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How Pratham Learns while Scaling

A case of adaptive design and evaluation

Jossie Fahsbender, Siddhant Gokhale and Michael Walton

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Abstract

Developing scalable innovations is a central challenge in development. Organizations that succeed in scaling often prioritize measurement, learning, and evaluation, but how this is done is poorly understood. This paper explores the case of Pratham, one of the largest NGOs in primary education and an exceptional learning organization. While Pratham is renowned for its randomized control trial sequence with J-PAL, we underscore this is just one aspect of a wider array of learning activities. These include an iterative process to continuously refine and protocolize solutions as they scale, the use of on-field qualitative insights and quantitative tracking, open feedback channels between the field, state, and central offices, information exchange among content and evaluation teams, and a nationwide assessment of learning levels (ASER). The RCTs were effective because they were embedded within this broader learning process and culture. Pratham learns at three levels: learning to improve children's basic skills, learning as an organization about what does and doesn't work, and fostering learning by others in the system. Its learning capacity is rooted in deep-seated values and a culture of openness, trust, problem-solving, and the freedom to experiment and learn from failure, inculcated and nurtured by its leadership. Throughout, we use the prism of an Adaptive Evaluation to provide a systematic framework for mirroring and understanding Pratham's organic learning processes (as affirmed by its own leadership). Pratham actively engages with the three main pillars of an Adaptive Evaluation, involving understanding systems, theorizing how to effect change, and iterating its designs. While Pratham's culture will often not be transferable, the systematic analysis of how Pratham learns can provide a framework for other organizations aspiring to replicate Pratham's success as a learning institution.

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[1] This case was written by Imago Global Grassroots. Imago worked with Pratham's leadership team of approximately 50 staff on organizational issues for two years, from 2018 to 2020. We would like to thank Rukmini Banerji, Madhav Chavan, Karthik Menon, Devyani Pershad, Siddhesh Mhatre, Faiyaz Ahmed, Samyukta Subramanian, Smitin Brid, Deepali Somra, Manushi Yadav, Neeraj Trivedi, and Shubhendu Chakravorty, for supporting and encouraging our work. Special thanks to Varsha Hari Prasad, Somya Rastogi, Ruchi Chaudhary, Diya Shilin, and Sarthak Goyal at the Delhi Office; Nuzhat Malik, Amritlal Yadav, Manish Tiwari and their team at the Uttar Pradesh Office; and Md Naiyer Alam, Dinanath Sinha, Shakti Kumari, Manoj Kumar, Nikalesh Kumar, Rajesh Pandey and their team at the Bihar Office. We thank all for giving us interviews and access to Pratham. Special thank you to Samriddhi Vij, Gurveen Kaur, Saumya Sharma, and Ekta Goel for guiding us in our field visits and connecting us to wonderful people across Pratham. We also thank ex-Pratham members who talked about their experience in preparation for this case study. These include Varun Gupta, Mihika Sharma, Pranav Bhargava, and Nikhil Swaminathan. Finally, huge thanks to Sarah Nzau, who helped us systematize the interviews to make sure that we captured everything accurately. This would not be possible without all this valuable support.

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1. Introduction

> *The 'appropriate' methodology for meeting acceptable standards of rigorous evidence is costly, and the skills for carrying out such studies often lie with researchers in western countries. Do both of those conditions constrain the scale at which evidence can be generated? Are alternative methods being developed that can study a system at scale and provide key inputs for improvement? … We have benefited hugely from a series of randomized controlled trials done in partnership with J-PAL over two decades… These studies [however] were layered onto a long-run effort for improving basic learning outcomes that continuously tweaked and adapted different features of the approach and implemented it in many different conditions and contexts. Instead of being seen as a one-off research study… research and implementation… together represent an ongoing endeavor to improve children's futures. Perhaps that is the missing element for strengthening scaling-up initiatives.*
>
> Rukmini Banerji, Chief Executive Officer of Pratham.
> Comments on Scaling solutions in education (Lee et al., 2022)

Pratham is a non-profit committed to solving India's huge children's learning problems. It is a remarkable organization that has grown since its creation in 1995 in Mumbai to one of the largest NGOs, working in virtually all states of India. Pratham has kept to a core vision of "every child in school and learning well." With this vision, it has always been concerned with making a difference at scale, whether the scale is for the whole city of Mumbai where Pratham started or the whole of India, though typically at the level of an Indian state, most of which are the size of large countries. In partnership with other organizations and governments, it is also increasingly working in or with other countries.

Pratham was able to achieve scale because, at its core, its original vision includes "every" child and because it is a learning organization. Learning manifests itself in at least three ways. First, it is, of course, focused on the *learning of skills* by young people – especially the foundational skills of young children, but all the way to young entrants to the workplace learning practical skills. Second, it is always *learning as an organization*, innovating, exploring, adapting, protocolizing, and sharing what makes a difference in real contexts. Third, it always seeks to foster *learning by others* in the system–whether that is learning by school teachers, principals, and frontline bureaucrats, learning by parents and communities, or learning by the broader public, including politicians, high-level bureaucrats, and the international development community. In all these cases, it is focused on learning about two questions: What's the problem? and What can be done to solve the problem?

Organic learning is integral to Pratham's success, driven by continuous information exchange and deeply rooted values of problem-solving, open listening, and data-driven decisions. This commitment to learning led them to partner with J-PAL for a series of Randomized Control Trials (RCTs) since 2001. These RCTs were highlighted when Abhijit Banerjee, Esther Duflo, and Michael Kremer won the 2019 Nobel Prize in Economics for their groundbreaking RCT

work in development challenges. Indeed, in the academic world of economics, Pratham became well-known because of these RCTs. However, while RCTs play a role in Pratham's learning activities, their deeper insights stem from on-field experiences and continuous feedback loops across all teams, from frontline to central offices. Rukmini Banerji's comment at the start of the paper highlights Pratham's iterative process of adaptation and collaboration. It prompts us to search for alternate methods to improve, adapt, and scale solutions for systemic impact.

This paper seeks to respond to Rukmini Banerji's comment at the beginning of this section. It does so in two ways: first, offering a description of what Pratham does to learn, and second, articulating an "alternative method" for studying a system and designing and evaluating a scaling process–an approach we call Adaptive Evaluation. Recent papers have provided rich accounts of Pratham's history (Banerji & Venkatachalam, 2023; Maruyama, 2023); this paper's contribution is to examine this through this methodological approach.

The Adaptive Evaluation approach is not inconsistent with, or against, RCTs, but is rather about the "long-run effort for improving basic learning," in Rukmini Banerji's words. The approach was developed in Imago Global Grassroots to support innovation and scaling processes, using a variety of techniques from various disciplines, including systems thinking, design thinking, economics, and other social sciences. It builds on developmental and realist evaluation traditions. Pratham did not explicitly follow an Adaptive Evaluation methodology but built its learning mechanisms for improvement and system diagnoses organically, continually refining them over time, including in the incorporation of a series of RCTs into their learning approach. We find that their learning, in approach, design, and spirit, is very closely aligned to Adaptive Evaluation principles and was indeed one of the inspirations of the approach. This sentiment has been echoed by Pratham staff and senior leadership, who saw Adaptive Evaluation as an articulation and reflection of their processes.

In exploring what Pratham does, it became clear that we also need to understand how and why it developed such embedded learning practices. We argue that Pratham's practices are profoundly a product of its organizational and human culture. In both the nature and drivers of this culture and the organization's values that underpin it, Pratham is unique. It will rarely be possible to exactly replicate Pratham's culture–especially in an organization with a staff in the thousands. However, Pratham's approach and processes can potentially be taken to other organizations and contexts. We see the Adaptive Evaluation framework as offering a more explicit and systematic set of processes for other organizations that seek to emulate Pratham's success as a learning institution.

These issues go beyond India and beyond education. Developing innovations that can work at scale within existing institutional systems is a central challenge in development across many domains. This is especially so in those "wicked" problems for which there are no simple, technical solutions but are intrinsically "complex." The experience of the past few decades shows vividly (and tragically for generations of children) that learning is one of those wicked problems. Pratham has probably done more than any organization to engage with this complex challenge.

Throughout the paper, we both describe what Pratham does and then mirror this through the prism of the structured approach of Adaptive Evaluation. This involves diagnostic and

engagement processes relating to systems behavior, theory-based analysis of change, and iterations between evaluation and design. These are the three methodological pillars of an Adaptive Evaluation, and we briefly summarize Pratham's engagement in each below.

Pratham is always **engaging with systems**. The challenge of education is partly a question of finding a pedagogy that works. But it is much more a challenge of understanding a complex system, from the households that children are living within, through teachers, principals, the many layers of governmental bureaucracy, educators, and the broader public. This is shaped by rules, mindsets, power relations, information flows, rewards, aspirations, and interests of all the actors and their multiple interactions. Pratham navigates the complex local and state-level school systems and governments by developing a deep understanding of the system in which they are operating, including identifying government priorities, programs, incentives, and influences of key stakeholders. This allows them to explore potential leverage and blockage points and to find the spaces to operate within the system. After gaining enough support and evidence of positive impacts, they are gradually able to effect changes in practices within the system to promote sustainable improvements in children's learning with the support of the local community and government.

Pratham is always **theorizing how to effect change**, often intuitively, increasingly also formally, in theories of change. This theorization is deeply and continually integrated with practices, with an intensive exploration of what does and does not work—again, with a pragmatic blend of formal and informal hypothesis testing—that underpins this continuous process of design modification, standardization, and further adaptation. This theorization is underpinned by an obsession with measurement–especially of learning outcomes, but also of all other parts of the system. This led to the design of practical and effective measurement tools for the learning status of children–notably the ASER (meaning "impact") tool for assessing basic reading and math capabilities. This has a brilliant design that is remarkably easy and low-cost to implement and easily understandable by all—teachers, educators, mothers, village leaders, politicians, and the general public. ASER is fully integrated into intervention design and tracking of outcomes. It is also a core instrument in the Annual Status of Education Report that shares the same acronym of ASER.

The complement to theorizing is continuous testing of those theories. Yet again, Pratham does this in both formal and informal ways, using a variety of quantitative and qualitative methods. RCTs are one part of this story. Indeed Pratham's work with J-PAL is one of the best examples in recent decades of the effective use of RCTs within an organization's long-term exploration of development designs to tackle complex challenges. And yet it is also true that the bulk of Pratham's design exploration, testing, and learning does not involve RCTs. Indeed, RCTs are a poor instrument for the rapid adaptive approaches that are so much part of Pratham's approach. It is rather better to see these are complements: Pratham's strong learning approach actually made it an unusually effective user—and co-designer—of the RCTs. RCTs played a role of sequentially assessing design phases in a more structured fashion, in discrete moments when the more rapid exploration was ready for a more protocolized assessment. They also certainly helped in building the credibility of Pratham's work in the domestic (and international) context.

