Evidence use brief





Using evidence to improve children's foundational skills: a successful teaching and learning approach expands in India and beyond

Schooling does not translate into learning. This has been the broad message of numerous global education reports. The World Bank's 2017 World Development Report warned of a 'learning crisis' in lowand middle-income countries: 'Schooling without learning is a wasted opportunity. More than that, it is a great injustice: the children whom society is failing most are the ones who most need a good education to succeed in life'.¹

Low learning levels are a major challenge in rural India. Although enrolment rates for children in the 6- to 14-year age group were 97 per cent in 2018, just around half of the children enrolled in grade 5 could read a grade 2 text, and only 28 per cent were able to solve simple division problems.² A lack of tools to help teachers identify student learning levels and customise their teaching approaches has meant children are not acquiring the foundational skills they should have at their grade levels. High pupil-toteacher ratios are compounding the problem.

Pratham, a large education NGO in India, developed the Teaching at the Right Level (TARL) methodology to improve learning outcomes. The model involves regrouping children (typically in grades 3 to 5) based on their learning levels, rather than their age or grade. Teachers use appropriate activities and materials to help them acquire foundational skills in learning and arithmetic. Instead of relying on an end of year exam, teachers regularly assess students' progress using easily administered assessment tools.

Highlights

Evidence use from the 3ie-funded impact evaluation

- Of five impact evaluations conducted between 2001 and 2014 in India, the one conducted in Haryana was particularly influential in government decisions about scaling up in several Indian states, although not in Haryana.
- Evaluation evidence also informed decisions by African governments to pilot the model.
- These independent evaluations have complemented Pratham's work on measurement of programme outcomes and have helped the organisation use evidence effectively in decisionmaking and course correction.

Factors influencing evidence use

- Decision makers had clear evidence from multiple impact evaluations across multiple contexts over more than 10 years.
- The Indian government's focus shifted from education access to learning outcomes, and there was a concurrent shift in global education policy discourse.
- The evaluation evidence supported an effective, low-cost, government-led model that fit political priorities.
- J-PAL and Pratham had sustained engagement with governments.
- The partners translated and tailored the evidence to ensure it was useful, relevant and accessible to diverse audiences.
- Both partners have international reputations and are highly respected and have leveraged each other's networks to promote TARL in India and Africa.
- TARL has been the basis for J-PAL and Pratham building a strong, long-term collaboration to improve learning outcomes.

For more than a decade, Pratham and the Abdul Latif Jameel Poverty Action Lab (J-PAL), a leading research organisation specialising in randomised impact evaluations, have contributed to the recognition of this methodology as an evidence-informed approach for improving children's learning outcomes.

This evidence use brief tells the story of how the strong partnership between J-PAL and Pratham, along with other factors, contributed to how impact evaluation evidence informed the testing and scaleup of a government-led TARL model in India and its expansion to several countries in Africa. It provides instructive reminders: (1) evidence of effectiveness does not automatically lead to use; (2) evidence use is not linear or driven by evidence alone; and (3) multiple studies that build from one to the other and are implemented in multiple settings facilitate decisions to adopt, pilot or scale up.

J-PAL and Pratham used the evaluation evidence to identify two types of programmes that could be implemented at scale:

- Direct approach. In this model, Pratham staff and local volunteers work directly with children in schools and communities. Their learning camps three to five camps of 10 days each within a 30- to 50-day period focus on intensive activities for providing language and math instruction. Students are grouped according to learning level and taught using level-appropriate materials, interactive activities and games to strengthen their foundational skills. J-PAL has evaluated this direct instructional model several times.
- Government partnership. In this model, government school teachers implement Pratham's teaching–learning approach. They group children by their learning levels and provide instruction for a dedicated amount of time during the school day. Supervisors mentor and monitor teachers to ensure they follow the key elements of the TARL process. This model has been assessed using randomised evaluations and has evolved over a decade.





The importance of the Haryana impact evaluation

The 3ie-supported randomised impact evaluation in Haryana³ is an influential study. With it, the partnership moved from testing the model using volunteers to evaluating an evolved model involving government teachers and monitors in implementing TARL. At the time of the study's baseline, 52 per cent of students in grades 1 to 8 could read a grade 2 text.⁴

The evaluation examined the impact of two interventions aimed at improving learning outcomes in schools in the Mahendragarh and Kurukshetra districts. The first intervention was the government's Continuous System of Comprehensive Evaluation (CCE), which required teachers to regularly evaluate student performance using a variety of techniques, instead of relying on one high-stakes examination at the end of the year.

