



Commentary

A twenty-year partnership of practice and research: The Nobel laureates and Pratham in India



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ABSTRACT

Pioneered by Pratham, “teaching at the right level” (TaRL) is a well-known and effective approach for improving basic reading and arithmetic capabilities of primary school children. This method is particularly appropriate for children who have been in school for a few years but for various reasons have not acquired foundational skills. The evolution of this approach has occurred over a period of almost two decades. The story of how this approach was developed provides a fascinating case of how innovative interventions and rigorous evidence can go hand in hand. Today TaRL is one of the most effective ways to improve children’s learning. It has been used widely in India and now increasingly is being tried in sub-Saharan Africa. This contribution outlines main milestones of this joint journey and discusses what made this evolution effective.

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School enrolment in India is now nearly universal for the age group of 6–14 years. This is an impressive achievement given the size and diversity of the country. Despite the increase in schooling levels, however, children’s learning remains a challenge. Two facts characterize school education in India. First, learning levels, even for foundational skills like reading and arithmetic, are low for a very large proportion of children. Evidence shows that despite being in school for several years, many children do not acquire essential foundational skills at the right time. Second, learning trajectories are flat. Without a strong foundation to build on, more and more children get “left behind” as their cohort proceeds to higher grades. Thus, it is very common to find children in fifth grade who are unable to read simple text or do basic arithmetic operations.¹

Pratham is an Indian non-profit organization. From its inception almost twenty-five years ago, Pratham’s mission has been to work towards the goal of “every child in school and learning well”. Since school enrolment had been increasing, Pratham’s efforts in the last two decades have largely focussed on finding an effective, frugal, and scalable solution to the “learning crisis.” Continuously experimenting, innovating, and learning, Pratham has worked consistently with children, in schools and in communities. On the instructional side, the aim has been to develop an approach that can help children acquire basic skills quickly and durably. As an organization Pratham has relied on systematic evidence and field

experience for making decisions. Pratham’s own internal measurement systems combined with external impact evaluations have played a major role in the evolution of the approach which is today called “teaching-at-the-right-level” (TaRL). For almost two decades, Banerjee, Duflo, and their colleagues have accompanied Pratham on this journey that has focussed on how to help children in Grades 3, 4 and 5 “catch up” and have a meaningful chance at completing primary school adequately.

In the late 1990s, an in-school remedial education effort was being carried out by Pratham in the municipal primary schools in Mumbai. The program was called the “Balsakhi” program. A local community volunteer – balsakhi (meaning child’s friend) would work with children in Grades 3 and 4 who were lagging behind academically. To build basic literacy and numeracy skills, children who needed help spent time with the balsakhi in a “pull out” class during school hours. Pratham’s collaboration with Banerjee and Duflo started around this time.² They proposed a randomized control trial to understand the efficacy of the balsakhi model. Conducted between 2001 and 2004, the study showed that children made substantial progress if instructional focus was on basic literacy, even if the volunteer was less educated and less trained.³ This study is perhaps the first published on RCT on primary education in India.⁴

² At the time, JPAL had not yet come into existence.

³ Banerjee, Abhijit, Shawn Cole, Esther Duflo, and Leigh Lindon. 2007. “Remedying Education: Evidence from Randomized Experiments in India.” *The Quarterly Journal of Economics* 122(3): 1235–1264.

⁴ For a detailed account see Banerji, Rukmini. 2019. “Banerjee and Duflo’s Journey with Pratham”. *Ideas4India*. November 13.

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¹ See ASER reports from 2005 to 2018. www.asercentre.org

As the Balsakhi program was being evaluated, Pratham's teaching-learning methodology began to undergo changes. The goal of the effort became more focused and shifted to ensuring that children can read fluently and be able to solve simple arithmetic problems. However, it would take another few years before this improved methodology was evaluated and found to be even more effective in a short duration and at a low cost with more predictable end results.

In the meanwhile, as Pratham began to spread in rural India, the JPAL team led by Banerjee and Duflo and Pratham teams together designed an intervention and an RCT evaluation based on two major questions: first, was information enough to fuel action in the community to improve children's learning? If so what kind of information? Second, do people need to see a convincing solution before they are willing to take up action themselves? The answer to the first question was an unequivocal "No". Participation of villagers in discussions, debates and information gathering was not enough. If in addition volunteers came forward to teach and were trained, children's learning improved.