Finally, Pratham is always **iterating in its designs** and modes of engagement. Throughout its systems work and its testing of theory-based assessments, Pratham is engaged in putting

insights from theory-based assessments into action through repeated cycles of experimentation, testing, reflection, and learning. Pratham has a remarkable ability to continuously try and test, learn from failures, and then try again until they find a way that works and works at scale. They are always looking to improve, and research insights and implementation are done in tandem, as Rukmini's quote eloquently describes.

So how did Pratham create and sustain such an extraordinarily pervasive and embedded learning approach within the organization? Some of the answers lie in terms of practices and structures: for example, the strongly decentralized model of working, the creation of the Measurement, Monitoring, and Evaluation (MME) group, and the practice of interactive working with the field. However, these are best seen through the lens of the more powerful drivers of organizational behavior—the values and organizational culture fostered and sustained by Pratham's leadership (especially the four senior actors of the past twenty-five years) that have been inculcated throughout the organization, from the leadership group down to the frontline workers and volunteers.

The rest of the paper is organized as follows. Section 2 briefly introduces two of Pratham's flagship programs–Teaching at the Right Level and Early Childhood Education–that constitute the primary examples in this paper. Section 3 delves into how Pratham measures what works, with a focus on the ASER instrument. Section 4 discusses how Pratham works with systems, at the level of shifting mindsets of the key actors, the level of villages and households, in the critical area of engaging with public schooling systems, and in moving to other countries. Section 5 unpacks Pratham's approach to theorization, design, and testing, including how RCTs fit into their overall learning approach. In both sections 4 and 5, we also relate Pratham's practices to a more explicit treatment within an Adaptive Evaluation lens. Finally, Section 6 discusses Pratham's values and culture and how these have fostered its learning approach. A conclusion summarizes lessons for other organizations. Throughout, we draw from field notes and observations, in-depth interviews of former and present Pratham staff members, podcasts, videos, and secondary sources on Pratham. We use the voices of people at Pratham, as much as possible, to remain authentic to its being and spirit.

2. **Two Programs: Teaching at the Right Level (TaRL) and Early Childhood Education (ECE)**

Pratham does many things in the education space. Here, we focus our attention on Pratham's learning around two of their programs—Teaching at the Right Level and Early Childhood Education. These involve core educational challenges at different stages of children's development, and they incorporate innovative elements in content and in the way that the programs are implemented, monitored, and evaluated.

BOX 1. Foundational skills: Teaching at the Right Level (TaRL)

Teaching at the Right Level (TaRL) is Pratham's major intervention to help children build foundational skills in reading and math. It evolved especially to help children in Grades III to V who were significantly behind in core skills and needed to "catch up" in order for the regular school curriculum to be relevant for them. TaRL has three essential elements.

The first is the ASER test which was designed to quickly assess a child's initial learning level in ways that clearly categorize the learning level of a child in a highly intuitive way (we discuss this in the next section). This allows the grouping of children by level and matches them to the relevant part of the pedagogy; teaching at the "wrong" level is radically less effective and also demotivating for a child (and the teacher). The ASER test can then be easily used to track progress.

Second, Pratham developed a vivid, interactive pedagogy that is adapted to the range of initial learning levels in these foundational skill areas. This was developed through an intensive, creative, and ongoing process of content design and field testing. This is called CAMaL (Combined Activities for Maximized Learning), which involves a combination of activities such as reading aloud, participating in discussions, phonetic charts, and word games, among others. These activities are done with children in large groups, small groups, and individually. It is impressively effective when the specific parts of the pedagogy are matched to the initial level of the child–substantial improvements in reading and math occur within two to three months.

Third, TaRL involves an organizational structure that can implement the testing, grouping, and delivery of the pedagogy–backed by the training of teachers, of course. This also needs to be adapted to the initial organizational context and, in Pratham's years of work, actually became the harder design challenge. They developed approaches from volunteers to summer camps and school-based processes that tested and sorted children into level-based groups for selected classes in the school week.

BOX 2. Early Childhood Education (ECE)

This program focuses on the holistic development of children from 3 to 8 years old and their readiness for school with the support of mothers, school teachers, and volunteers in the community. This includes four developmental domains: physical, socio-emotional, cognitive, and language development. ECE has four essential elements.

First, ECE strongly relies on local resources. It is key for the instructor or teacher to be a local community member so that they fully understand the local context and can have more effective interactions with children and parents in the community.

Second, connected to the previous element, the contextual content, and low-cost material allow children to become familiar with the program more easily. Pratham teams are very deliberate in developing content based on children's immediate surroundings and using materials and objects that are locally available and ideally for daily use.

Third, children are regularly assessed through observations and simple activities.
Instructors conduct these periodic assessments using indicators that are easy to observe, measure, and communicate to track children's progress and constantly communicate with their parents.

Fourth, ECE fosters mothers' engagement through periodic meetings, mothers' groups, and home visits. As part of the engagement, mothers participate in discussions and games and contribute to creating and distributing materials relevant to their children.

3. Measuring Outcomes so as to Work out What Works

"…the distinction between assessment and activities wasn't there…"

Rukmini Banerji on the creation of the ASER tool (Balakrishnan , 2023)

Any exploration of design, testing, and learning has to be based on measurement. Pratham is obsessed with measuring learning outcomes. And it has a particularly interesting story in its design of measurement tools that are closely related to its pursuit of solutions to learning problems and its commitment to making a difference at scale.

Let's start with an example of the use of Pratham's outcome measurement, taken from the most recent ASER report– "In 2022, [only] 42.8 percent of children in Grade V in India can read a Grade II level text." (Annual Status of Education Report Rural 2022, 2023). This vividly and powerfully conveys the nature and scale of the learning problem. It is an example of a statistical result from the ASER test (aser means impact in Hindi and Urdu—as well as standing for the Annual Status of Education Report). The ASER report has a host of similar measures from this statistically representative survey of Indian children. Here are other examples for reading and math: In Grade VIII, only 69.5 percent could read a Grade II text this year. In 2022, only 25.6 percent of children in Grade V could do a numerical 3-digit by 1-digit division problem—a Grade IV capability—rising to 44.6 percent of those in Grade VIII. Numbers such as these are a spectacularly informative way of instantly characterizing the scale of the learning problem India faces. They imply, of course, that some 57 percent of Indian children in Grade V and 30 percent in Grade VIII are incapable of reading a text that is designed for their second year in school, with a similar story for math. Everyone involved in education in India, a significant proportion of villagers wherever Pratham works, and many politicians, journalists, bureaucrats, and business people have heard of numbers such as this.

We discussed later how these tests became used in national and other studies as an instrument of engagement and learning in different parts of the system. Here we want to focus on the ASER test itself. Let's first look at the tests in their latest incarnation—from the ASER 2022 survey. Figure 1 below is a copy of the reading test (in Hindi) and the arithmetic tests. Then in Figure 2 we show the instructions provided to surveyors on how to administer the reading of these tests (these are taken from the ASER 2022 survey, with very similar instructions for the arithmetic test). The first thing to say about these tests is that they are a brilliant design for their purpose of quickly and efficiently assessing where a child is with respect to foundational reading and math skills. And foundational really means what it says: absent these skills, children will have huge difficulties in learning higher level skills, and end up leaving school and entering work, public life, and citizenship ill-equipped for their adult lives. So, the results of these tests are personally and socially important. The test is easily understandable in relation to practical capabilities for daily life. It is easy to execute—surveyors can be quickly trained to follow the instructions. It can be done in the home or in a school classroom. When a surveyor, teacher, or anyone else implements it, there is immediate learning about where a child is. So, for all these reasons, it is also scalable.

Figure 1. Pratham's two core tests for reading and arithmetic

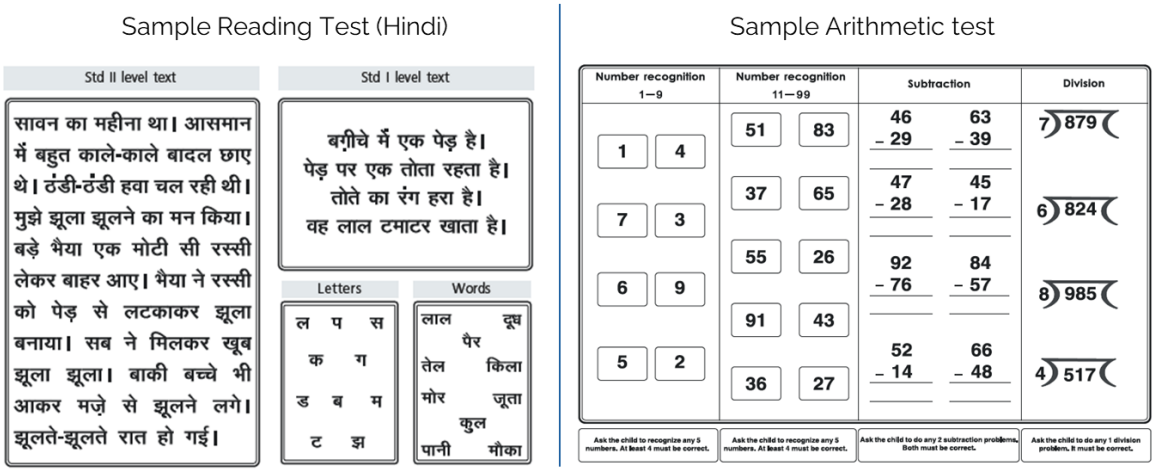
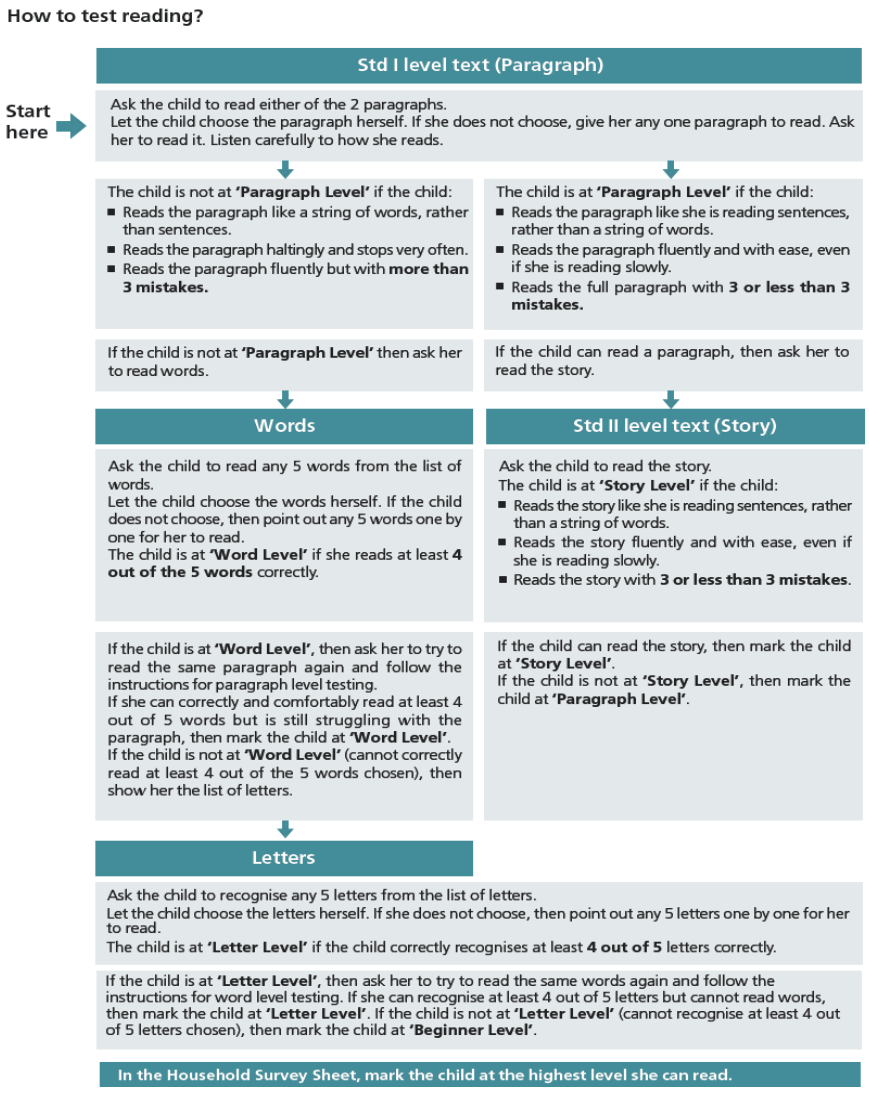