The second intervention was the Learning Enhancement Programme (LEP), which was based on Pratham's TARL principles. Teachers used a rapid oral test to assign primary school students to one of five groups, according to their learning levels. They taught each group for an hour during the school day with level-appropriate learning activities and materials.

As part of both interventions, the J-PAL–Pratham team revived the school monitoring system that

involved associate block resource coordinators. Until then, these personnel had been mainly collecting information on physical inputs in schools, and were not engaged in teaching–learning activities. Pratham trained the coordinators to use the TARL methods and materials, and they were involved in daily practice classes for 15 to 20 days.

Having these coordinators in place was an important element in the intervention, as they trained and mentored the teachers. In addition, J-PAL trained them to use tools for monitoring teaching practices and school needs. J-PAL and Pratham also organised monthly review meetings involving block and district supervisors and field monitors to track progress and resolve implementation issues.

The impact evaluation showed that CCE did not have any impact on learning outcomes. However, LEP had a large, positive and statistically significant effect on students' basic Hindi reading and writing abilities. The effect was larger for girls than for boys. Combining LEP and CCE had no significant effect on test scores, relative to LEP alone.

Process monitoring showed that CCE did not lead to any change in teaching practices in terms of implementing any CCE-recommended techniques. Conversely, LEP had high levels of compliance and was well implemented.

How has TARL evidence been used?

Pratham's experiences of working closely with J-PAL teams have complemented the work of its measurement, monitoring and evaluation team and enhanced its use of evidence for decision-making and programme course corrections.

The partners have used evaluation evidence, particularly from the Haryana study, to inform programme design and subsequent scaleups in India. The body of evidence on the model has also helped in evolving this teaching–learning approach and informing pilot projects in Sub-Saharan Africa.

Scale-up in India

- Pratham and JPAL have worked with the governments of Gujarat, Andhra Pradesh and Jharkhand to implement the model in some districts.
- Over the past five years, Pratham has used the approach to work in partnership with the governments of 15 Indian states.

Scale-up in Africa

J-PAL Africa and Pratham have worked together to support organisations and governments across Africa to adapt, pilot and scale up TARL programmes:

- In Zambia, the Ministry of General Education is expanding the 'Catch Up' pilot project to 1,800 schools by 2020. Pratham has provided technical support to a Belgian Flemish organisation, VVOB – education for development, and the government during the pilot process. Along with VVOB, UNICEF and J-PAL Africa, Pratham continues to work directly with the ministry on the scale-up.⁵
- In 2018, the Ministry of National Education of Côte d'Ivoire partnered with Transforming Education in Cocoa Communities, Pratham and J-PAL Africa to adapt and pilot the approach in 50 primary schools.
- Between 2018 and 2019, Nigeria's Borno State government, with support from the UK Department for International Development through UNICEF, Plan International, Pratham and J-PAL Africa, piloted the approach in five Koranic schools and seven formal schools.
- The Botswana Ministry of Basic Education, the NGO Young 1ove and UNICEF are working together to implement a pilot in 50 schools in 2019. The pilot will inform a national scale-up of the approach to all 755 of the country's primary schools.
- Evidence Action, the Japanese International Cooperation Agency and other partners are supporting governments to scale up the model in other African countries.



Why was evidence use more limited in Haryana than elsewhere?

Despite the importance and influence of the Haryana study findings, the state government did not use the study findings in its decision-making. The government's response offers important lessons on stakeholder engagement, buy-in, the political context and timing.

J-PAL engaged with state government officials throughout the impact evaluation. The evaluation results were well received by senior state government officials, who expressed interest in scaling up LEP with J-PAL and Pratham. In the end, however, the government did not approach them to take up the findings and scale up the project. The principal secretary for education, who was the evaluation's main champion, was transferred to a national ministry soon after the study ended. Several officials who were 'internal champions' and who played an integral role in programme implementation were also transferred to new positions in the months following the study.

The state government's education strategy also underwent a radical shift during this time. The government chose to go with a private consulting firm to restructure the entire education department and implement a new teaching approach to improve learning outcomes. The new approach incorporated some of the elements of Pratham's LEP, including remedial education, regrouping children based on their learning levels, building competencies rather than completing the curriculum and involving government's resource coordinators for monitoring and mentoring support. However, the consulting firm worked with another local NGO to develop a different set of programme materials and a teacher training module. They implemented this new method in 9,000 schools in Harvana.

