The Bridgespan Group

Changing the Public Discourse on School Learning: **The Annual Status of Education Report**

OVERVIEW: The Annual Status of Education Report (ASER) is an annual survey that aims to provide reliable estimates of children's schooling status and basic learning levels in reading and math for every rural district in India. ASER is designed for use in rural communities. Volunteers orally deliver the survey questions in families' homes, to account for all children, regardless of whether they are enrolled in school.

ESTABLISHED: 2005 (first report published); 2008 (ASER Centre established as autonomous unit within Pratham's network)

QUICK FACTS

PRIMARY PHILANTHROPIST:
The William and Flora Hewlett Foundation

GRANT AMOUNT:
INR 53 crores[1] (USD 8 million) over 10 years

PRIMARY FOCUS:
Education

ARCHETYPE: Inform public policy
ASER creates a comprehensive evidence base of learning levels among rural children in India.

KEY PARTNER:
- Pratham

WHY BOLD?

ASER is the largest citizen-led survey in India and the country's only annual source of data on children's learning outcomes. ASER citizen volunteers reach children in every rural district in India and use a radically simple assessment tool that is administered in households instead of schools. ASER results have informed the national and global discourse on education, shifting the focus from enrollment to learning quality.

KEY LEARNINGS

Use philanthropy to create an evidence base and drive advocacy efforts around an issue

Develop novel and inclusive tools when existing ones do not serve your purpose

Where possible, empower citizens to drive advocacy efforts that maximize impact

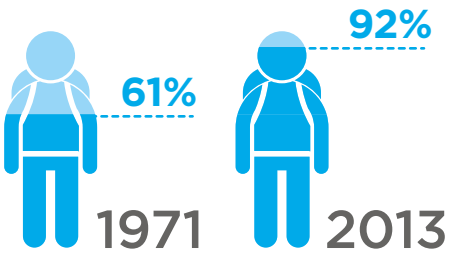
Continuously experiment with new approaches to addressing a problem

1 Conversion rates (INR to USD) reflect rates available during the April 2018 to June 2018 time period.

THE OPPORTUNITY FOR IMPACT

Over the last 40 years, India has made great strides in providing free public education to primary school children. India's primary net enrollment ratio—the percentage of children of primary school age that are formally enrolled in school—rose from 61 percent in 1971 to 92 percent in 2013.[2]

Primary school
net enrollment



In 2009, the Parliament of India enacted the Right of Children to Free and Compulsory Education Act (RTE), underscoring the importance of public education. The Act requires government and local authorities to ensure the admission, attendance, and completion of elementary education by all children aged 6 to 14. It also stipulates that students automatically move up to the next grade level at the end of each school year, until they reach grade 8.

While student enrollment rates have increased steadily, other areas of India's education system are floundering. For starters, the country is dramatically short on teachers. According to India's Human Resources Development Minister, 18 percent of teaching positions in government primary schools and 15 percent of teaching positions in government secondary schools remain unfilled, resulting in a nationwide shortage of approximately one million teachers.[3] Needless to say, teachers at government schools are stretched thin. And teacher absenteeism abounds: approximately 24 percent of government teachers fail to come to work on an average day.[4]

While India's push to get children into school is commendable, there has been little focus on the quality of their education and a lack of conclusive data indicating whether higher enrollment resulted in better learning.

In 2001, the government attempted to measure learning outcomes by implementing the National Achievement Survey (NAS), a pen-and-paper exam testing math, science, language, and social sciences for students in grades 3, 5, and 8. However, experts argue the test overstates learning levels, as it is administered only among school-enrolled children and its questions are framed in exactly the same form that children study them. Additionally, the

Teaching positions
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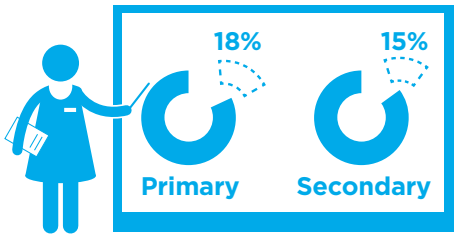


Across India's public schools, there is a shortage of 1 million teachers

2 "School enrollment, primary (% net)," United Nations Educational, Scientific, and Cultural Organization (UNESCO) Institute for Statistics., The World Bank.

3 Abhishek Waghmare, "India's Unfolding Education Crisis: Government Schools Short Of 1 Million Teachers," *IndiaSpend*, December 12, 2016.

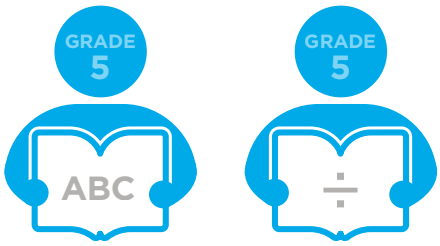
4 Karthik Muralidharan et al., "The Fiscal Cost of Weak Governance: Evidence from Teacher Absence in India," *Journal of Public Economics* 145 (January 2017): 116.

government only administers the NAS every three years or so. Meanwhile, the RTE's policy of automatically promoting students until grade 8 ensures that children who have fallen behind will still progress through the system, even though they lack the requisite skills to learn at their appropriate level.