Figure 2. Instructions for surveyors on how to test reading using the ASER tool



While the ASER test is a remarkable tool, we are equally interested in how Pratham developed the test in the early 2000s. For this we have an illuminating podcast of an 2023 interview with Rukmini Banerji that includes her account of this process (Balakrishnan, 2023). In Rukmini's telling, the test emerged as a practical response during the implementation of one of their early programs. Pratham was working with young volunteers (balsakhis), who received a stipend significantly below a teacher's wage, in a program that sought to provide remedial education in Grades 2-4, working in some 200 schools in two urban areas, Vadodara and Mumbai. Pratham had also invited J-PAL to evaluate impacts in a RCT in an early collaboration (see Banerjee et al., 2007). They realized that existing tests weren't what was needed, especially in the practical tasks of working out what was working across teams. Around a hundred and more Pratham staff started to work out a common vocabulary on how to share experiences, in terms of where children are and where they wanted them to be. As reading was needed for almost any other learning, a practical goal was for a child to be able to read a story. Then they worked from the building blocks needed to get there, and that took them to working out if children could read letters, then words, and then simple stories (Grade 1 level) and longer stories (Grade 2 level).

So, ASER as a test emerged as a way of talking together, and then was used to see what could be achieved in a month's remedial work by the balsakhis. This became an incredibly practical way of assessing where a child is, aligning the learning material with their level (as Rukmini says, they don't see any other level to teach at!) and tracking, comparing, and interpreting processes across the implementation. (It was also used as the outcome variable in the RCT, as the J-PAL team adopted Pratham's measures). And a second major benefit is that they found the ASER test was a way of communicating to others in the system—mothers, teachers, and beyond so that they can also learn what the problem was and how to solve it—a story we pick up later.

This is classic Pratham. Already obsessed with learning and with children in school but left behind. Also obsessed with learning outcomes and problem-solving during implementation with many staff (more than a hundred!) in ways that emerged organically out of the task at hand and then institutionalizing this across the organization and beyond.

Some 20 years later, as we were undertaking field observations of how Pratham works in early 2022, we found essentially the same way of working.

4. How Pratham engages with systems, from mindsets to communities and governments

> *"In Pratham, we believe if you are to solve a problem, it has to follow a big scale"*
>
> *Smitin Brid, co-lead of the ECE content team*

Pratham has always aimed to bring about change in learning outcomes at *scale*. Bringing about lasting change requires shifting multiple levers in the system, whether it is *mental* (involving changing behaviors, habits, and mindsets), *relational* (involving interpersonal

relationships, group relations, and power dynamics), or *structural* (involving policies, budgets, or information/resource flows) (Kania et al., 2018). Moreover, going to scale intrinsically involves working with systems, from the "household system" of parents, grandparents, siblings, young children, and others, to the community, the state system, and the broader public. For this reason, system-based diagnosis is typically the very first step of an Adaptive Evaluation. This is then periodically updated as one engages with the system, develops new insights, and as the system itself changes.

Pratham intrinsically understood the centrality of systems for their vision, and worked on shifting multiple levers in the system concurrently. Through initiatives like ASER, which spurs debate, Pratham has reshaped our perception about education, influencing *mental* models of various actors, from the village to the state bureaucrat. By working closely with mothers, encouraging them to take an active part in their children's learning, even if they may be illiterate, Pratham is addressing *relational* dynamics in the family. And, finally by presenting concrete data on learning deficits via ASER and partnering with states to prioritize and implement TaRL, Pratham is bringing about *structural* change. In general, Pratham engages with the system in three ways:

(1) Changing mindsets and informing the expert and general public on the state of learning in India, primarily through the remarkable citizen-led ASER survey

(2) Direct programs, involving own-managed implementation by Pratham staff in village communities

(3) Advising and supporting state systems to adopt and implement new approaches, involving engaging with mindsets, practices, rules and incentives within the state

Through ASER, Pratham has become the main point of reference on India's learning issues, clearly articulating the problem, and making it central to the discourse. In the *direct programs,* Pratham has full control and constantly innovates at the village level, obtaining quick results to learn what works and what does not work and the key mechanisms for the results. Through the exploration of these rapid results, they make quick changes to their interventions until they find a model that works in practice. Once they find a proof of concept for their direct programs, they gather evidence to take it to the government, gain buy-in from local authorities, and build *government partnerships* to increase the scale of their program. This sometimes involves a small *government partnership* in one or two blocks, and based on positive results, they take the program to the whole district and finally to the entire state.

The role of system functioning is acutely relevant to a classic challenge in development: an intervention works when implemented at a low scale by a highly motivated group but not at scale. Pratham initially developed pedagogies that "worked" in the sense that, when implemented with fidelity, including aligning with the initial learning level of the child, they led to the rapid development of foundational skills. But the key was how to get the pedagogy implemented with fidelity. There was an early discovery that this did not require unusually high-level teaching capabilities. Village volunteers without formal teacher training could be trained up by Pratham and implement the pedagogy. Rather the big challenge was around changing behaviors within the organizational system—especially the state system—with all that this implied in terms of mindsets, rules, organizing printing of materials, specific training of teachers, testing and tracking children, organizing classes, frontline monitoring and more.

In this section, we discuss the ways in which Pratham engages with the three parts of the system mentioned above, and then assess the additional challenge of taking Pratham's approach to other countries.

4.1 Changing mindsets through the ASER surveys

> *"Often ASER is looked at as data. I like to think of it as an experience–an experience that connects you as an Indian to India. I don't think we have enough of these experiences that bring the whole together…It is being done for you and me and my neighbors and everyone else. It is for us"*
>
> *Rukmini Banerji (Balakrishnan, 2023)*

To the casual observer within India's development community, ASER is a nationally representative survey that captures the current state of learning in India, raising awareness about education concerns. They may recognize ASER as a go-to reference for education in India, featuring in debates, national economic surveys, planning commission documents, and even parliamentary meetings (Banerji et al., 2013). Those more familiar with Pratham may highlight how ASER collects data on learning directly from households using an interactive tool, in contrast to typical surveys that gather data in schools using standardized pen and paper tests. All this is undeniably true.

And yet, ASER is much more than just an annual large-scale survey that assesses children's basic levels in reading and arithmetic. It is a participatory social movement to shift mental models about education. ASER mobilizes twenty-five to thirty thousand volunteers from various civil society organizations to visit households across the length and breadth of the country each year (Banerji et al., 2013). The volunteers, motivated to participate in a productive experience and "see" how India truly learns, serve as activists and champions of the movement, inviting households to uncover together the state of basic reading and math in India. Moreover, its intuitive and easy-to-administer design allows it to meaningfully engage not only ordinary citizens but also policymakers, educators, civil servants, and civil society in thinking about and acting to improve basic learning outcomes. It has compelling "simple" results. For example, "The proportion of children enrolled in Std V in government or private schools who can at least read a Std II level text fell from 50.5% in 2018 to 42.8% in 2022" (Annual Status of Education Report Rural 2022, 2023). These have built a common vocabulary to communicate learning outcomes that can be understood up and down the system, from an illiterate villager to a high-level bureaucrat (Chaudhry, 2023).

Rukmini Banerji, in many interviews about ASER, often recounts a memorable encounter from one of her ASER field visits that has stayed with her (Balakrishnan, 2023). While administering the ASER reading tool in a village, an elderly illiterate woman, who was observing from afar, curiously inquired about the activity. She said she noticed there was a piece of paper and some interaction. When Rukmini quickly replied it was a "survey" to measure reading, the woman laughed. She noted that surveys typically involve locals explaining things they know to outsiders that do not—like their daily routine, income, or water supply. ASER was different– "Here both you and I don't know what will come out, but we are doing it together." The anecdote is one of many illustrations that show how ASER brings people together. Unlike so

many surveys, it is not extractive, but a mutual and collective learning experience for Pratham, the surveyors who volunteer, and the participants. This is what elevates ASER from a mere survey to a unifying social movement.

Of course, as with any movement, ASER alone did not bring about improvements in children's learning, and galvanize action (Plaut & Eberhardt, 2015). For real improvements, Pratham also needed to activate the other parts of the system in tandem, such as the community and the state (as we continue to see in this section (Banerji, 2015a). Moreover, to act, people needed live demonstrations of what works and how to do it, along with first-hand experiences of making it work, to truly believe that change is possible. This is where Pratham's quick and inexpensive pedagogy (the intensive learning camps and Teaching at the right level) to get children to read and do basic math was powerful. Nonetheless, ASER did contribute to improvements in learning, by bringing education, and especially learning deficits, from the sidelines to the center stage of the discourse, which is no simple feat. ASER clearly articulated the problem, creating the space for the community to work towards a solution. If you do not know there is a problem, or if the problem is invisible, then there is no need for a solution. ASER's bottom-up approach to uncovering the problem involving several thousand volunteers and engaging the local community built momentum and made the learning problem visible.

ASER, which began in 2005 in India, has now sparked several movements of citizen-led assessments around the world (Citizen-Led Basic Learning Assessments: An Innovative Approach, 2013). This include, among others, ASER (also meaning 'impact') in Pakistan, "Uwezo" (meaning 'capability') in Kenya, Tanzania, and Uganda, "Beekungo" (meaning 'we are in it together') in Mali, and 'Jangadoo' in Senegal (meaning 'learn together'). Notice, many names and their meanings in other countries more strongly highlight the collective nature of endeavor, which is more akin to a movement, as opposed to a statistical data collection exercise. In 2015, the People's Action for Learning (PAL) network was established to coordinate and support organizations working on citizen-led assessment around the world as a means to take ownership to solve their education problems (PAL Network, n.d.).