In 2006, Pratham's nationwide survey – Annual Status of Education Report ASER- provided national-level evidence that weaknesses in foundational skills were a nationwide problem, irrespective of perceived social, educational or economic status of different states. Armed with this annually available data and an effective way to tackle the issue, Pratham launched its Read India program.

Partnerships with state governments were essential if a reading India was to become a reality. Pratham teams began to tackle the challenges of persuading government school systems to use the Pratham method. Ongoing conversations with Banerjee and Duflo led to the next RCT. A set of school and community activities were conducted by Pratham and the state government in two locations (Bihar and Uttarkhand). Bihar government conducted "camps" in the summer holidays of 2008 in which teachers put grade-level textbooks aside and worked for one month exclusively on building the basic reading and arithmetic skills of students in Grades 3 to 5. Three major findings emerged from this RCT. First, the one-month summer camp showed significant learning gains for children and proved that even short duration bursts of activity can be effective for building foundational skills for children of this age. Second, the learning gains from the one-month summer camp were larger than what the children acquired during the entire school year. This underlined the fact that teaching the curriculum, even if done well, does not lead to significant gains if what one teaches is far above the current level of the child. Third, tracking children from this study showed that those whose learning levels had jumped up during the summer camp continued to maintain their lead over those in the control group for at least two years.

The next opportunity for an RCT on the next iteration of Pratham's approach implemented in partnership with government schools came up in the state of Haryana in 2012–2013. One hour in the school day was put aside for improving reading for Grades

3 to 5 in government primary schools. In an important addition to the existing method, the supervisory cadre in the system were first trained and then encouraged to conduct their own daily "practice" classes for 15–20 days before they in turn trained and provided on-site support to their teachers. The research showed that schools using the Pratham method "had a large and statistically significant effect on students' reading scores." These learnings built on what had been learned in the previous RCT; teachers who used the teaching-at-the-right level method during school hours were able to help children make substantial gains in basic reading especially when supported by their supervisors – the "leaders of practice". The Haryana intervention-impact evaluation further strengthened what was becoming known as the TaRL approach.⁵

A decade of significant results from a series of RCTs had established TaRL as one of the most promising solutions for the "learning crisis". The success of the summer camps led Pratham to develop the "learning camp" model of direct delivery by paid staff. From 2013 onwards, in "learning camps", children are grouped by their current learning level (rather than by grade); each group does activities appropriate for their level. As soon as children progress, they move to the next group at the higher level. Outcome measurements from "learning camps" showed that several ten-day camps, with 2–3 h of TaRL activities daily, helped most children reach a satisfactory level of basic reading and numeracy.

A final RCT in this series with JPAL studied the impact of the "learning camp" on children's foundational learning. Learning from the previous studies and adding in new elements from recent experiments, Pratham staff ran "learning camps" in government schools. Learning levels in the camp schools went from being among the lowest achievement levels in India to the learning level of the third highest achieving state in the country (Haryana) in 40–50 days.⁶ In more technical terms, the learning levels improved by 0.70 standard deviations with the learning camp whereas the improvement was around 0.15 standard deviations in most previous RCTs.⁷ This work proved that solving the learning crisis was possible. It could be done in a short period of time using very few extra resources and in a predictable and long lasting way.

This is an example of how a working partnership between researchers committed to changes at the ground level and practitioners committed to scientific methods to evolve effective solutions can be productive for a greater good. The J-PAL team has actively spread this culture of active collaboration in different parts of the world. Today TaRL is used not only in India but is being explored in several countries of sub-Saharan Africa. The Nobel is therefore well deserved, among other things, for creating a culture of collaboration and for creating a powerful evidence-based movement for a real change.

Acknowledgements

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⁵ Banerjee, Abhijit, Rukmini Banerji, James Berry, Esther Duflo, Harini Kannan, Shobhini Mukerji, Marc Shotland, and Michael Walton. 2016. "Mainstreaming an Effective Intervention: Evidence from Randomized Evaluations of "Teaching at the Right Level" in India." *NBER Working Paper* No. 22746. October.

⁶ For more academic pieces see Banerjee, Abhijit, Rukmini Banerji, James Berry, Esther Duflo, Harini Kannan, Shobhini Mukerji, Marc Shotland, and Michael Walton. 2017. "From Proof of Concept to Scalable Policies: Challenges and Solutions, with an Application." *Journal of Economic Perspectives* 31 (4): 73–102.

⁷ See <https://www.povertyactionlab.org/evaluation/improving-learning-outcomes-through-government-school-system-india>