

Enrolment rates are climbing. So what explains the sorry state of India's education sector?

The Annual Status of Education Report (ASER) 2017 will shortly be up for discussion among policy experts. Based on household-based surveys that cover children in the age group 3-16 across almost all rural districts of India, ASER provides estimates of children's schooling status and their ability to do basic reading and arithmetic tasks.

Aniruddha Ghosh and **Sujan Bandyopadhyay** analyse the prior survey findings and conclude that innovative intervention is required over boosting enrolment.

ASER's 2016 report observed that despite high enrolment ratios of over 96% in the last eight years, improvement in reading outcomes and arithmetic ability continues to be low. Moreover, a large proportion of students in both government and private schools continue to be below 'grade level'. Grade level means that a student can meet the requirements expected of her in that grade.

The ASER 2017 is targeted to look 'beyond basics': the age group between 14-18, primarily those outside the Right to Education ambit. There is a significant dearth of information in this regard and therefore, ASER 2017 will be a critical information asset to assess India's *madhyamik shiksha* scenario. The government's flagship Rashtriya Madhyamik Shiksha Abhiyan (RMSA) launched in 2009 and re-booted in 2013 as RMSA-Integrated has not been much of a success in India's secondary education *scene*. In light of these observations, it is likely that ASER 2017 will throw up systematic issues that have continued to plague our secondary education.

ASER 2016 and other previous reports

Let's take a step back and illustrate how our performance has been in the age group 3-16. Here is a snapshot of ASER's previous reports on the state of India's early grade development.

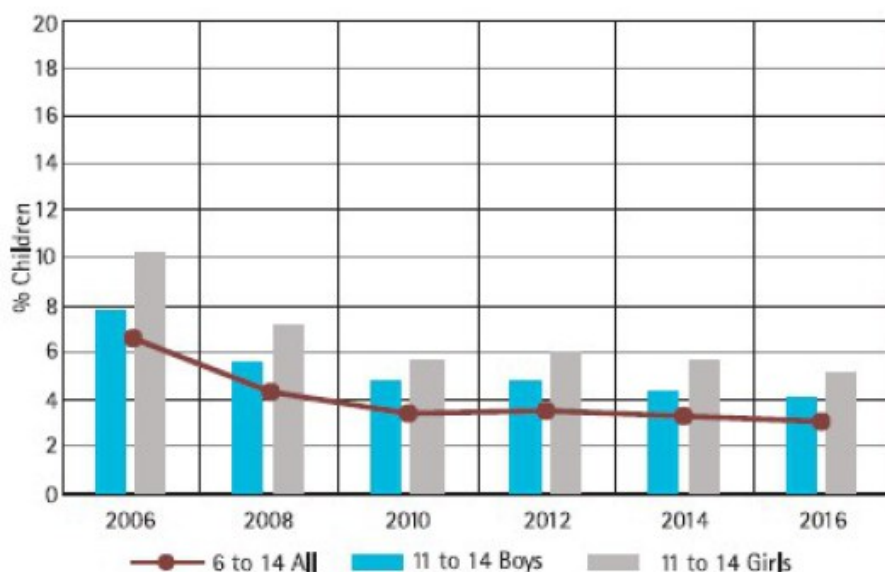


Figure 1: Percentage of children not enrolled in school. The trend for enrolment has been on the rise. Source: ASER 2016