ASER has transformed mindsets about education in India and stands as one of the most significant initiatives in development. It shows the power of ground-up citizen-led assessments to engage ordinary people in spotlighting important issues. It proves that surveys can move beyond information sharing to inducing learning as a collective activity in the system and fostering a culture of measurement. And finally, it gives us an example of embedding a movement within a survey to measure outcomes and within an organization focused on getting children in school to learn well.

4.2 **Engaging with village communities**

Pratham's direct programs in elementary education reached some 400,000 children in 20 states in 2017-18, through instructional activities and over more than 650,000 children through community-based out-reach programs. In 2018-19, Pratham started a new flagship program– Hamara Gaon ("our village")– in 14 states to shift from 30 days of intensive work in schools to 3 years of presence and participation in ~3000 villages (see Pratham's website). The program involves two components - a school component, that includes the early childhood education program and teaching at the right level in the village schools, and a community component,

that involves mothers and children groups that congregate after school hours to facilitate learning activities outside the classroom.

Direct programs at the villages have an intrinsic value, and also serve as laboratories for exploration on what can work, in terms of interventions. This forms the basis for any engagement with state governments, that we discuss in the next section. Thus Pratham's head of Uttar Pradesh, says:

> *"We understand from the direct programs what works and what doesn't work. Whatever is working we try to get an external research to get a proof of concept. We take that and go to the government, we tell them we have done this, this is what the third party says and this is a proven methodology."*
>
> *Nuzhat Malik, State Head of Uttar Pradesh Office.*

From the early work with the balsakhi remedial workers, Pratham soon moved to working in rural villages. This involved connecting, building trust, and helping the village learn about the state of learning of their children. A village report card was an innovation that has continued to be used ever since. After introductions have been made with village leaders, this involves the entire village. It is a way of understanding the needs of the village in a community-wide survey where Pratham collects information on enrollment, learning levels, and access to education resources—using the ASER test to assess basic reading and math skills. The overview of the results is then disseminated in an open village meeting where the village head is also present. As Nuzhat said in a visit in Uttar Pradesh:

"We invited everyone and we told them: These are the broad problems in terms of education, this is the big picture of the level of education in the village. So, what do you think? Do you think this is a problem? How should we solve this problem?"

This feature of involving the community, but also of creating buy-in because of their involvement is a key piece of every Pratham intervention. It allows Pratham staff to directly interact with the key actors. Nuzhat explained:

"*It was a village mapping of needs, but they also used it for mobilization purposes, and to get the villagers together, involving them in the decision-making. This is a big activity that happened when we started working in these villages. We interacted with every single stakeholder in the village."*

The village report card is just one element of the way Pratham works to build trust. This involves staff going beyond a typical day job. "*There are a lot of stakeholders that are untapped during the day"*, said Nuzhat, *"If you are only coming during the day people feel you're only coming because it's your job."* In some states there is a residential team of implementers. Some stay overnight in the village, but the condition is that someone invites them to stay in their home. In conversation with Nuzhat, she mentioned, *"Conversations with them [the village inhabitants] were initiated about the importance of education, but also just creating friendships and connections."* In this way, Pratham staff and implementers become part of the community. Through the years, they have seen how this practice helps with acceptance and relationships with the community.

A large part of the buy-in from the community also comes with time, once there is evidence that the children are improving their learning. "*Teachers at the beginning were very skeptical about the TaRL methodology*" Nuzhat told us, "*but now they see the benefits of it and they look at the Pratham teams' methodologies and use the methodologies themselves.*" Even some children that used to be part of the learning camps have grown up and they are volunteers now.

Moreover, Pratham appreciates that aligning incentives and motivations of local stakeholders in the community is key to ensuring the sustainability of their interventions. This realization came gradually. Nuzhat recalled, "*Initially our program focused on direct Pratham teachers. Then they realized that when they went back there was no follow up happening and they didn't have the bandwidth to follow up because they have many villages. So they realized they need a strong person that stays in the village that is at least enabling the learning environment for the children.*"

Today, different parts of Pratham work towards strengthening community buy-in based on the idea that only if the community takes ownership of the methodology will it be able to sustain its programs. Nuzhat explained Pratham's key role in building a bridge within the system: *"It is important to work with the community for sustainability. If at some point we exit, we want to leave Pratham's methodology behind. We try to focus very strongly on the community."* This involves getting different parts of the system to work together. In Nuzhat's words, *"Sometimes schools and communities don't interact so much and we try to bridge this gap so that they interact with each other.. If you ask parents, they will say teachers are not interested; if you ask the teachers, they will say parents are illiterate. We try to empower, train parents so that they know what are the right questions to ask and create accountability for learning."*

Pratham taps into the whole system around the children and gradually transforms it towards a more supportive environment for children learning and success. This is central to Hamara Gaon, which involves mothers' groups that support each other and share lessons on how to teach their children better. The program emerged as a way of creating sustainable change in learning in the community. Nuzhat explains the rationale rather well— "*Mothers are usually illiterate, and they feel like they are not capable of supporting their kids, but they are the ones that spend more time with the kids. If mothers teach their kids, the kids are going to listen to them and also mothers feel the most responsibility for teaching their kids. So that's why we realized they are an important stakeholder.*" Pratham decided a multiyear program between three and five years would help them create engaging learning environments for children with the involvement of local people. The goal was to understand how a village could be transformed to ensure foundational learning at the elementary school level. This also uses Hamara Gaon as a laboratory to test new material and assess its impact before sharing it with the government and other partners.

During COVID-19, the Hamara Gaon program started to rely even more on youth volunteers and mother's groups. Youth volunteers kept running "catch up" learning camps in their communities to recover from the learning losses, and Pratham teams continued to engage directly with families via SMS and WhatsApp to share home activities and follow up. Nowadays, mothers are an essential component of the program, as they are key actors in their children's learning.

The content team created homework activities that are easy to understand and that can be done with objects available in the house. They try to give the message— "you don't need to be literate to help your children." All these elements help mothers increase their confidence level and get more involved in their children learning in a sustainable way.

I wanted to understand a bit better from the mother's perspective if they actually found the time to conduct these activities with their children, or maybe they thought it was too complicated or time consuming for them. The mother looked at me surprised and almost amused by my question, "Will we not have time for our children? That is our utmost priority", she replied.

Jossie Fahsbender Field notes

The nature of Pratham's engagement is well-illustrated by Nuzhat — *"When we go to a community, we try to identify who is the best person who can help us. We try to work with someone who is already educated because they can conduct activities and they understand the benefits of education. We spoke with the village head and other people and realized that it would be easier with them. They helped us identify who would be a good volunteer to help us."*

The way Pratham's field staff work is to identify the mother who is more willing to go through this transformation first and influence mothers around her. Nuzhat explains, "*Initially there was hesitation and push back. They [mothers] grow up in a very conservative patriarchal environment where the culture is that they are not allowed to have a voice. Not all of them are illiterate but because of this environment they don't feel capable. We understand which mother is more active and we interact more with her and then she calls her friends. It is a lot of community networking. Once they realize it is just for the good cause of their children's education, their in-laws give permission, and then the neighbors are more willing to give permission."*

On the identification of mother, Nuzhat said, *"We identify mothers in a hamlet and we create mothers' groups that meet weekly. Initially these meetings were organized by volunteers, but now they have identified a "mother" leader who organizes the meetings. They teach them how they can help their children, but it is also a space to learn what their problems are. For the first time in these communities they have a platform where they feel their voice matters. This also empowers them to have an opinion on their child and on teaching them. It gives them the confidence to speak up."*

It was further brought out in one field visit.

Luckily enough, I was able to experience first-hand this transformation from the first session of a mothers' group to two months later after they have been holding regular meetings. Our second day in Bihar started with a very chaotic meeting, the first meeting of a mothers' group where a Pratham facilitator was trying to explain the methodology. A small number of mothers were asking many questions, other mothers did not feel ready to participate. Then we moved to a neighboring village, where mothers' groups had started two months ago. Gurveen, the Pratham Manager that had been guiding me through the field visits, had tears in her eyes when we finished the meeting. I was only

able to understand how deeply moved she was when in her distinct "Pratham way" of absorbing things, she said "the first time I saw this group, mothers were so shy, now they are talking not only about helping their kids at home, but about creating their own businesses." I saw it clearly then, how the "chaos" of the first meeting goes through such a transformation in just a few months and then mothers start to feel comfortable to speak up, to share their ideas, to be creative and innovative. Mothers' groups have the potential not only to affect children's learning but also mothers' perception of themselves and the kind of opportunities they want to pursue.

Jossie Fahsbender Field notes

In this section we provided snapshots of how Pratham staff engage with community or village systems. This is central to the way they work in the direct programs. What we see here is an organization that starts from where the community is, connecting with local actors – village leaders, teachers, mothers and more–building trust through building relations. Pratham staff stay in the village, build empathy, and then find pathways for change within this local system, through connections with mothers, teachers, and others.

4.3 **Working with the state**

"We go to different levels of government: state level, district level, block level. We identify whoever is more amenable to change and to our methodology, we engage with them and we show them our methodology."

Nuzhat Malik, State Head of Uttar Pradesh Office

In India, primary education is the responsibility of subnational states within the federal system, so it is at this level that engagement really matters.[3] In 2017-18, Pratham had partnerships in 15 states and reached 6.7 million children. In 2018-19, there was a major new opening for working in Uttar Pradesh (UP), India's largest state, involving all the government schools in the state. So, in this year Pratham's reach through state programs more than doubled to 15.6 million children. This is almost half the total elementary school student population in the United States. By 2019-20, there were changes in the top bureaucracy of UP, and the state seemed to lose interest (though many teachers continued to collect the information that was part of the intervention). Meanwhile, three other states were gearing up for work with Pratham. This illustrates why working with the states is so important for reach, but also how the interest and commitment at the state level can be fickle, especially with changes in leadership.

[3] "In most states in India, the administration of the government elementary school system, especially in rural areas, follows a tiered structure. A state is divided into districts and districts into blocks. Depending on the state, a block may have anywhere from 50 schools to 300 schools. Within each block, there are clusters; each cluster has about 12-–-15 schools. Within each layer of administration, there are officials to manage the work at that level." (Banerji, 2015b).

Pratham's work with the states vividly illustrates the very different challenge of system engagement, compared with working with communities. Again, our aim is to describe how Pratham engages. We continue to use TaRL as the primary illustration.