A BOLD INITIATIVE IN EDUCATION QUALITY MEASUREMENT

To address the question of whether children in India are learning, the ASER Centre—the autonomous research arm of Pratham, one of India's most well-regarded education NGOs—regularly conducts the Annual Status of Education Report (ASER) survey, which measures basic reading and math skills of rural children aged 5 to 16.

Education crisis



50% of students cannot read at a grade 2 level

75% of students cannot do division at a grade 3/4 level

In many regards, ASER is a revolutionary survey. It is the only annual source of data that delves into whether India's rural children are actually learning. It has an outsized reach: to assess learning at the national, state, and district levels, ASER collects learning outcomes data from approximately 600,000 children across every rural district in India. Moreover, the process by which ASER collects this data is radically different from other learning assessments. Designed for use in rural communities, local citizen volunteers conduct the survey orally, in families' homes. That way, the survey accounts for all children—including those enrolled in public or private school, those who might be absent from school on a given day, or those who are simply not enrolled.

Through its pioneering efforts, ASER has made starkly evident the extent of India's education crisis: roughly 50 percent of Indian children in grade 5 cannot read at a grade 2 level, while roughly 75 percent of Indian children in grade 5 cannot solve three-digit by one-digit division problems at a grade 3 or 4 level, depending on the state. These alarming statistics have shifted India's national discourse on education from focusing on enrollment rates to improving learning outcomes.

"Prior to ASER, the assumption was that 'schooling' and 'learning' meant the same thing," says Dr. Suman Bhattacharjea, director of research at the ASER Centre. "In other words, if children go to school, they will learn. The ASER Centre's work demonstrates with rigorous evidence that this assumption simply is not true in India."

What does seem true, based on the evidence, is that ASER's powerful results have put a global spotlight on the need to ensure quality education for every child. Organizations in 13 other countries in Latin America, Africa, and Asia have designed and implemented surveys based on the ASER model.

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> Director of Research, ASER Centre

HOW THE INITIATIVE CAME TO LIFE

Pratham has been operating primary education programs throughout rural India since 1994. Through its work, Pratham's team observed that many rural Indian children were failing to learn basic reading and math skills. With all the focus on driving school enrollment, no one was paying attention to whether or not children were actually learning. That dispiriting insight pushed Pratham to create an evidence base aimed at assessing whether such a learning gap actually existed, and if so, at what scale.

Pratham hoped to shift educators' and policymakers' focus from only escalating enrollment numbers to surmounting the challenge of helping every child acquire foundational reading and math skills. In order to collect evidence of poor rural learning outcomes, Pratham's in-house statisticians, econometricians, educationists, and assessment experts developed, piloted, and iterated simple, oral tests to measure children's reading and math skills. External experts subsequently validated the overall survey design.

Once developed, the tools were deployed nationally for the first time in 2005. From its inception, the survey was conducted in families' homes, to account for children who were not enrolled in or were absent from school. Additionally, volunteers oversaw the survey to ensure that ASER was conducted frugally in every rural district. Further, by delivering the survey through volunteers, Pratham hoped to raise rural communities' awareness of India's subpar education system.

In 2008, the ASER Centre spun out of Pratham's assessment unit and became an independent organization, with the primary responsibility for conducting the ASER survey each year. ASER's autonomy helped reinforce the effort to collect student data without bias. The ASER Centre also conducts grant-funded research focused on measuring education and health outcomes in a given region or state.

In 2006, global initiatives to improve education systems in developing countries began to run in parallel with India's efforts. That year, the William and Flora Hewlett Foundation (Hewlett Foundation), together with the Bill & Melinda Gates Foundation (Gates Foundation), founded the Quality Education in Developing Countries (QEDC) Initiative. Both the Hewlett Foundation and Gates Foundation believed that because children were leaving school without becoming proficient in reading and math, the world faced a learning crisis. Through QEDC, the foundations aimed to confront the problem by providing funding to organizations working to measure and reverse learning crises in India, East Africa, and West Africa.