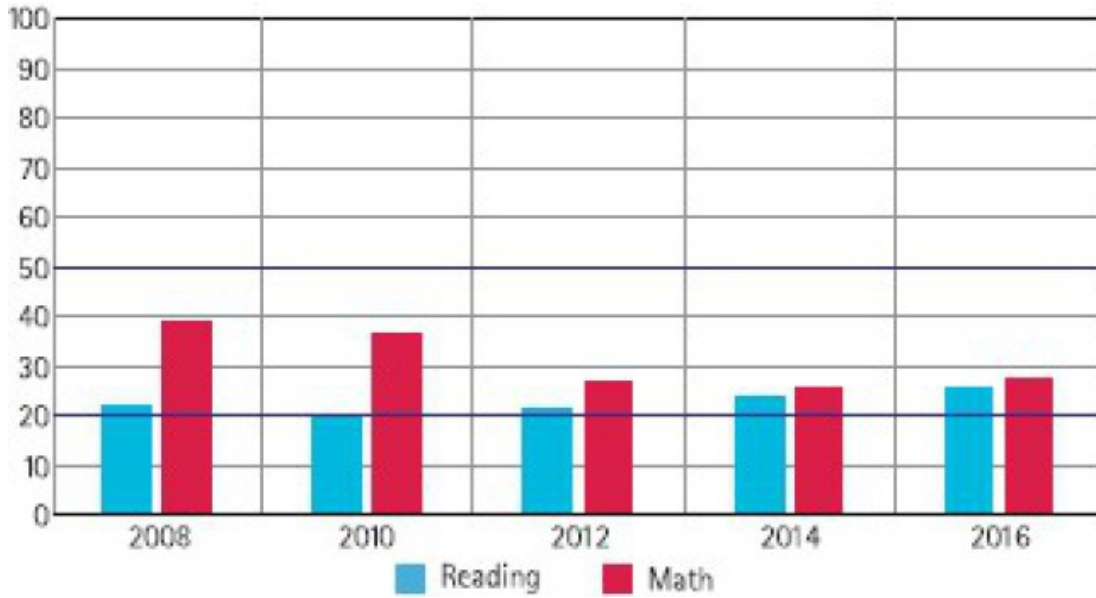


Figure 2: Children in class III who are at 'Grade Level' 2008-2016. The lack of commensurate ability with grade level is evident. Source: ASER 2016

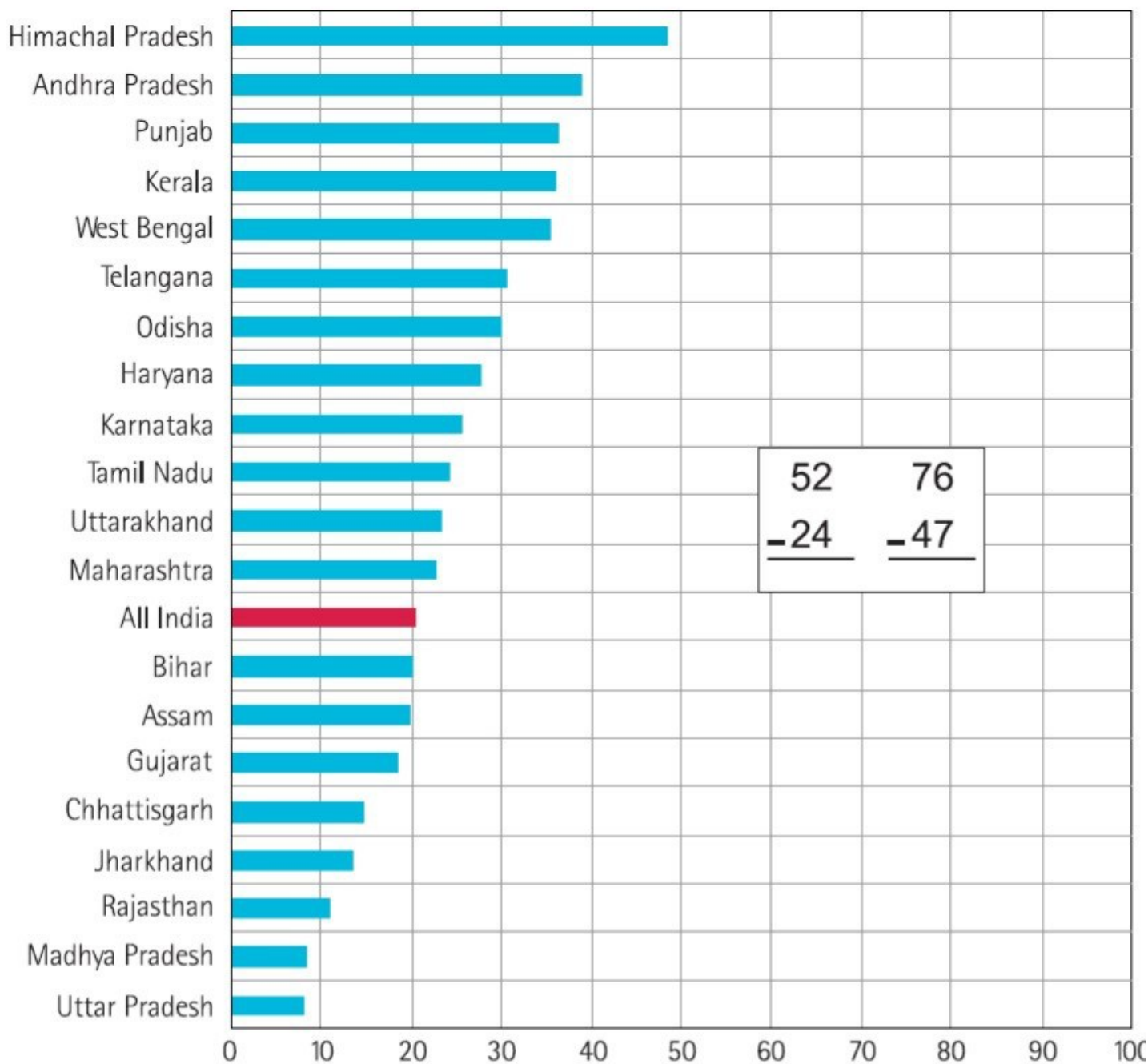


Fig 3: Percentage of students who can at least do subtraction in Grade III. Large variation across states. In 2016, the number of children at grade level ranged from 50% in Himachal Pradesh to 10% in Uttar Pradesh. Source: ASER 2016 Report

Enrolment levels have been high for the 6-14 age group, and around 96% since 2009 onwards.

