government as if government owns the country and is responsible for fixing all our problems. We know that there is tremendous poverty in the country. We know there are demand for certain skills. Then why is that we can not find people willing to invest in the venture of training people for some of these skills. If people will get jobs based on the skills taught, more and more people will be willing to pay to learn skills and the entrepreneur running the training shop will make a living. It is so simple.

I invite individuals interested in and willing to start the business of imparting some of these skills to contact me. Together, we can find capital and other means to start something. Let us go beyond preaching and analyzing. Let us ACT.