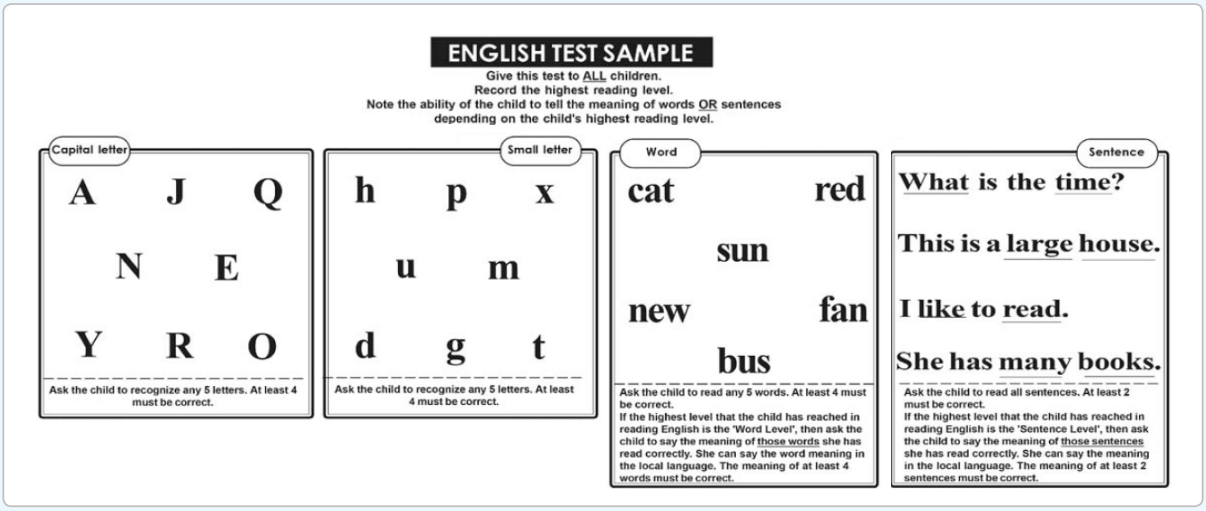
In 2010, the Hewlett Foundation began providing core funding to the ASER Centre and also helped establish its international unit, which has worked with organization leaders from Bangladesh, Cameroon, Ghana, Kenya, Mali, Mexico, Mozambique, Nepal, Nigeria, Pakistan, Senegal, Tanzania, and Uganda to develop ASER-like surveys in each country. The Hewlett Foundation also provided direct funding to organizations in Kenya, Mali, Mexico, Senegal, Tanzania, and Uganda to execute their versions of the ASER survey.

HOW THE INITIATIVE WORKS

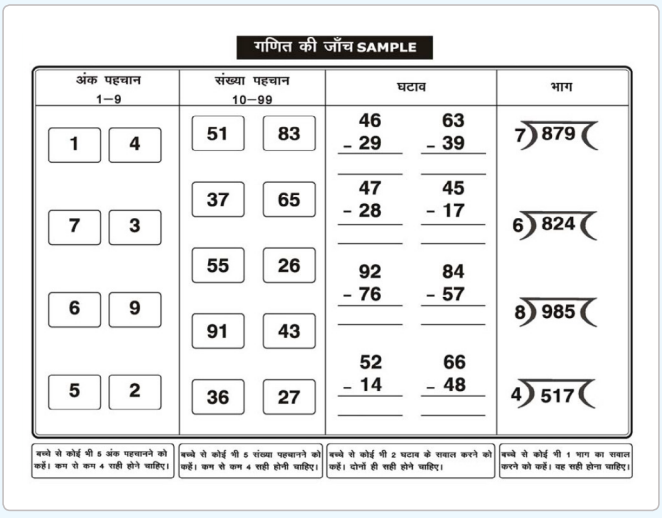
To ensure comprehensive and unbiased results, ASER randomly samples villages in every rural district. Within each of the sampled villages, ASER also randomly samples households. Volunteers assess every child aged 5 to 16 within a selected household.

Through spoken assessments conducted in the home and visits to one government school in each surveyed village, the survey collects:

- **The enrollment status** of children aged 3 to 16.
- **Basic household information** including household size, parental education, and household assets.
- **Reading and math skills** for children aged 5 to 16. The highest level of reading tested—reading a story—corresponds with grade 2. The highest level of math tested—simple division—corresponds with grade 3 or 4, depending on the state.
- **Additional information,** such as basic English or applied math skills. These additional tests vary from year to year.
- **Government school information** on school infrastructure, enrollment, attendance, and the number of teachers.



ASER's English assessment is used to determine whether a child can read English at a grade 2 level.



ASER's math assessment tool determines whether a child can solve arithmetic problems at a grade 3 or 4 level, depending on the state. (Photos: ASER Centre)

Every year, about 30,000 survey administrators assess roughly 600,000 children in India. During three-day district-level training workshops, volunteers learn how to conduct the survey as per the ASER Centre's strict protocol. Training includes classroom sessions, field practice, and a quiz.

Through its nationwide network of partners, the ASER Centre selects its volunteers from a vast range of colleges, universities, NGOs, youth groups, women's organizations, self-help groups, private companies, and other organizations. It has partnered with more than 2,000 organizations since the survey's inception in 2005.