The percentage of children in grade 3 who are able to read at least a grade 1 level text has improved marginally – from 40% in 2014 to 42.5% in 2016.

Percentage of grade 3 children who could do two digit subtraction has marginally improved from 25% in 2014 to 27% in 2016. This has been the first year since 2010 when there has been an upward trend observed in arithmetic ability.

However, trends over time point to a dismal outlook. Figure 4 demonstrates the ability of grade 4 children in successive cohorts to read and do basic arithmetic. One can see a downward trend in the ability of successive cohorts.

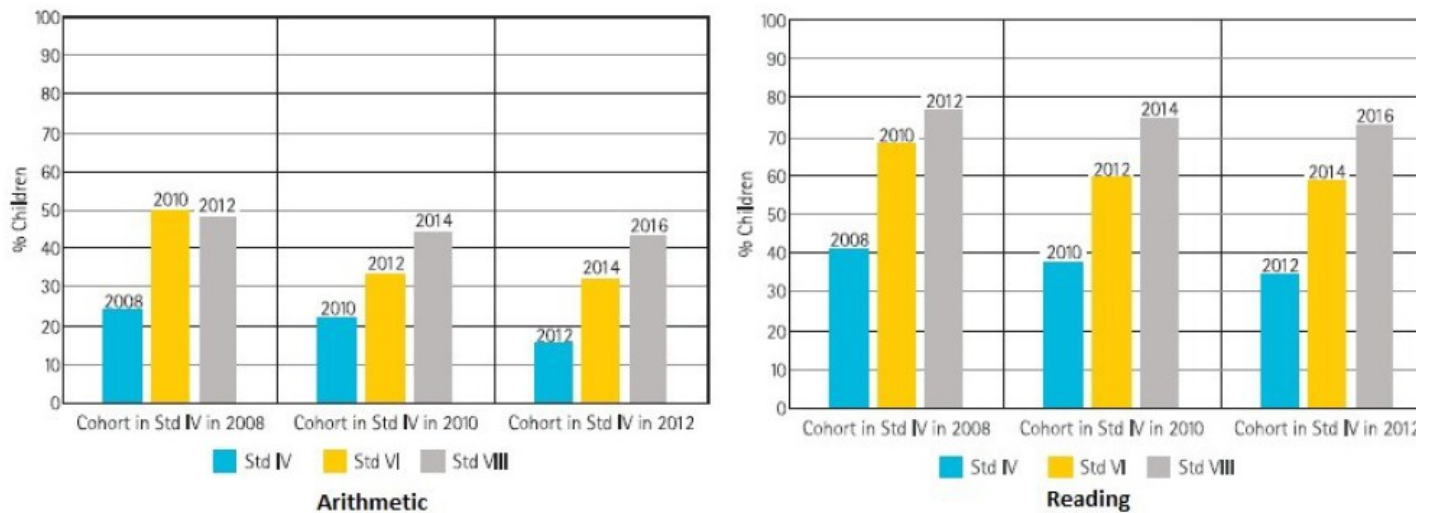


Figure 4: The graphs show the performance of three cohorts from class IV to class VIII. The graph on the left shows the percentage of students who can do division; the graph on the right shows the percentage of students who can read a class II 2 level text. Source: ASER 2016

Economics, enrolment rates and cognitive ability

One of the most influential studies to look at the relationship between education and economic growth was professor Lance Pritchett's '[Where has all the Education Gone?](#)' His 2001 study found no significant positive relationship between educational attainment and economic growth.

He wrote:

"In the decades since 1960, nearly all developing economies have already seen education attainment grow rapidly. The cross-national data show, however, that on average, education attainment contributed much less to growth than would have been expected in the standard augmented Solow model."

He proposed several possible explanations for this phenomenon, the most important of which being the classic quantity-quality argument: Quality of educational attainment was so low that despite high educational attainment there wasn't a significant increase in cognitive skills and human capital.

As outlined above, the very idea that improved schooling (through the lens of school attainment rates) – which has often been a cornerstone of most interventionist strategies – will raise economic well-being has often been discounted by economists. Eric Hanushek and Ludger Woessmann in their authoritative paper, '[The Role of Cognitive Skills in Economic Development \(2008\)](#)' find strong evidence that the cognitive skills of the population – rather than school attainment rates – are powerful determinants of earnings, economic growth and income distribution.