'The Haryana government went in for a state-level strategy that focussed on reforming the entire education sector. They drew on whatever they had learned from various projects, including the impact evaluation in Haryana', said Devyani Pershad, head of programme management at Pratham.

From Pratham and J-PAL's perspective, using only the broad principles of TARL does not imply an adoption of their teaching–learning approach, as none of Pratham's materials and learning activities or implementation methodology were used.

Although there is disappointment that LEP was not scaled up in Haryana, there is also acceptance of the political reality: a partnership with government may not be sustainable if champions leave or if buy-in from decision makers at different levels in the administration is insufficient.

For Rukmini Banerji, CEO of Pratham, there was a key lesson: 'You need to have top to bottom government alignment to really see big change that is durable'.

Although take-up of the evaluation evidence was limited in Haryana, it was a consideration for other governments when they decided to scale up the model. However, this example highlights that high-quality, policy-relevant evidence on its own is insufficient to drive major policy or programmatic changes. A complex interplay of factors usually influences decision-making.



Timely evidence provided solutions

The impact evaluations were timely. They came when the Indian government's attention had been shifting from education access to learning outcomes. There was a growing realisation that despite significant strides in building school infrastructure and boosting enrolment, a big gap in learning remained.

The interest in improving children's foundational skills in Africa also highlights increasing governmental focus on improving children's learning outcomes. 'The gap in learning has been a concern for a while', Banerji said. 'Reading and doing basic arithmetic are very fundamental skills – without that you can't move ahead'.

According to Pratham staff, the government is also genuinely interested in understanding the best teaching practices for improving learning outcomes. 'There is a lot more sharing happening between Indian states and the central government about what works to improve learning outcomes. There is definitely a change in the environment now, compared to what it was earlier', Pershad said.

Evidence demonstrated that TARL was effective, low cost and feasible

J-PAL and Pratham have been committed to finding answers to the 'what works to improve learning in India' question for more a decade. Pratham has been using experimental evaluations to improve the effectiveness and durability of its approach and to maximise impact. They were also looking for a method that would not be resource intensive, would keep their costs down and would work at scale. They were interested in finding effective approaches that could be implemented in existing school systems. Impact evaluation evidence has played a key role in discussions about scaling up TARL with government, donors and other partners. For Pratham in particular, the fact that the impact evaluations had been carried out by an external organisation has added to the credibility of the evidence.

'When we have had conversations with state governments, the fact that we had evidence to show that this kind of an approach works has been very useful. Evaluation evidence has also been very useful for securing funding from donors for our scale-up work. However robust our internal measurement systems might be, it is not the same as having a randomised controlled trial done by an external organisation to evaluate the programme', Pershad said.

For both organisations, the evidence from the five impact evaluations in India has helped demonstrate that the model is effective in different settings with varied administrative and implementation systems.

Lessons from the smaller proof of concept studies informed the design of subsequent impact evaluations of government-implemented, largescale versions of the programme, such as the one in Haryana. Showcasing the work that has gone into arriving at scalable models has helped in making the case for a 'pilot and then scale up' approach.

Rishi Rajvanshi, who headed the implementation team in Haryana (and is a former head of Pratham's work in Rajasthan) said, 'Government officials find it reassuring to hear that this programme has been implemented with the government in Haryana.Foundations and donors also categorically ask you for evidence of working with the government'. The impact evaluation evidence from Haryana showed that a cost-effective, teacher-led model could work. It is also a simple model, in which teachers receive brief training, followed by ongoing support and mentorship.

'It's a cost-effective model and it's very easily scalable. I think that is the selling point for the model, and the Haryana study was the tipping point, the reason we are able to make this case to other governments,' said Shobhini Mukerji, executive director of J-PAL South Asia and researcher on the Haryana study team.

Governments have also shown interest in the model because it may be sustainable by virtue of being government led. According to Pendem Rambabu, head of Pratham in Andhra Pradesh, 'Governments don't want to work with one organisation for too long.... They have adopted the TARL programme also because it costs only Rs 300–400 per annum per child; it's very cheap'.

Evidence provided pointers for programme improvements and scale-up

Pratham has been working jointly with J-PAL to determine research questions that could generate useful answers for running and scaling up programmes. The process monitoring component of the Haryana impact evaluation was crucial for assessing whether the programme could be implemented effectively at scale.