A child is tested using the ASER tool. (Haryana, 2013) (Photo: ASER Centre)

PROGRESS AND RESULTS

From the outset, Pratham aimed to shift the national conversation around education from increasing enrollment to improving learning outcomes. It has succeeded in doing this, and much more. ASER's exhaustive data collection, reliable analysis, and easy-to-understand results have provided compelling evidence of India's education crisis and the profound need to improve the education system in rural communities.

Today, ASER's impact has reverberated through the national, state, and district levels in India. The Government of India cited ASER in its five-year plan (2012–2017) and stated that the overarching goal in elementary education is to improve learning outcomes. It is worth noting that the ASER Centre has worked with state governments to help them interpret ASER results and think about how they can design policy, improve teacher training, or develop curricula to address learning gaps.

ASER's influence has also gone global. The World Bank's World Development Report (WDR 2018) on the global learning crisis cites ASER data in its first paragraph. And, whereas the United Nations' Millennium Development Goals, set in 2000, focused on access to education, its Sustainable Development Goals, set in 2015, aim to ensure an "inclusive and equitable, quality education…for all."

"I am sure that it was the ASER Centre's work that led to the introduction of learning measurement into the Sustainable Development Goals," says Ruth Levine, program director of global development and population at the Hewlett Foundation. "The fact that, in a decade, [the ASER Centre] could alter the conversation around education in the world's largest democracy and contribute to the global debate on education is truly impressive."

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> Program Director, Global Development and Population, William and Flora Hewlett Foundation

While ASER has helped shape the global conversation around improving education, challenges remain. In particular, ASER has not led to substantial, community-level advocacy beyond survey data collection in rural districts. The ASER Centre acknowledges that it needs to investigate ways to directly engage citizens in rural districts before and after the survey is conducted. Only then can the organization close the feedback loop between collecting data and mobilizing community-level efforts to improve the quality of education.

LOOKING TO THE FUTURE

Moving forward, the ASER Centre plans to continue conducting its flagship ASER survey on an annual basis, to expand its evidence base, and to investigate more deeply the shortcomings of India's education system. "We think it is important to continue running ASER every year," says Dr. Wilima Wadhwa, director of the ASER Centre. "If you want data and evidence to impact policy, it needs to be available on a regular basis, and at a district as well as a national level."

As was done in 2017, when ASER focused on measuring the ability of children aged 14 to 18 to solve applied reading and math problems (for example, counting money, telling the time from an analog clock, and following written instructions), the ASER Centre's leadership would like to assess different age groups in future reports. However, dealing with different age groups will require the development of a diverse range of new assessment tools, as well as comprehensive pilot projects to test their efficacy.

LEARNINGS TO DATE

Use philanthropy to create an evidence base and drive advocacy efforts around an issue. The ASER Centre uses philanthropic resources to develop ASER survey tools, recruit and train tens of thousands of volunteers, distribute survey materials across the country, establish a team to oversee the survey's execution every year, and disseminate the survey's findings. Through the survey, the ASER Centre gathers irrefutable evidence of the education crisis in India. ASER's findings have galvanized government leaders, civic society, and the media around the urgent need to build better education systems in India and globally.

Develop novel and inclusive tools when existing ones do not serve your purpose. When ASER was developed in 2005, it differed radically from other learning assessments that, by design, exclude children who are not enrolled in or are absent from the formal schooling system. Unlike the NAS, which is a pen-and-paper, school-administered test that consists of 45 or 60 questions, ASER is a spoken, 15-minute survey conducted in a child's home to account for all children, whether they are enrolled in public or private school, or if they are absent from school or not enrolled. Pratham and the ASER Centre have designed a tool that is exceedingly simple to administer and is able to cater to the on-the-ground realities of rural India, even as it produces reliable and valid results.

Where possible, empower citizens to drive advocacy efforts that maximize impact. By employing citizen volunteers to conduct the survey, ASER is able to reach roughly 16,000 villages representing every rural district in India. This comprehensive data set draws into sharp relief the magnitude of India's education crisis and it holds district, state, and national actors accountable for taking action. What is more, when the ASER Centre trains its 30,000 surveyors, it increases people's awareness not only of the education crisis, but also of the value of the survey itself.

Continuously experiment with new approaches to addressing a problem. Each year, in addition to its standard set of questions, the ASER survey includes one or more novel assessment tools that aim to deepen the public's understanding of India's education crisis. For example, in 2007, 2009, 2012, 2014, and 2016, children were tested in basic English reading skills. In 2017, children aged 14 to 18 were assessed on functional skills and were asked to solve applied math problems, such as adding and subtracting money, adding the weights on a scale, and calculating the total number of hours between two given points in time. Before the national rollout of ASER surveys, teams conduct comprehensive and large-scale field trials to test the robustness of new survey tools.

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