Addressing India's Skill Gap

Education should focus on learning skills rather than accumulating paper degrees, says **Sabarinath C Nair**

The largest reputed centre of learning in terms of the number of candidates it can seat on campus is the Infosys training centre at Mysore, which has a capacity of 14,000 students. This is an indicator of the sorry state of our education system, as the capacity of most universities is much smaller, if you exclude affiliated colleges. The irony is that the Infosys' training centre trains people who have already undergone 18-19 years of formal education; it claims to provide them in six months, training in 'usefulness' to industry!

Over the last few years, the words 'skill gap' and 'skill training' have become buzz words, almost as if India is finally waking up to its demographic dividend - realising that its population with a median age of 29 years, is an advantage. However, this can only be an advantage if our people can be made employable. For this they will have to be trained with skills that will bridge our yawning skill gap as soon as possible. If India needs to train 500 million people in the next 10 years, it will have to train 50 million people, per year. This roughly translates to 10 million engineers and 40 million vocationally trained people per year. Our current capacity, without considering the quality of training, is a meager 1.5 million engineers and less than 3 million vocationally trained people.

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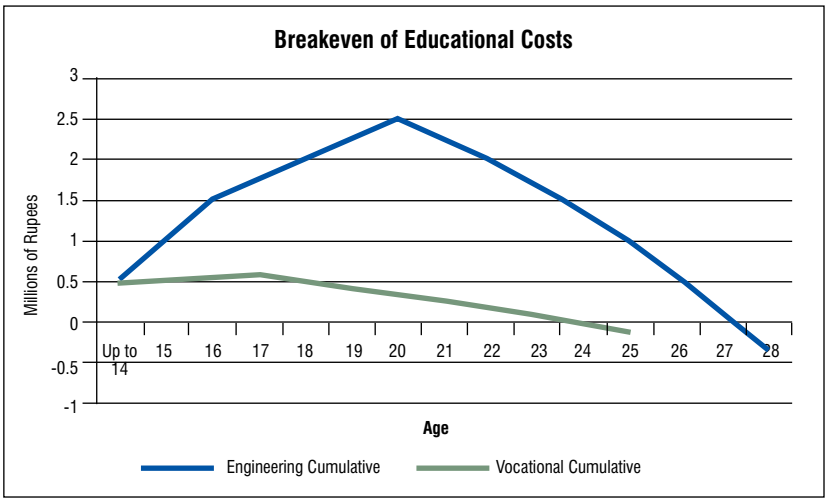
Skilled workers vs engineers

Let me illustrate our current paradox with an anecdote from my previous company, which was exploring the option of setting up a new manufacturing unit and its team was out on the field looking for a suitable location. On making enquiries at one place about the availability of skilled workers, a local resident told a team member, "For skilled labour, the starting wage will be Rs 10,000 per month, but you will have to scale this up to Rs 15,000 per month to retain them. Engineers are available for a lesser amount of Rs 7,000 per month, but they will not be half as useful as the skilled workers." This statement left me wondering whether this was a reflection on the quality of engineers our institutions are churning out every year.



Economics of Education

An engineering student effectively starts earning only from 28 years onwards, for a vocationally trained person this is slightly lower at 24 years of age.

An option to acquire shorter multiple skills in intermediate stages will enable faster return on investment.

(Data extrapolated from AICTE norms on teacher salaries and infrastructure requirements.)

Faster returns in skill-based education

Chart 1 shows how economically unviable the current educational structure in the country is where students learn continuously for many years, before they begin to earn. In the new emerging economy, skills are required at varied levels, such as, an entry level technician or an operator, a supervisor, and a manager, among others, with each level having its own importance. We have to lose our current notion of educational hierarchies such as, engineering degrees being perceived to be greater than polytechnics. This notion has to be replaced with a quest to acquire multiple short skills. There are people who have acquired a greater set of skills including people management and in-depth technical knowledge, combined with experience. They should be viewed as being at par with an engineer, or a manager, instead of being at par with a mere four-year BTech, or a two-year post-grad MBA, having no practical skills. The National Skill Development Corporation (NSDC) has already recommended such a radical approach of introducing shorter, targeted courses that fetch earlier returns, allowing an individual to keep on accumulating more skills.