Their work premises itself on a rather simple question: whether education is the steering force or merely one of the several factors that are correlated with more fundamental development forces, say cognitive skills when it comes to economic growth. Hanushek-Woessmann armed with strong econometric evidence argue that cognitive skills overwhelmingly outnumbers schooling attainment rates when it comes to influencing economic growth. Moreover, the effect of cognitive skills on economic growth is larger in developing countries than in the developed ones.

Building on the works of Pritchett, and Hanushek and Woessmann, a recent research paper titled '[Does One Size Fit? The Impact of Cognitive Skills of Economic Growth](#)' by professor Nadir Altinok of the University of Lorraine and professor Abdurrahman Aydemir of Sabanci University studies the difference in the impact of cognitive skills on economic growth between developing and developed economies.

In addition to the findings mentioned above, the heterogeneous effects of cognitive skills vis-a-vis the income levels of the economies is rather stark: the magnitude of the effect of cognitive skills is about 60% higher for low-income countries compared to high-income countries, and this more than doubles when low total-factor productivity (TFP) countries are compared to high TFP countries. From a policy perspective, this encourages the view that the promotion of education policies that focus on the quality of education has especially larger payoffs in the least developed regions through the productivity channel. To sum it up, economic research overwhelmingly supports the idea of interventions aimed at improving cognitive skills rather than mere enrolment rates.

To cite a success story, Colombia has made impressive progress towards universal enrolment in basic education and at the same time has raised learning outcomes. A lot of this accrues to the flexible 'new school' model, commonly known as [Escuela Nueva](#).

Escuela Nueva accepts multigrade teaching as an unavoidable condition in small schools of rural areas. It encourages to develop special materials and teaching methods for multigrade teaching. The academic achievement of the students in Escuela Nueva has been consistently higher than in urban schools. There are plenty of cross-country experiences to learn from and we should actively explore and replicate them here.

India's scenario

Sarva Shiksha Abhiyan (SSA) was launched in 2000 to spread the availability of universal elementary education across India. Under SSA, commendable progress has been made in increasing enrolment rates; as well as providing basic infrastructures such as classrooms, water, toilets and boundary walls to all schools. Yet, what is the scenario when it comes to learning outcomes?

India made its debut in the Programme for International Student Aptitude (PISA) test in 2009 with 16,000 students from 400 schools across Himachal Pradesh and Tamil Nadu. While China – also a first-timer in 2009 – stormed into the number one position with Shanghai schools topping in math and science, India was at a paltry 72nd among the 74 participating countries. Since then, India has boycotted the PISA rankings citing 'methodological differences' but it plans to return to the rankings fold in 2021. Coupled with ASER's findings over the years, this paints a sorry state of India's primary education sector.

Now that enrolment rates are high, we would need to look for innovative interventions to improve learning-based outcomes in India. One of the recommendations of the ASER report, which the government has been focussing on in the last few years, has been early-childhood care and nurture, especially for children in the 0-3 age group. In fact, [ASER's study](#) on three states (Andhra Pradesh, Assam and Rajasthan) found a positive and significant relationship between early childhood care and nurture and early grade learning outcomes. Although issues do remain in implementation, this avenue holds promise to further improve outcomes in India.

Additionally, in India, there are two interesting policy interventions that are in the process of being rolled out: same language subtitling (SLS) and outcomes fund for the education sector.

Conceived by Professor Brij Kothari of IIM Ahmedabad, SLS is the concept of subtitling existing Bollywood film songs on television. Kothari's research estimates a 9% increase in the number of functional readers who watch TV programmes with SLS within a period of two years.

Similarly, a large outcome-based fund for education is set to launch in India in early 2018. Touted as one of the first and largest funds for social enterprises, the fund would invest in education providers to work with government-run schools to deliver outcomes. There could be a variety of outcomes like early childhood interventions, retention of girl students, learning in primary schools and employability of students after high school. The fund is being launched by the Global Social Impact Investment Steering Group, an organisation comprising 13 member countries (including India), with a focus on channeling global social impact investment. Outcome fund based models are actively being employed by nations across the globe to fund social projects and has the potential to deliver the necessary outcomes.

While we wait for ASER's 2017 findings, much of the theory and evidence that we have strongly suggests that raising enrolment rates hasn't been enough to push our growth frontiers. The hope is that the required stakeholders will aim, plan and push for innovative interventions that encourage student achievements.

This article first appeared on The Wire and can be viewed [here](#).

Cover image: School children in Cochin, Kerala. Image credit: Thorsten Vieth, [CC BY-SA 2.0](#).

Note: This article gives the views of the authors, and not the position of the South Asia @ LSE blog, nor of the London School of Economics. Please read our [comments policy](#) before posting.

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