'Pratham provided a lot of inputs on key process monitoring indicators, such as what the ABRCs [resource coordinators] would go check for in the classroom, particularly in terms of teaching practices', said Harini Kannan, senior research manager at J-PAL South Asia.

The impact evaluation evidence has regularly informed programme design modifications over the years. According to Banerji, some of the process data collected as part of the Haryana impact evaluation, such as the use of TARL materials and teaching practices, may not have made it into academic papers, but they have helped Pratham refine its implementation plan.

The implementation evidence also offered clear pointers for concrete measures governments needed to undertake successful scale-ups.

'The rich process information from the Haryana study showed us how it could be scalable for government', said Gautam Patel, senior policy manager at J-PAL South Asia.

In Haryana, the training of resource coordinators as monitoring agents and as mentors to teachers was an important intervention component that contributed to the model's success. State governments have readily taken up this idea of strengthening existing monitoring systems. Similarly, governments are adopting the monthly review meetings with local government officials to iron out implementation issues, which was another key aspect of the Haryana programme.

Strengthening existing government systems to scale up

The appeal of a low-cost, government-led model that strengthens the existing supervision and teaching system has been an important factor in scale-up decisions. Wherever J-PAL and Pratham have worked with governments to roll out TARL, certain 'non-negotiable programme elements' have been replicated, as they were shown to be crucial to the success of the programme in Haryana. For instance, governments must either build or train a cadre of supervisors to mentor teachers and monitor programme implementation. Supervisor and teacher training requires mandatory practice classes in which the approach is demonstrated in the classroom, as was done in Harvana. Government entities are also trained to assess learning outcomes.





The partnership has been committed to sustained engagement with governments

Both Pratham and J-PAL have dedicated time and resources for sustained engagement with governments to implement scale-up projects in different settings.

J-PAL's policy team spends a substantial amount of time engaging with government officials. It also helps that the teams include policy specialists with sufficient insider knowledge of the workings and priorities of specific state governments. For instance, Gautam Patel, lead on the scale-up work in Gujarat, has worked with the state government for four years.

It is reassuring to policymakers that there is a clear plan for scaling up the model and eventually handing it over to the government. The organisations also recognise the importance of champions at different levels within the government. 'You need someone senior to convene meetings, but you also need other types of champions who will help push the paper', Patel said.

J-PAL teams have also been engaging with governments to see how the lessons from scale-up projects could be transferred to other countries. Importantly, J-PAL's experience and network of regional offices facilitated efforts to grow demand for the approach in Sub-Saharan Africa.

Over the last five years, J-PAL Africa has investigated the demand, need and opportunity for the model. J-PAL Africa and Pratham have been working with governments and other local partners in several countries to explore how to customise and implement the approach through government systems in different African settings. Pratham and J-PAL have now entered into a formal partnership, TARL Africa, to jointly grow and support this model in the continent.

The partners used an integrated communication approach

The partners have a multipronged strategy for translating and communicating the evidence from their studies to targeted audiences.

Numerous meetings and customised presentations are integral to their intensive communication with policymakers and donors. J-PAL prepares an evidence index for the major development sectors where multiple studies have been carried out.

This index provides key takeaways from a curated list of studies that shows what works and what does not in a sector. The policy team then customises the index to make it more salient to policymakers in a given context and better aligned with the policy priorities of specific state governments. The team then customises its pitch to address state governments' policy priorities. They are careful to include evidence of positive, negative and null effects. These efforts have contributed to making evidence relevant, useful and easy to digest for decision makers.

The J-PAL and Pratham teams have played important roles in communicating study findings and recommendations. They have presented at major conferences and workshops and co-authored blog posts and media features that have contributed to the wide dissemination of study results. They have also jointly published several academic papers to document what they have learned.^{6,7}

More recently, in response to increasing demands for more information and resources on TARL, J-PAL Africa created a dedicated website that is accessible to policymakers and programme managers.⁸ It offers detailed guidance to programme implementers on capacity development, assessment tools for foundational skills, classroom methodology, and monitoring and measurement. Pratham and J-PAL have also created learning and sharing opportunities for organisations and governments interested in implementing the model, with the goal of bringing together an African community of practice.

The successful partnership is defined by respect and commitment to learning

J-PAL and Pratham have been partners for more than a decade. Banerji believes it has been successful because of mutual respect. They also have a shared interest in using data to measure learning outcomes. Since 2005, Pratham has been publishing the Annual Status of Education Report – a survey that provides annual estimates of children's schooling status and learning levels in rural India.