An early exploration of how to influence the state system started with an institutional feature of the society-state interface. India has a system of village level education committees (VECs) with an overview role over governmental schools. Village members (often parents) are elected, the village head (sarpanch) heads it, and the principals of schools are members. In the international development literature, there was a lot of interest from at least the late 1990s over the potential quality improvements that could be induced by such parental influence. Pratham tried working through this part of the system. They designed an intervention in a district (Jaunpur) in Uttar Pradesh, in 2005-2006. This built on the experience with village report cards to explore the hypothesis that providing members of VECs with information on the learning problem would allow them to influence the focus and behavior of local government schools. Pratham invited J-PAL to undertake an RCT to evaluate this approach (Banerjee et al., 2010, to understand whether mobilizing community members to monitor local schools through Village Education Committees will increase participation in school governance or improve education outcomes (Banerjee et al., 2010). It didn't work! However, in a pivot within the intervention, Pratham organized local volunteers to tutor children with learning deficits, applying the "technical" solution of testing, and matching to the aligned pedagogy. This worked! But only at a low scale, given the intrinsically limited reach of tutoring. This is another classic Pratham moment, learning from both failure and success. They had a clear hypothesis based on an assessment of one part of the state-society system. They discovered that the influence of VECs was inadequate to effect change in school practices (and many VEC "members" were unaware of their status). But they also discovered that the pedagogy did work even if implemented by local volunteers, without formal teacher training.

Pratham decided they needed to build on more direct engagements with state education systems. They were already developing connections with both state governments and the national education system–both because of their growing reputation of work on the ground and the early extraordinary ASER surveys. However, in engaging with the state, the Pratham team had to navigate a complex system with "established mindsets" and "entrenched interests" (Banerji et al., 2013)

A compelling next step in the learning journey can be illustrated by the case of Bihar. In the early 2000s, Bihar, one of the poorest states in India, had suffered significant neglect of its education system for decades. In the first ASER survey that ran in 2005, some 18 percent of girls aged 11-14 were out of school, and almost 30 percent of 15-16 year-olds (*Annual Status of Education Report*, 2006). Learning deficits were severe. A new government, led by Nitish Kumar, had come into power in 2005 with a mandate to promote schooling and social justice (as well as law and order). This provided an opening for Pratham, and they initially worked on one of the new government's priority programs to get children into school, especially from the "extremely backward castes." This helped build trust and relationships with the education bureaucracy and opened the door for a pivot to Pratham's primary concern of learning. Through their productive working relationship and their strong connections with top-level bureaucrats, they figured out a pathway to engage with the system.

Bihar had radically increased the number of teachers to deal with the past deficit. Schools certainly had resource challenges. However, an important part of the core challenge was that people didn't fully understand, or agree, on the root cause that was preventing children learning. There were at least six different theories of change of what should be done to tackle the education problem, all of which had very different implications for policy design (Banerji et al., 2013; Banerjee et al., 2017). The explanations ranged from norms of implementation, additional resources, closer monitoring systems, improving incentives and teachers' capacity to changing the pedagogy.

With this trust and connections, Pratham obtained government support to develop a large-scale pilot of the TaRL approach involving introducing testing of children's learning levels and providing Pratham's pedagogy–known as Combined Activities for Maximized Learning (CAMaL) meaning 'amazing'—to be taught by existing government teachers in one district of Bihar. They again invited J-PAL to evaluate this with an RCT, supported by extensive process monitoring and some focused qualitative work (Banerjee et al., 2017). This again didn't work, at least in the regular school year! However, an opportunity opened within the system, with a government initiative in 2008 to have "summer camps" in which existing teachers would provide remedial classes to lagging students. Pratham again pivoted and introduced the TaRL methodology into selected schools within the intervention areas–and got J-PAL to build this into the evaluation. This worked! The TaRL methodology made a significant difference to the learning of children, when the pedagogy was aligned with initial learning levels, and this was affected by existing Bihari teachers.

The next step of the journey unfolded with a specific feature of India, and Bihar's, bureaucratic system. A powerful position in the Indian bureaucracy is the District Magistrate or Collector, who oversees all activities of the state in a district and has widespread influence including over sectoral departments. Districts are large by international (but not Indian) standards–with an average size in Bihar of over 2.5 million people.

In 2012, the District Magistrate (DM) of Jehanabad, Balamurugan (usually known as Bala), decided to tackle the learning problems in his district. He sought Pratham's advice and help. The problem was clear (and familiar): many children were not only way behind their expected learning level, but were in grades inappropriate to their skills. Pratham had a model that had been shown to work elsewhere, involving testing children, grouping for part of the school day according to their level, and providing the CAMaL pedagogy. They started a program called Padho Jehanabad (Read Jehanabad) in two blocks of Jehanabad district (Modanganj and Kako). Pratham made clear they could advise, but not implement. The key was to find out how to work with the system and change its behavior.

The breakthrough came when Bala and the Pratham team decided to build ownership through direct involvement of the front line of the education bureaucracy, the Cluster Resource Center Coordinators (CRCCs). Each CRCC leads 10 to 15 schools, with a task of supervising implementation of school activities. A video tells the story beautifully (Padho Jehanabad, 2013). The CRCCs first had to learn about the problem–through seeing how the ASER tests of children were so different from their expectations. They then had to get out of their comfort zone and learn and teach the CAMaL methodology, see the rapid gains of children, and then take on the responsibility of teaching the school teachers. They identified 690 teachers in 224 schools, and this was rolled out over several months.

Pratham ran a "simple" before and after test. The gains were remarkable in the context of rural India, and Bihar. Between August 2012 and March 2013 the proportion of children who were beginning "readers" (on the ASER test, could read paras or stories), rose from 31 to 72%, while those who couldn't even read words fell from 57 to 14% (*Padho Jehanabad,* 2013). For comparison, panel data from the schools studied in the Bihar RCT referred to earlier in the text, found *no* significant change in learning levels over a year. Also vividly portrayed in the video, was the learning on the nature of the challenge and how to make a difference embodied in participating CRCCs and teachers, and parents.

This story was still alive during our field visits:

Ten years later, I was in Pratham's Bihar office. When I entered the office in the morning, I saw a big open office space arranged with many desks and chairs facing the computers, when I got back there for lunchtime all the tables had been pulled together forming a semicircle so that we could all see each other while we ate our exquisite sattu parathas with baigan bharta. I had dearly missed eating with fifteen people at the same time and I thought to myself how lucky they were at this office to have lunch between friends so often. It was also evident that these informal spaces were used by the team to exchange learnings from their experience and again I wondered how this could be replicated in a different setting. As we were eating, the Pratham staff put on the video of a key turning point in the history of TaRL in Bihar where they all could remember the origins of the government partnership with an iconic figure, Bala, who was a key actor that made it possible more than 13 years ago.

Jossie Fahsbender Field notes

Md Naiyer Alam, Pratham's state head for Bihar, shared more about Bala's stories and the successful government partnership. *"Bala wanted people to understand the extent of the problem, he wanted the CRCCs to understand and believe,"* said Naiyer fondly of his memories. He spoke about four key learnings from this experience: (i) practice classes should be done by the government, (ii) monitors (CRCCs) should understand the problem themselves, (iii) grade level textbooks will not work for all children and (iv) there was a shift in mindset of not penalizing if something was not working.

The Bihar story continued, with Chief Minister Nitish Kumar taking a direct interest, influenced by the ASER survey results. The Padho Jehanabad programme was an important influence, especially as it had been designed within Bihar and could show substantial gains. This led to a much larger program, across many districts in Bihar.

Our purpose in this section, is, again, not to evaluate the program, but to illustrate how Pratham diagnoses and works with different levels of the state system, builds trust by going to where the system is, then seeks to engage with mindsets and practices, through bringing evidence on outcomes and what works to counterparts. The cases also vividly show the tolerance for failure: when things don't work Pratham interprets, learns, and moves on to the next iteration of engagement and design. We pick this up further below when we discuss iterative approaches and then in the section on Pratham's culture.

This way of operating with the government system is not specific to Bihar. In the field visits (by Jossie Fahsbender from Imago), we witnessed the same mindset from different offices across Pratham at various levels, going from the front-line Pratham teachers to the heads of state offices. It is a delicate balance because priorities for the government and Pratham need to be taken into consideration. In the words of Nuzhat, the state head for Uttar Pradesh: "*It is a compromise. We need to find a balance between furthering Pratham's mission while also catering to watch over government needs. Pratham focuses strongly on learning and learning level data. The government focuses on attendance, and there is less focus on actual learning. We try to refocus the priorities to what is actually happening in terms of learning in the classroom.*"

Pratham's experience in Uttar Pradesh illustrates the approach to building a state-wide partnership in the state with the largest population in India (some 230 million people in 2023). Nuzhat had been there from the beginning and she shared her experience on the scaling up process of their programs. We quoted her words above when introducing the role of evidence from direct programs, both to build credibility and build joint activities. She said they conduct pilots and use the direct programs as laboratories but "*we don't go to the government if we don't have results.*"

She also emphasized how important it is to show the ongoing programs to government officials and to keep using the direct programs to constantly improve. "*Governments can come to see the direct programs, so that they can understand how it is being implemented in the field. One important aspect of why we implement direct programs is that we want to understand what is working and what should be scaled, and we want to demonstrate to the government. And data is very important to demonstrate that.*"

Her reflections made it clear that working with a partner to replicate or take your program to scale is more challenging than doing things on your own, but it is necessary, and that flexibility is key when working with different governments. *"For example, we worked in Matra Village (in Uttar Pradesh) and also in Punjab to insert pre-primary centers in government premises. Punjab decided to do it for everyone, Matra said they would start by one. The context was different, the government structure was different. We need to negotiate different things and we needed to learn how to handle it. We have learned a lot from those collaborations."*

Both Bihar and UP, showcase examples where Pratham used a set of tools to understand the system, work within the system and change the system when needed. When working in government partnerships, Pratham makes a deliberate effort to map the government system and identify champions that will support their work. The stakeholder mapping is constantly evolving, so that they can keep engaging with the current system. This then is fundamental to the selection and exploration of potential pathways to work with the system, supported by design of associated theories of change (that we discuss in Section 4). Then, system-level interventions work at various levels, from solving information problems, influencing mindsets, supporting new rules and practices and aligning incentives for behavioral change.

4.4 Taking TaRL and Pratham international

It might be much easier to do it all yourself, even internationally, but this is not sustainable. Capacity needs to be created at the local level".

Devyani Pershad, Director of Programs and Partnerships at Pratham International

When traveling in the field in Bihar, Dinanath Sinha, a Senior State Content and Training Associate, who had been working for years on direct programs and supporting government partnerships, proudly told me that he had just come back from Nepal, where they were trying to implement a pilot of TaRL. He said that the pilot had been satisfactory and that they were waiting on the government to see if they moved forward on the expansion. Nepal is just one of the many examples of countries that have been adopting TaRL. The program has been taken to several countries in Africa and more recently Brazil. I couldn't imagine how such a unique way of working as a team and the closeness to the field and to each other could be transferred to teams outside of Pratham.