This should not be seen as an attempt by the affluent classes to ensure the perpetual availability of the working class for their large-scale projects. Rather, this is more about delivering the right monetary value to skilled blue collar jobs. The current wage structures are skewed but they are getting corrected slowly. Today, a skilled crane operator gets paid more than a tier two B-school graduate. The same is true about a skilled welder working on boilers, and nuclear reactors. The economic aspects mentioned here should also hopefully address aspirational challenges in acquiring skills. It is high time the notion that working with hands is menial, and should be looked down upon, changed.

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Address skill requirements locally

To fill the yawning skill gap we are bringing in skilled workers from East Asian countries. However, we have to move quickly to skill our own people latest by 2025, if we wish to achieve our targets to tap the demographic dividend. By 2035, our demographics will begin to change with the median age rapidly rising. Bringing in talent from outside also has a socio-cultural impact - the cultural integration of immigrants poses a huge social challenge. So, if better wages and opportunities are available locally, people will prefer not to migrate. Skilling in the right sectors based on requirements in each locale, will be the right approach to adopt. In this regard, the skill gap surveys commissioned by the NSDC provide insights into what type of skills should be urgently imparted in the states and locales investigated in the surveys.

Poor quality of trainers

The quality of trainers is yet another major area of concern. One should remember that a bad trainer results in an entire batch (of say, 20 or 40 students) being poorly trained. As a result, the lack of proper skills gets magnified many times over. To address this, we need to restore the respect teachers had in our society. Imparting education or skills has to become an attractive proposition, so that the best and inspiring teachers are available for us to nurture world class talent in the country. Technology is the best enabler to help good trainers reach more numbers of students. It can complement, not replace efforts

of teachers, and can also help in training the trainers. However, the current facilities for training the trainers are greatly limited in scale, and the need to train the trainers is as important an issue to solve urgently as the need to skill millions in a short duration. The Advanced Training Institutes run by the government have a current capacity to train only around 1200 trainers every year for their flagship programmes. Also, salaries for trainers may be seen more as an investment in developing good trainers – a study conducted by the NSDC found that only 29 per cent of vocational trainers felt that they were paid well.

Technology should be locally available

Similarly, technology for skill training should also be available locally, as it helps in saving on imports of technology. This can be better used to train more talent locally. The local development of technology also implies the following:

(a) increased local employment opportunities and

(b) faster customisation of technology specific to local needs, like local language content delivery.

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India's strength in Information Technology can be tapped in developing simulators which, if done realistically, can be a very effective tool to train many times the current capacity, in a better and faster way. The confidence that we Indians are best suited to bring about a positive change in this area has been the inspiration behind companies like SkillVeri.

Outlook on education has to change

It is high time we changed our outlook towards education – for some reason, education ends up creating more 'fear' than confidence to do things which are original. A quick look at engineering students tells us that they are far more comfortable working at MNCs than engineering new products. A quick glance at the number of MBA graduates who have started up their own business shows that formal education on how to run businesses ends up creating more managers than entrepreneurs. Also most of our entrepreneurs end up bringing in technology from abroad, and then tweak and customise them to suit Indian needs. We need to change our mindset and thinking and start believing in ourselves. We have to start inventing our own products that will challenge Google, Apple, and Microsoft, among others instead of developing poor clones. This underscores the importance once again of skill development so that we may have original 'built-here-from-scratch' solutions. The right skilled people will lay the foundation for building great organisations. Let us all work towards making India a skill hub, so that we can reap the demographic dividends for the next few decades. ■

The author is Sabarinath C Nair, Co-founder & CEO of SkillVeri Technology Enabled Learning. He is passionate about technology and its application in education & training

Some figures mentioned in the article are referred from National Skill Development Corporation, and World Bank reports on skill development in Asia.

(The views expressed herein are purely those of the author and have no bearing on SkillVeri Technology Enabled Learning.)