'There has to be openness and equality between partners, otherwise it's not worth it', Banerji said. 'We are not people to whom you can come and say, "I have a question, you implement and I'll measure". We are also not the kind of organisation that works on an evaluation for the sake of it, because a donor has asked for it. For a partnership to be productive and a learning experience, the desire to learn has to be on both sides'. J-PAL also credits the successful partnership to a good working relationship and a willingness to learn from failure. According to Banerjee and colleagues, 'The good working relationship of Pratham with J-PAL made it conducive to conduct the sequence of RCTs [randomised controlled trials] over time. Each experiment built on past successes as well as failures, with modifications to both the design of the intervention and the manner of implementation within and across experiments. In the end, two successful scalable interventions have been shown to be effective, but these interventions would not have been identified without learning from the failures along the way'.⁹

For Pratham, the partnership with J-PAL has added an important dimension to its measurement, monitoring and evaluation work.

For the projects in which Pratham leads the scale-up work, its in-house team carries out assessments of foundational skills. Similarly, the partnership with Pratham has helped J-PAL engage more deeply with implementation- and practitioner-related research questions.

Over the years, the partnership has built J-PAL's and Pratham's reputations in education research and innovative programming. Their success with several governments continues to help them make a persuasive case for scaling up the model in more Indian states and countries.



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What have we learned about evidence use?

This example highlights how political economy can limit as well as enhance evidence use in governments' decisions to scale up. The impact evaluation evidence on TARL programmes shows that it is an effective, low-cost model for improving learning outcomes. The evidence is policy relevant and timely because governments are increasingly interested in finding solutions to address the learning crisis.

The Haryana impact evaluation demonstrated that a government-led model was feasible. Yet, the lack of government buy-in and interest derailed J-PAL and Pratham's scale-up plans in the state.

However, some crucial lessons learned in Haryana have informed changes in the way the organisations promote this approach. Their strategic and sustained engagement with other Indian state governments and other country governments has driven the success of several scale-up projects. What is paramount is that J-PAL and Pratham have worked on fostering relationships with champions at different levels of government and on developing widespread project ownership at multiple implementation and decision-making levels. They have actively explored opportunities to work with governments that are committed to improving learning outcomes. They have worked with them to jointly develop clear implementation plans and provide ongoing support.

Both organisations have spent substantial time and resources in translating the evidence, information and resources into multiple formats for different audiences. These efforts have helped make the evidence useful and accessible to policymakers, programme managers and other decision makers.

The long-term partnership between J-PAL and Pratham is another factor in this successful scale-up story. Both organisations are committed to working together not only to find what works, but also to learn together from failure and find solutions.

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3ie's approach to promoting engagement and evidence use

3ie uses an evidence-informed theory of change for promoting evidence use, adapted to reflect our being a funder. We rely on our grantee researchers to be the primary actors in terms of engagement and promoting evidence use during the life of a study. We require early and ongoing engagement between researchers and decision makers, programme implementers and programme participants using an engagement and uptake plan that has a dedicated budget.

We also stress the importance of politically aware context analysis, stakeholder mapping and tailoring communication for given audiences. In parallel, we monitor for evidence use instances and impact, using specialised reporting that we augment with interviews. We use theory-based contribution tracing to measure and report them to wider audiences.

Since 2017, 3ie has been publishing examples of evidence uptake and use in the 3ie evidence use brief series. Each brief showcases a 3ie-funded evaluation or systematic review and analyses how context, actors and other mechanisms contributed to or limited the use of evidence in policies and programmes.

Endnotes

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About this brief

This brief examines the factors that have contributed to the uptake and use of evidence from the 3ie-supported impact evaluation of TARL in Haryana. It grew out of discussions with J-PAL South Asia about the fact that neither they nor 3ie understood why the Haryana government did not adopt this approach, since the evidence from the Haryana study was so influential in supporting uptake elsewhere in India and beyond. The authors drew on extensive engagement and evidence use monitoring data generated from the Haryana study. They conducted 10 semi-structured interviews with

About the impact evaluation

The 3ie-supported impact evaluation in Haryana by Duflo and colleagues (2015) was a randomised evaluation that also had a process monitoring component.

key research, programme and government stakeholders in 2018, reviewed online academic and feature articles about the model. The authors used RAPID+10,11 to guide conceptualisation and framework analysis to understand the data.

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