Jossie Fahsbender Field notes

The field notes above encapsulate both the aspiration and challenge of taking Pratham's work internationally. Pratham has been known, and recognized, internationally for at least two decades for their work in India (both in education and economic evaluation circles!). There were early moves when people from other countries came to India to adopt elements of the ASER survey approach and bring them to their countries. As we discussed above in the section on ASER surveys, this was adopted by Pakistan as early as 2008, then by Kenya, Tanzania and Uganda and more recently by Senegal and Mexico. Each of these bring some version of the ASER test instrument and undertake large-scale assessment of learning under the leadership of local civil society organizations. However, taking Pratham's exploratory, learning, protocolizing, and scaling process to a very different context is a much larger challenge. We discuss the role of Pratham's values and culture in section 4 below. Here we first describe how Pratham itself thinks about international work, and then expand on work in Brazil, that takes Pratham's thinking to two projects with a structured Adaptive Evaluation approach.

Devyani Pershad, who leads the international strategy, shared Pratham's approach when scaling beyond India: *"When we work with governments in other countries, we are convinced that the idea is to build government capacity. There are many opportunities where we could put more people from Pratham's team in the ground. In the short term this would be easier but the longer term repercussion is that we would lose the government capacity that we are trying to build, so we don't do it."*

In international work, Pratham's role has switched from being direct implementers to being technical advisors. Devyani explained, *"In Nepal, when we involved people from the India team, it was very important for us to explain that this work was different from the India work, that we were going to build Nepal's capacity. In the initial visits there used to be this tendency that the India team would take charge and explain, but we can't just do things, and take over. We need to build the capacity of our partner organization."* Transitioning to international work is a process, it has been challenging and it has taken a long time because it requires changing the mindset about execution and implementation. In Devyani's words, "*moving away from implementers to technical advisers or those building other people's capacity… that is a bigger responsibility."*

Another key tension was how to make the distinction between the flexibility that you needed to implement Pratham programs in such different countries and the non-negotiable components that were essential to improve children's learning. Devyani had Pratham's non-negotiables very clear: "*working on an idea that is scalable, making sure that what we are trying to achieve is measurable and with context in mind, building capacity in a very practical hands-on manner."* She further added, *"We try to bring this culture of being nimble, identifying what is not working and quickly doing something about it, staying close to the work on the ground independent of the role in the organization".* Another key aspect of their way of working is having collaborative decision-making processes. In the words of Devyani, "*In work with other countries, even if they think that a specific team should be the final decision makers, we say it is okay as long as you go through the collaborative process. They can't have all the technical expertise if they don't go through the collaborative process, and they can't do it alone. It's time-consuming, but it ensures that we make the best decisions for the programs."*

Pratham's unique culture has been instrumental to constantly innovate, learn and improve the program during implementation. The deep trust and frequent informal chats between people from various offices organically lead to rapid learning at Pratham. This organic way of learning can be challenging to replicate in other organizations trying to adopt Pratham programs when the culture of open interaction is not present. Teams have to be very deliberate in developing structures that allow for different teams to learn on the way during the scaling up process.

Part of the work of the international team is to stay very focused on the programs that are being taken to scale and being very cautious of how much innovation and adaptation is happening on the way: *"we still do learning by doing, experimenting, continuous adaptation but within a frame, we are very focused on what our goals are and what are our operations. When we are bringing something new we are very clear that this is something that we are trying, innovating, and only when we are very sure of it we take it to scale",* said Devyani.

In Imago we have direct experience of taking TaRL and similar approaches to foundational learning to the very different context of Brazil. This illustrates how structured techniques like the Adaptive Evaluation approach, can help take the Pratham approach to other institutional contexts. We are working (in 2023) on two programs with Brazilian counterparts. As in many countries, there are major concerns over learning deficits in foundational skills, which have been magnified by the shutdowns during the COVID-19 pandemic. One program is led by Instituto Gesto, a non-profit organization that works on implementation and evaluation with local municipalities. They learnt of TaRL through Pratham International (including with Devyani), and are working on implementing an adapted version of TaRL with the education departments of several municipalities. A second program is led by the Center for Public

Policy and Education Evaluation at the Federal University of Juiz de Fora (CAEd/UFJF), and involves a variety of approaches to tackling learning deficits in the municipal school systems of Recife, a city in the Northeast of Brazil.

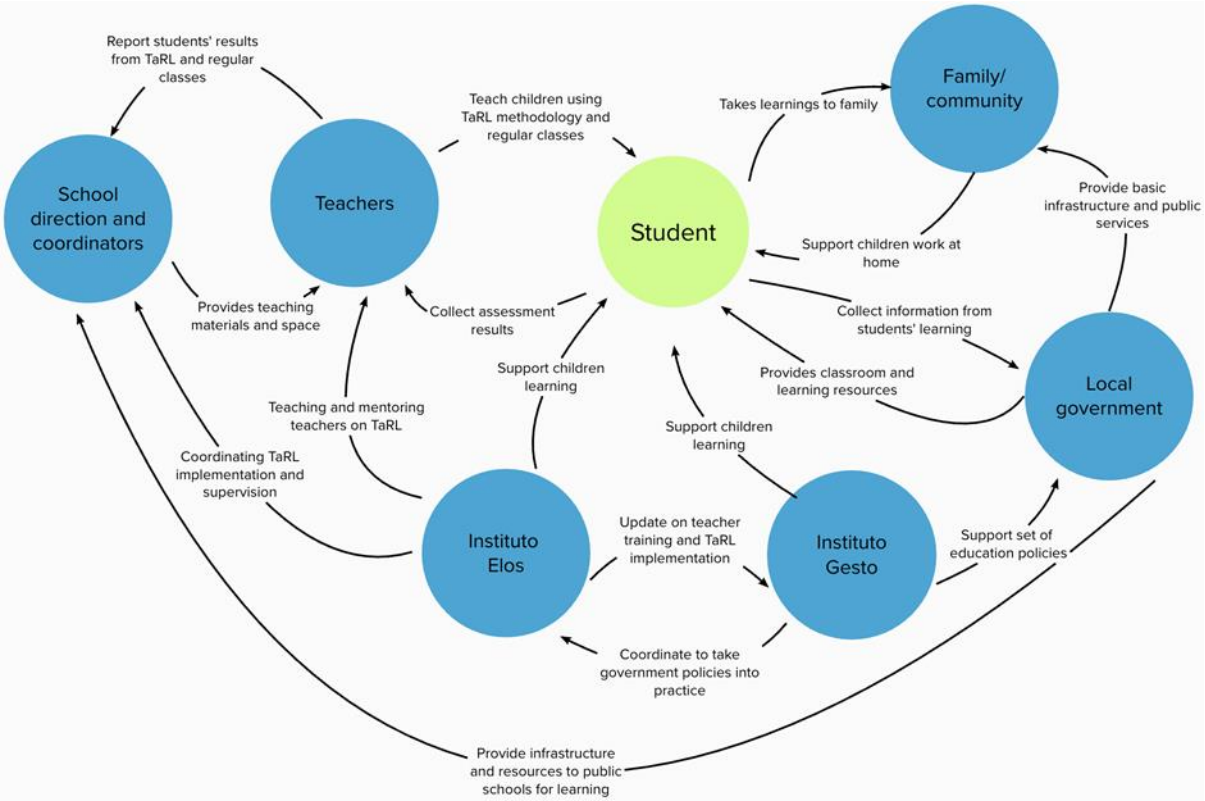
In these two programs, we have been introducing the structured approach to Brazilian counterpart teams, developed in the more formalized approach to Adaptive Evaluation referred to in the introduction. [4] A first step of this is a systems diagnosis, for which a structured technique is system mapping. This involves documenting the variety of stakeholders and the relationships between them. It can be extended to other dimensions of systems diagnosis, including patterns of feedback loops, the nature of interaction in systems dynamic terms outlined in the introduction to this section. This is best done in a participatory way with key participants and can usefully deploy design thinking tools. Figure 3 shows the process in action, with a group from the Recife municipality using lego figures. Then Figure 4 shows the high level result of an online workout for TaRL with Instituto Gesto..

Figure 3. System mapping in action in Recife

Source: Workshop with the Recife municipal education team, run by CAEd and Imago. February 15, 2023.

[4] See Gokhale and Walton (2023) for concepts and examples, and Guerrero, Gokhale and Fahsbender (2023) for an overall treatment in the context of scaling.

Figure 4. A system map for TaRL in Brazil



Source: Online workshop with Institute Gesto and Imago

5. On theories of change, testing, and iterating

Pratham has learning in its bones. It permeates every part of the organizational ethos and all people working at Pratham. In this section, we provide a snapshot of how Pratham learns about what works.

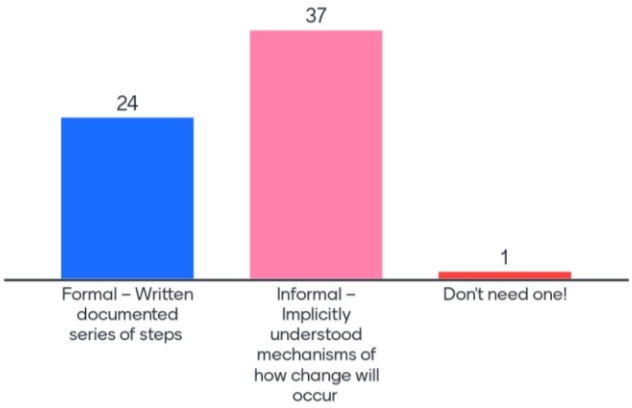
5.1 Building, using, and updating theories of change

Theories of change unpack the expected pathways through which programs intend to achieve their desired impact. They help generate hypotheses about the mechanisms or "black box" between interventions and outcomes, that are tested against unfolding data and evidence, to inform changes in design and implementation. In an Adaptive Evaluation, theory-based approaches typically follow a systems diagnostic, and are a central activity in a scaling journey.

Pratham's staff, from the top leadership to the field, are always thinking about, working with and testing theories of change—on how the interventions they are designing, supporting, or observing make a difference to learning outcomes, and why. Sometimes this is informal,

sometimes formal (Figure 5). Each one of Pratham's programs serves the overall purpose of improving children's learning outcomes. However, the pathways to impact children from grades 3-5 (TaRL) will differ from the channels to improve learning for children in grades 1-2. The mechanisms will also vary depending on the system that Pratham is navigating, whether they are trying to work through their own direct programs or government partnerships.

Figure 5. How do you use a theory of change in your work?



