

Giving the emperor new clothes

This ASER 2017 has ventured into a new area with what may look like a lot of old-style tools. Some of the information it provides looks like an extension of all the other ASERs that measure enrollment and learning outcomes of school children. But there is more and as this exercise is repeated in future, I am sure the learnings from this one will feed into the future 'Beyond Basics' reports.

The 14-18 year-old age group is very close to the income earning age. Hence, while we are looking at the activities, abilities, awareness and aspirations of these youth, it nudges us to look at the youth in the higher age group and the challenges they face.

There is little doubt that employment of the youth is rapidly becoming a critical issue not only in India, but all over the world and especially in the developing countries with rapidly growing populations. Around the turn of the century, encouraged by the possibilities of rapid economic growth of India, the term 'demographic dividend' became popular. However, a decade and half later not many people are heard talking about this advantage although most of the features for optimism are still around. In fact, the worry seems to be that while wealth will increase, the growing aspirations of the young will not be realized.

The fact that India was going to be the youngest country in the world was the key reason why there was such optimism around the demographic dividend this young population would generate. However, some of us also wondered if we would have demographic disaster if we failed to sufficiently educate and skill our young population. Human capital offers advantages in accelerating economic growth. But, does lack of human capital decelerate growth or block it? In countries where working population is in short supply, new technological inventions have always overcome the problem and automation has increased productivity. But such development was also supported by a wide base of skilled or trainable workforce. Now automation is reaching a point where even in those countries employment is going to become a problem. Thanks to the rapid transfer of technology the same technologies are coming to our country in the manufacturing and service sector. There is no clear confidence that growth of these sectors will lead to more direct employment anywhere near the levels we need. It is already recognized that the skills required for today's jobs are not provided by yesterday's education even if we ignore the rather low level of abilities the young demonstrate. Tomorrow's jobs require different skill sets, although it may be argued that the foundational knowledge provided by today's education is still needed.

So, we seem to have two sets of problems. One is that not many jobs are being created and the other is that numbers of students continuing beyond school is increasing rapidly but we seem to be incapable of preparing them for tomorrow.

Table 1: Percentage of 18 year-olds enrolled in some educational program

	Rural enrolled	Urban	Total
2001 Census	26%	46%	32%
2011 Census	44%	59%	49%
2017 ASER	70%		

¹ Co-founder and President, Pratham Education Foundation

Table 1 indicates that proportion of youth who prefer to continue their education has grown considerably and by 2021 the numerical gap between urban and rural will in all probability disappear. In 2005, the GER for higher education among the 18-24 age group was 11.6% whereas a decade later in 2015-16 is around 24.5% for the 18-23 age group². So, although enrollment of 18 year-olds is at 49% today, only half of those are likely to continue their education for another 4-5 years to complete a degree. As a result of such attrition in the past decade, the proportion of graduates in the 25-29 population was 5.2% for rural and for the urban areas it was 20%. Thus out of the total population of 25-29 year-olds in India, 10.2% were graduates in 2015-16. This number is likely to double in a decade given the trend of increasing enrollment and retention in undergraduate courses. The question is, what is the value of these graduates, to the economy, to themselves, to their families and to the community they live in.

Although number of students enrolled in higher education is increasing, the proportion of students studying BA, BSc and BCom is constant at 74%³. This matches exactly the percentage of 14-18 year-olds who say they want to study for such degrees according to ASER 2017. Policy-makers had noted a long time back that the general degree course really does not prepare young people for any job. Although, if taught well and learned well, such courses can create a good foundation. Often students opt for these courses because the institutions accessible to them offer no useful alternatives.

It is often said that instead of going for general graduation degrees, the young should go for vocational training. In the 14 to 18 age group there is not much evidence that children are learning vocational skills. Efforts to provide entry-level skills for jobs started way back under UPA-I and have been sustained under the present government. These courses train youth so that they can start working within two to three months. In a relatively poor country which has industry starved of skilled labour, young untrained people should be flocking to these courses and industry should be chasing the training centres. Pratham has been involved in vocational training and our experience says that neither happens. The answer to India's larger skilling problems does not lie in the short modular courses, although it does help a good number of people in poverty. They acquire some skills, get jobs, learn further on the job and then move upward. The real answer lies in creating progressively strong foundations at different stages in school and junior college level and then offer options. The youth should be able to work as they study or study as they work because earning is an immediate need and learning for upward mobility will be a growing aspiration.

ASER 2017 also shows that nearly 78% of all rural 14-18 year-olds - whether enrolled students or not - do some agricultural work whether for wages or on their own land. Yet, the percentage of students in agricultural or veterinary courses around India amounts to less than half a percent of all undergraduate enrollment. Although the percentage of population working in agriculture and related areas has now reduced to about 50%, it is an area that could use a more educated and trained workforce considering that productivity lags far behind world's leading nations. Foundational agricultural courses that replace the usual bachelor's courses but also add training in skills that could prepare the youth for alternative vocations need to be designed and delivered. I find it interesting that the enrollment in Agricultural Engineering (16,461) is only a little less than Aeronautical Engineering (14,059) according to AISHE 2015-16. Agriculture and related sectors will continue

² This GER is less than half of US and UK while it is a third or less of North European countries.

