Teaching at the Right Level to improve learning

Reorienting instruction has improved learning opportunities for over 60 million students in India and Africa.

TaRL activities taking place in a classroom in Gujarat, India. Photo: Luke Strathmann | J-PAL

Teaching at the right level (TaRL) is an approach developed by the Indian NGO Pratham that aims to build foundational skills in math and reading for all children before exiting primary school. At the instructional level, the approach works by assessing children’s learning levels using a simple tool; grouping children based on learning levels rather than age or grade; using a range of engaging teaching and learning activities; and focusing on foundational skills rather than solely on the curriculum; and tracking children’s progress. When TaRL is implemented within government systems, Pratham helps ensure that teachers receive strong academic support through mentors who are part of the government system. Ongoing, onsite monitoring and support, as well as reviews at different levels of the school system, all contribute to the effectiveness of the program. A series of randomized evaluations by J-PAL affiliated researchers over the past fifteen years have shown that TaRL consistently improves learning outcomes when implemented well and has led to some of the largest learning gains among rigorously evaluated education programs. The iterative process of innovation and evaluation in collaboration with J-PAL has helped Pratham to refine and adapt TaRL over time, which has now reached millions of children in India and Africa.

The Problem: Children around the world are in school but not learning.

Most low- and middle-income countries have dramatically increased access to schooling in recent years. However, record high enrolment rates have often not translated into improvements in learning for all students. For example, in rural India, enrollment rates in primary schools were over 96 percent in 2018, but only half of children in grade five could read a grade two level text and 52 percent could correctly do a numerical two-digit subtraction problem with borrowing—a skill that children are expected to have by the end of grade two. Similarly low learning levels exist in Sub-Saharan Africa: in 2015, only 40 percent of Grade five students in Uganda could read a grade two level text in the local language.

School systems in India and other countries are not always designed to address the evolving needs of students, many of whom may be the first in their families to attend school. In practice, many national curricula target only the top students and fail to provide support to the majority of children who fall behind. Factors at school and at home contribute to this problem.

School-level factors:

- Schools are usually organized by age and grade, with children progressing into the next grade regardless of learning levels.
- Teachers are expected to complete the prescribed curriculum, which becomes more and more difficult each year.
- There is often no system in place to assess children's progress or foundational skills in early years in primary school.
- School systems often do not provide learning support to children who fall behind.

At-home factors:

- Many children come from families where parents have had little schooling and cannot provide learning support even though their aspirations for children's educational attainment can be high.
- Children have not had any preschool exposure.

The Research: Pratham's Teaching at the Right Level has consistently produced large and cost-effective gains in learning outcomes.

Pratham, one of India's largest education NGOs, developed Teaching at the Right Level (TaRL) in the early 2000s to provide a solution to this particular problem. At the instructional level, children are assessed using a simple tool and then grouped according to their learning level rather than their age or grade. Instructors teach each group starting from what children already know. This approach works best with children in grade three or older because they have some experience in school and are prepared for the activities. For each group, there are activities and simple materials designed for helping that group move ahead. There are activities that children do in big groups, small groups, and individually. As a combined result of these elements, children can progress quickly to the next group. Throughout the entire process, teachers assess their pupils' progress through ongoing, simple measurement of their ability to read and do basic arithmetic. TaRL classes break free of the "chalk and talk" practices commonly found in primary school classrooms across the world by using engaging, fun, and creative activities focused on building foundational reading and mathematics skills.

Since 2001, J-PAL affiliated researchers—Abhijit Banerjee (MIT), James Berry (University of Delaware), Shawn Cole (Harvard Business School), Esther Duflo (MIT), Leigh Linden (University of Texas Austin)—and colleagues—Rukmini Banerji, Rachel Glennerster, Harini Kannan, Stuti Khemani, Shobhini Mukherji, Marc Shotland, and Michael Walton—have partnered with Pratham to evaluate the TaRL approach for scale. This process began with early proof of concept evaluations that showed the effectiveness of TaRL and continued with subsequent iterations to understand the effectiveness of different delivery models when implemented by village volunteers, Pratham instructors, and government school-teachers. Six randomized evaluations in seven states of India show that the TaRL approach is consistently effective when implemented systematically and has led to some of the largest effect sizes rigorously measured in the education literature. For example, the TaRL Learning Camps in Uttar Pradesh doubled the number of children who could read a paragraph or story. The long-term partnership between J-PAL and Pratham demonstrates how findings from an evaluation can provide important inputs for continuously evolving the program which in turn is rigorously evaluated.

One key learning from decades of research is that TaRL works best as a holistic approach that reorients education systems towards focusing on learning outcomes, especially for foundational learning. The series of evaluations in India have shown that simply training teachers in the approach or providing the teaching materials alone does not improve learning outcomes. However, when teachers were guided by clear goals, helped to understand data on children's learning, supported by strong mentors who provided ongoing on-site help, and brought together to share learnings and challenges, learning outcomes improved. Moreover, the research suggests the importance of governments collecting data and using these data in regular review meetings.

Pratham's TaRL approach has inspired a broader set of programs that use tailored instruction to promote learning. A growing body of evidence suggests that these types of programs that align instruction to students' current learning levels are among the most effective and cost-effective ways to improve learning. For more information on this research, please see J-PAL's policy insight on tailored instruction.

From Research to Action: Pratham's TaRL approach has scaled throughout India and Africa to reach over 60 million students.

While several other delivery models had been tried in the past, starting in 2012, Pratham began to focus on two implementation models:

(1) Learning camp model: Pratham instructors work directly with children in "Learning Camps." Learning Camps are intensive periods of instructional activity that usually last ten days.
Children (generally in grades 3 to 5) are re-grouped according to learning level rather than age or grade for two to three hours per day. Three to five camps are done through the year for a total of 30 to 50 instructional days, often with a gap of roughly ten days between each camp. When they are not in a Learning Camp, children return to their regular grade classes. Learning Camps are carried out during the school day with the permission of local authorities.

(2) Government partnership model: Government teachers are trained and supported to implement TaRL in their schools. In these models, teachers re-group children in grades 3 to 5 based on learning level for one or two hours per day to focus on basic skills. Usually the program is led by mentors or “leaders of practice” who are part of the government system but have carried out practice classes to implement and experience the TaRL approach first-hand. The leaders of practice then train teachers and also provide ongoing, onsite support. Drawing on learning from randomized evaluations in Haryana and Bihar, Pratham helps ensure that teachers receive strong ongoing mentorship support and that monitoring and review systems are integrated into existing educational systems.

Pratham’s efforts to implement these two models at scale, strategically support governments aiming to improve learning, and continuously incorporate learnings from rigorous research have led to the implementation of TaRL programs in many states in India.

Drawing on the success of the TaRL approach in India, governments and non-governmental organizations in Sub-Saharan Africa are adapting and implementing TaRL programs in several countries with technical support from Pratham and J-PAL. For example, the Zambian government now implements the program in 1,100 schools and plans to scale to 1,800 schools by 2020. Governments in Côte d’Ivoire and Nigeria have also adapted and piloted TaRL in their contexts. Other organizations are working to support governments to scale TaRL in countries across the African continent. For more information on TaRL in Sub-Saharan Africa, please visit the TaRL Africa website.

References


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