Source: Workshop survey of Pratham's leadership group in October, 2023

Regardless of the specific intervention, there is an unspoken rule that is followed throughout Pratham: the theory of change for the interventions is designed in a very collaborative environment with people from various teams (content, monitoring and evaluation, leadership, and program management). In earlier years, theory of change work was typically done by whoever was involved—and not necessarily called a theory of change! These days the theory of change is usually articulated by a core team which has senior leadership from states as well as from content and measurement teams. It builds from inputs from the field, and it is channeled through state offices. More importantly, Pratham's use of a theory of change is not static; theories of change evolve based on field inputs and findings from ongoing implementation. As a member from the Delhi MME team noted, *"Programs follow a theory of change: There is a hypothesis that if you do X it will lead to Y. Then, during the year we try to learn as quickly as possible. So, we measure progress at every cycle: it could be monthly, every 10 or 20 days, etc. at the field level."* These progress indicators are used to identify gaps, and then to test various innovations and solutions, resulting in updated theories of change. A member from the MME team explained *"There is a core program which really does not change, the core program has certain goals that we try to achieve. But Pratham will always try to layer on different components, and when we layer on different components there will be some gaps. These are the gaps that will lead to some questions that we will try to answer. Sometimes at scale, and other times in smaller measures."*

Continuous revision of implementation plans and theories of change became even more important during COVID-19. *"Pre-covid everything was very structured because schools were open. We would meet at least twice a year, at the beginning of the school year to train every program staff, and in the middle to share knowledge and learnings and look at data* "recounted Naiyer, Pratham's state head for Bihar, *"Now with Covid we do monthly programing because*

everything can change…Every quarter we need to decide what is going to happen the next cycle. For example, we decide if we will be conducting learning camps in schools and in community libraries and mothers' groups. We need to come up with a plan of exactly what is going to happen."

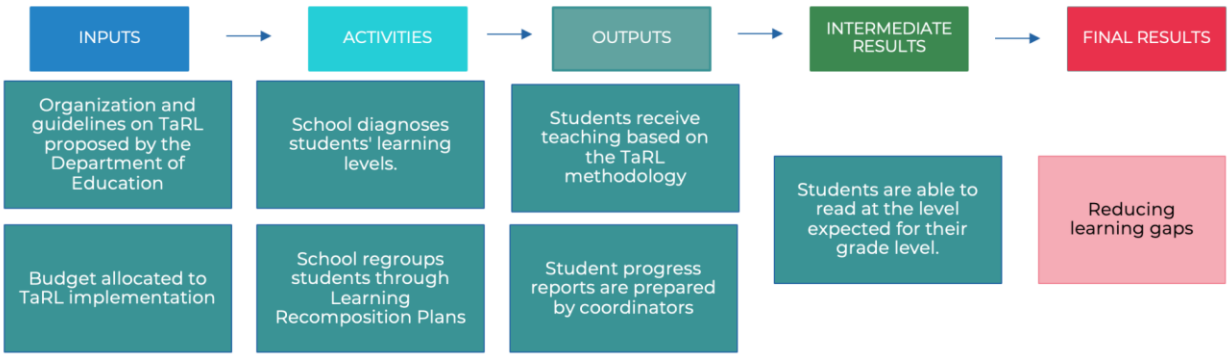
The adaptation that occurred during COVID-19 also shows Pratham's spirit of being creative, innovative, and resourceful with the goal of helping every child learn. In Bihar, a member of the content team proudly explained to us how they decided to create a toll-free number where parents could call to get a different story recited to their kids everyday. *"There were 200 stories in total!"* The government was on board because all Anganwadis (rural childcare centers) and schools were shut down during COVID, so they were very thankful to Pratham.

Another innovation from this time was a switch to the use of SMS with instructions for home activities. Here the role of the mothers is key for children's learning. They meet once or twice per month in women's groups, where they discuss what activities need to be done in the next few weeks and then they go home to implement the activities with their children, usually using items that they have in their houses to teach and test knowledge of colors, numbers, among others. If they have doubts about the activities, they can always call Pratham to ask questions or share concerns, as well as exchanging experiences with other mothers. Additionally, the Pratham field coordinator visits every group twice in one month and follows up on phone calls.

This discipline of starting with a clear theory of change, testing it, and then being flexible to adapt the solution based on insights, or pivot to another solution, with a revised theory of change helps Pratham accelerate learning. At no point are they constrained by the theory of change because they see it as a working set of assumptions rather than gospel truth. People from Pratham observed, *"We don't stay committed to the theory of change, we keep changing all activities, coming up with innovations."*

This practice of engaging with theories of change often needs to be nurtured. Currently, Imago is working to support an Adaptive Evaluation with Instituto Gesto, which is looking to adapt TaRL to the Brazilian context. Inspired by Pratham's approach we have co-created theories of change with them, to facilitate this process of continuous trial and error in a systematic fashion. Figure 6 is an example of the high level theory of change we built together (once an evaluation gets into practice this is typically broken down into many more steps for specific hypothesis testing).

Figure 6. A high level theory of change for the adaptation of TaRL to Brazil



Source: Online workshop with Institute Gesto and Imago

5.2 Testing and iterative approaches

Iterative designs are fundamental to innovation and scaling. They put insights from theory-based assessments into action through repeated cycles of experimentation, testing, reflection, and learning. It is here that data merges into practice and informs it, and evaluations meet implementation as one. In an Adaptive Evaluation, we find that this works best when rigorous measurement and data collection is embedded into iterative implementation. There are many techniques that can be used, including Agile, often used in the private sector, a range of tools in design thinking, increasingly used across sectors, and even Problem-driven Iterative Adaptation (Andrews et al., 2015), whose focus is governments.

Pratham seamlessly integrates adaptability into its daily functions without being tethered to the specifics of any particular iterative methodology. Both quantitative and qualitative data, combined with field observations, are analyzed to evaluate and refine various stages of the theory of change, guiding adjustments in the intervention process. In the words of Varsha Hari Prasad from the Delhi MME team, *"It's a cycle. One aspect of it is the data and the evidence, and the other aspect is the reaction to this data and experiences on the field. Both of them inform each other…It's a continuous cycle and it plays out in different ways in different programs."* She shared one example in which they realized one program was not going as expected, and then the MME team started asking themselves why we didn't notice this before, "*Sometimes data can help you identify a gap, then you go back to the field and try to understand what actually happened and the challenges. Then, this feeds back again to when you implement your program the next time, so you don't just implement changes to your program but also to your measurement system.*"

Constant innovation can challenge internal teams, but systematic structures aid in managing this. Pratham integrates repeated testing into their learning process, with each test building on the previous. They value understanding the reasons behind results, using feedback loops within teams to enhance program implementation. An example of this iterative process, combining qualitative and quantitative insights from the ECE program is illustrated in Box 3.

BOX 3: Using different methods to learn and improve implementation - Designing theories of change for Early Childhood Education (ECE)

Samyukta Subramanian, initially a volunteer, has worked in Pratham since 2008 and now co-leads the ECE content team, specially focusing on government partnerships. In Delhi, their collaboration with the government on ECE began 5 years ago. Since then, they've significantly refined their approach using various learning methods, ranging from training sessions to data, to their initial theory of change.

Initially, Pratham's Delhi content team took the lead at reviewing the government's ECE content, developing content for the first three months. Concurrently, training for supervisors and child development officers took place, followed by 20 days of practice classes. A joint team from Pratham and the government then held a "review training" to gather hands-on feedback from practitioners on what worked and didn't. For instance, feedback on the child report card suggested it was challenging to fill, especially with variations based on age. The response was to simplify it, consolidating multiple formats into one. The content also underwent changes to suit children's comprehension levels. For example, some questions part of a module on 'my family', like asking about a children's aunt's name, were considered too difficult and were omitted.

After the initial design iteration, a collaborative team, composed of members from Pratham and the government's Women and Childhood Department, revised the content and jointly developed material for the remaining year. This approach fostered a sense of shared ownership over the content, which then became the basis for subsequent training.

Now that the program has been rolled out, constant observation and quantitative data have become crucial. Samyukta emphasized, "*You want to see how it's working in class, you want to visit classes, observe what is working or not.*" One common insight is that usually the problem is not content itself, but what is happening in class. The content and MME team work together to design a class observation tool. Then, data informs different aspects of the program implementation. For example, it can give insights that a refresher training is needed because people don't know how to do a specific part, or they have forgotten. Cluster level meetings are used to analyze the data and decide what needs to change. Based on this, the supervisors take actions to improve learning. Samyukta explains, "*You have some methods which tell you very quickly how the kids are doing, you could have a school readiness fair, school observers or involve the government in the monitoring process, and then ask them what did you see? What do you want to do?*"

For Pratham, involving people from the government in the monitoring process is a natural need because the scale is so large, but it has also proven to be vital so that they trust the results and bring their own recommendations to the process.

When asked where the main source of learning comes from, most Pratham members say it was a combination of the key takeaways of field workers and the work of the MME team. They made it very clear that both teams worked extremely collaboratively and were deeply interconnected. This is much easier said than done. In many organizations, there are tensions between implementing and evaluating teams, which often work as separate entities with distinct objectives. Implementation teams complain that the evaluation overly scrutinizes their efforts without fully grasping the real context and felt challenges on the ground. Meanwhile, evaluation teams perceive the implementation teams to be overly sensitive, conflating negative feedback with criticism while overlooking their robust research methodology.

In Pratham, these tensions and divisions between evaluation and implementation are practically non-existent. Manish Tiwari, part of the MME team in the Uttar Pradesh Office,

recounted, "*The content team collaborates with the evaluation team, they confirm the findings from the data, so it's not only the data but it's being corroborated by the content team. And all these meetings are conducted together, we all meet together and discuss together."* And this collaboration is not only limited to discussions pertaining to data, but also extends to programmatic planning and beyond. "*Whenever the planning happens it is not like one person is planning, it is a combination of the content team, the evaluation team [and the field team]",* said Manish when asked about the relationship between evaluation and implementation, "*In this way, we leverage knowledge every time. There is a significant amount of preparation that we do so that implementation is smoother, and there is a general positive attitude of people implementing.*"

Any insights from evaluators (whether internal or external), academics, government, mothers, teachers, and even children is taken as an opportunity to learn and improve. Manish beautifully explained the way in which people at Pratham see evidence: "*Data advises us... Everyone reacts very positively to data because they know we are sharing data to improve the program. It can be useful for the program, it can bring an important suggestion on how to move forward. We observe what school is performing well or not, what are the challenges, so if there are new processes or new activities we can give suggestions, and understand what is the story behind these problems. It's an opportunity to exchange best practices and highlight challenges."* These views from the MME team were confirmed by Amritlal Yadav from the content team at Uttar Pradesh: *"Content and data teams meet and work together, reflect together, plan together, so there is a lot of interaction between our teams. When there is MME training, the content team joins and when there is content training, the MME team joins. They join each other's training."*

This willingness to learn and improve using data stems from an environment conducive to experimentation. Failures are fine, because they teach you something and eventually help improve the intervention (recall the "failures' in the development of TaRL in state systems above). A recent concrete example comes from the implementation of TaRL. After receiving feedback from field workers, the team decided not to use phonetic charts. Faiyaz, Head of content and training (Elementary), summarized the reasoning behind the decision– *"It's difficult to implement phonetic chart learning at scale because learning thorough charts needs demonstration which is hard to train and implement."* While the repercussions of this change remain unclear, pilots are exploring alternative, simpler teaching methods. At the same time, they felt very open to the idea that this new strategy might not work, *"It's all about trying a new thing, and if it doesn't work then we can go back to the status quo."*

This means Pratham is always tinkering and making refinements along the way. Adjustments at Pratham span from altering details in children's stories to enhancing the readiness of teachers or volunteers. The content team swiftly modifies stories to resonate with local realities. Samyukta shared her experience designing content for ECE: *"The content actually changes with the context and the needs of the area. We have a framework but for instance any content has to be created in the language of the area and then you have a context, you need to look for what kind of resources and materials are around. If you are looking for poems you want to look for poems that are popular in that area, so that it has a local flavor... One has an idea of where we want to take the content, but the creation of the content is more decentralized, the teams that are in those states really help because they speak the language and they know what would work for that context."*

Meanwhile, the implementation team, spearheaded by field supervisors, augments training for new teachers or volunteers. The strong connection between the Delhi office and the state offices also plays a key role in refining the training. Samyukta explained *"We work with the state team to create what is required. If it's training for government supervisors, it has to be in their language and I can have some suggestions on how it should be done, but the state office will say the government wants it this way and we need to adapt."* This hands-on approach underscores that, at Pratham, everyone plays a teaching role in the field.