³ All India Survey of Higher Education (AISHE) 2015-16.

to be major occupations and they need to be improved if rural livelihoods are to grow. So, why are young people not enrolling to learn agriculture?

There may be a problem of supply because of lack of infrastructure. But the poor supply may also be tied to a lack of demand. I suspect the demand is low for the same reason that most people do not pay to take cooking lessons. It is a skill that is handed down from generation to generation and people would laugh at the idea of enrolling kids in cooking classes unless it was for a salary earning job. But, it is noteworthy that videos of Indian cooking recipes on Youtube routinely have a million or more views within a year. This is not too far off the number of views of many popular Bollywood songs. Further, these recipes do not have to be presented "professionally". Just watch Shubhangi Keer (who may appear and sound like a less educated housewife to us "urban educated" lot) telling you in Marathi how to cook spicy chicken, which has over two million views and appreciative comments even from non-Marathi viewers. Similarly, videos on agriculture, especially those in Hindi or regional languages, are viewed close to a million times and the viewership is growing. Clearly working in agriculture is not an aspiration, as ASER 2017 also shows. But, I think mechanised or scientifically supported high yield agriculture, horticulture, animal husbandry, fisheries and the allied processing industry will be able to generate a cycle of demand, market, profits and potentially aspirations in the near future.

The supply-demand problem of education has many interesting aspects to it. The numbers of youth wanting higher education has shot up but the supply suffers on various counts. First, government sources are quoted in the news that there is a shortage of 30-40% faculty in colleges and universities at all levels. I have not found data in support of this claim. Second, almost anyone who is thinking of education says that the syllabi are outdated. Third, industry and business complain that the outcome of education - quality of job applicants is extremely bad but we have no measure of how good or bad it is. Graduation certificates, like school certificates, have lost credibility and meaning. Further, considering that about 90% of the Indian workforce is in the unorganized sector where hiring is quite informal, certificates and diplomas count less than a reference trusted by the employer. And yet, parents want their children to go to colleges and complete graduation. There is a certain helpless faith in our educational institutions that they will somehow deliver at least for "my" child. At the same time, we do not rely totally on these institutions. At appropriate times we also send children to private tutors. ASER 2017 shows that nearly 40% students of attending government schools go for tuitions. ASER has been pointing out that in the Eastern states around Bihar, massive proportions of school children go to private tutors.

ASER 2017 indicates that a large proportion of 14-18 year olds can at least read simple texts. Their math levels are quite poor and do not show improvement with age. At this age perhaps pen-paper assessments like PISA will help to assess higher level abilities. But the fact that policy-makers and administrators do not have data about learning outcomes is a relatively small problem. The bigger problem may be that the youth cannot show what they really can or cannot do to a potential employer in the absence of a credible and transparent examination system. Just as there are standardized examinations such as TOEFL and GRE, independent examinations that test the abilities of young people are the need of the hour. In fact, such certifications honoured by employers will help change the education scenario dramatically.

Increasing number of students, lack of infrastructure, shortage of teachers and loss of credibility and quality have created a complete crisis. Alternatively, the education system seems to have become like that powerful emperor without clothes. Everyone can see that he is naked but no one wants to say so. What most parents with means do is bow to this emperor by enrolling their children in the institutions and then also get the children to take advantage of alternative paths. But, what about the large majority who do not have the means?

Over a period of time governments and educational bodies have themselves declared their institutional education and examination mechanisms - at least at the undergraduate level - untrustworthy and undependable. There was a time when university examination marks and certificates were enough to join a professional course such as medicine or engineering. By bringing in separate entrance examinations, the devaluation of university examinations was formally stamped. Perhaps there was no other way. Preparing students for the entrance examinations is a major occupation and a new industry has come up to help this small percentage of students. One website declares that there are 400 entrance examinations "to ace" in India. Already admission to elite colleges is controlled by ridiculous "cutoff marks".

Instead of creating more and more barriers to education and general learning, it will be better to open doors wide and create new institutional mechanisms that will ensure low costs and better quality. Even today, almost 10% undergraduates are registered in open universities. Open learning has to be taken many steps further. Digital technology is clearly a major helpful feature that needs to be used fully. New learning structures will be needed where local tutors help students and where learning groups can use group and peer learning processes to learn. The possibilities are endless.

The digital age has been shaping our way of life. Its distinctive feature in contrast with the one in the twentieth century is that we are moving from linear functioning to non-linear functioning. The technology that brought up the industrial revolution organized our life in linear patterns. As many have remarked, our schools have been a reflection of that era as well starting from the syllabi, the seating arrangement, the quality control of passing and failing children and finally the presentation of a product desired by the factory. The non-linear technology that first brought computers in our homes and now computing and communications devices in our hands is changing the way we think. Again, as many have remarked, with so much knowledge that can be made available at our fingertips, the barriers to access this knowledge have to be lowered and pathways to use it and get recognized for what we know have to be opened up.

Preparing children to learn while they are in elementary schools is the first unfinished task as everyone now agrees. We need to define what we need to accomplish at the next stage of 14 to 18 years of age. This is where the so-called 21st century skills will have to be mastered along with learning to live physically and mentally healthy lives in communities that help each other. The 'Beyond Basics' ASER will grow to understand this age group further in the coming years.