When asked how they were able to quickly learn if something was working, Pratham members often reference their feedback sessions and review meetings. While the frequency and nature of these vary from state to state, depending on the program, they are all in the spirit of learning and adaptation. In Bihar, for instance, the content team and field implementers meet on the 7th of each month to discuss the data. They discuss both quantitative data from dashboards and qualitative observations from field visits. Team members give their opinions on what they saw working or not working in the field. Both are used as valuable inputs to ideate, problem solve, and co-create solutions during the meeting. More complex problems are addressed in Anganwadis (rural childcare centers), where in collaboration with the facilitator, a change is implemented and assessed.

In Lucknow, they have established weekly meetings for these feedback loops. As Manish Tiwari, from the MME team, explains *"Every week we get together, we get the views from field supervisors and with these inputs we design the mobilization plan for next week. If we find that one school or one district is doing relatively poorly, we mobilize our attention to that particular place, we understand why children are not learning well and we make the necessary changes."* The state of Uttar Pradesh, more broadly, has a unique formation, structured as resident teams. Nuzhat, the UP State Head, shares, *"They conduct daily meetings. After every day they come back to the office and they debrief. They talk about what are the problems, the challenges, what worked and what didn't, and accordingly if there are some problems they will help each other. Knowledge sharing happens on an everyday basis, and based on that they decide what is the lesson plan for the next day. They cook together, eat together, stay together."*

Back at the Delhi Central Office, the MME and content teams are open to changing plans on the basis of data. They too give a central role to anecdotal evidence from field visits. *"Depending on what works and what does not work from observation, activities and materials, it must be updated."* said Samyukta from the ECE content team. Discussion on content that works happens at least three times, at the beginning, mid and end of the school year. Changes occur at the central level but whatever changes are made are practiced at the field level and the field staff give feedback on changes.

Until now, we have discussed two substantial and indelible parts of Pratham's learning journey that often go unnoticed – especially in the mainstream economics discourse. The first, covered in the previous section, involves Pratham's engagement at multiple levels of the system to influence change. The second involves constant tweaking and adaptation to converge to a solution. In the last part of this section, we revisit one the most documented aspects of Pratham's journey–its sequence of RCTs– with the aim of placing these in the larger context of the long-term exploration that Pratham has embarked upon.

5.3 The role of RCTs

> *I first learned about Pratham through an econometrics class, where we were studying how to conduct rigorous impact evaluations using experimental methods such as Randomized Control Trials (RCTs). In fact, one of the reasons why Pratham became well-known in the academic space was their alliance with J-PAL over many years with a whole sequence of RCTs and many associated academic publications. I never imagined this was just a small portion of Pratham's learning structure, which goes much deeper than statistically significant results of an RCT. The main source of learning comes from being close to the field and from constant feedback loops between people in various teams, including monitoring and evaluation and content teams, in the central and state offices.*
>
> *Jossie Fahsbender Field notes*

Pratham is *both* one of the best examples in development practice of how to make use of RCTs *and* an organization for which most theorizing, design, testing and learning occurs elsewhere, as we have seen in earlier sections. This isn't a contradiction—in fact these are complementary.

As already noted, Pratham is renowned for its series of RCTs conducted by J-PAL, spanning five consecutive studies on the evolution of TaRL and its predecessors, and recently on ECE. These evaluations chronicle the development of TaRL: from the Balsakhi program, to influences of volunteer and community engagement in Uttar Pradesh, to incorporating CAMaL into Bihar and Uttarakhand's school curriculum, summer camps in Bihar and UP, and finally, the use of frontline education officials to oversee TaRL delivery in Haryana (Banerjee et al 2007, 2010, 2017). This led to several academic publications, highlights of Pratham in Abhijit Banerjee and Esther Duflo's book Poor Economics, and in the Nobel Laureate acceptance speech. This has been one of the most effective collaborations between researchers working on RCTs and an implementation partner in recent development history. And from various accounts from Pratham leadership, this was indeed an equal 'collaboration' from the beginning, in which there was a mutuality between J-PAL researchers and Pratham staff. J-PAL was genuinely interested in working with problems that Pratham was actively working with, and Pratham was genuinely interested in the structuring and rigor that the RCT methodology brought to their work. Pratham and J-PAL co-designed the RCT's together. In Rukmini Banerji's words - "Pratham did not have RCT's done on them by J-PAL. Pratham did RCT's with J-PAL. There is a difference." While many researchers worked on the RCTs, a key feature was the continuity in the participation of Abhijit Banerjee and Esther Duflo throughout the more than two decades of an ongoing relationship.

It is important, however, to place the RCTs in context. The great strength of an RCT is having a tightly defined intervention that can be rigorously tested statistically, through random assignment of alternative treatments across different groups, in this case groups of children. This allows for robust conclusions to be drawn on the causal influences of any differences in outcomes. There are often specific pivots during an RCT's implementation—indeed a rather

crucial pivot in the evaluation of Read India was the opportunistic and fortuitous inclusion of summer camps in Bihar, when the Bihar government made a last minute announcement that camps would be held in 2008.[5] Further, process monitoring and complementary qualitative work during an RCT may provide important interpretive insights (Banerjee et al. 2017). This is nevertheless very different from the ongoing exploration, adaptation, and rapid iteration described in much of this paper, which occupies a much more prominent space in Pratham's overall learning arc.

So how to think of the RCTs? First, Pratham used them as a complement to their ongoing exploration—to have a more structured test once designs were sufficiently crystallized to be in a protocolized state. Second, they helped structure testing and learning—a counterweight to the highly fluid process of designing and adapting that is central to Pratham's modus operandi. But here what is most important is that the questions and approaches the RCTs took emerged from where Pratham was, with strategic designs designed collaboratively, even as specifics of the technical design of the evaluation were, of course, with the research teams. While Pratham's leadership and staff were typically using "findings" way before RCTs were finished, let alone published, this structuring role is often referred to by Pratham staff. And third, having globally recognized external researchers was important to the credibility of the work, contributing to the broader *trust* in Pratham in the education, development and public space.

Faiyaz Ahmed, Head of content and training (Elementary) in Delhi, has been working with Pratham for many years. He was a key part of the preparation work in the form of small pilots of TaRL in various locations as well as the implementation of the RCT of TaRL in Uttar Pradesh, so he explained this experience from a firsthand perspective (Box 4).

[5] Rukmini Banerji and Michael Walton were in the field when this was announced and were able to make this pivot because the baseline had already been undertaken in the target villages, and the government was happy to support the random assignment. It led to the only robustly significant finding in this RCT and provided important insights!

Box 4: Learning camps for TaRL

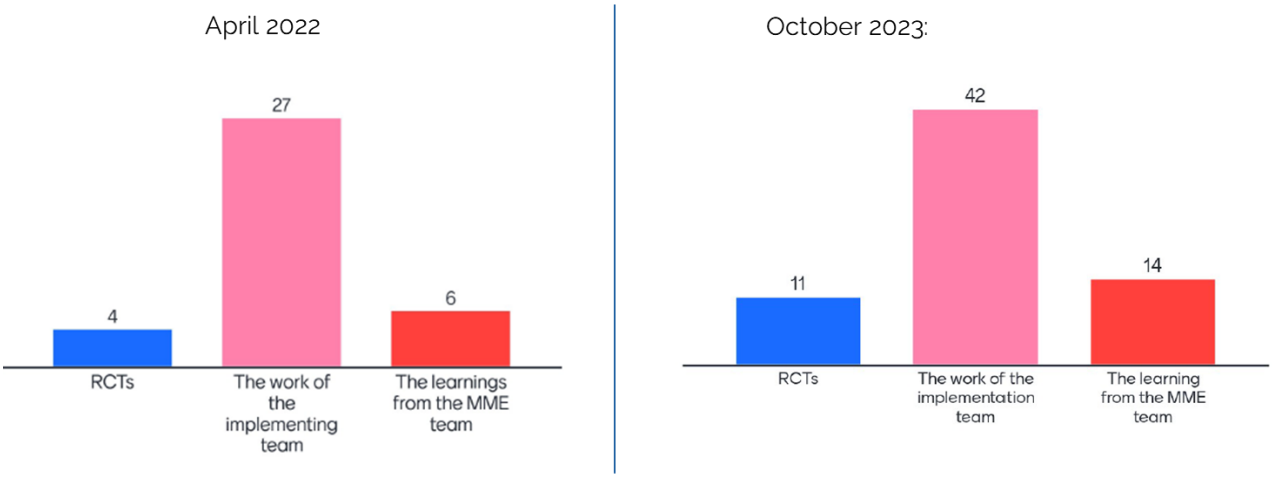
Prior to the RCT on implementing TaRL in camps, various pilot learning camps were conducted to test the TaRL method in this context. Many changes were implemented during the learning camps, which included the duration of the camps and the type of activities. After these had been tested in small pilots, they designed an RCT in collaboration with J-PAL, where they identified that children that participated in summer learning camps were performing significantly better than those children that did not participate.

Madhav and Rukmini asked Faiyaz and his team to start piloting short learning camps for TaRL. They conducted one-month learning camps divided into 10-day periods in different locations in northern India. After one month they received feedback and they realized that more days were needed, so they added 10 more days. They realized that what they were previously doing in the period of three to four months, was working in 30 to 40 days. Then, they expanded the learning camps from northern India to southern India and they kept getting the same results with larger sample sizes. The basic tools and framework of TaRL did not change, but the pilots led to key takeaways in terms of the optimal number of days of the learning camps and the activities that worked best for children learning. Also, they were able to test which activities and dynamics were more helpful depending on the group size. The activities needed to be very engaging and lively and all the material colorful.

It seemed like they had already learned a lot and they were getting positive results even before the RCT, so why the need for an RCT? Faiyaz smiled and responded with a vivid phrase: *"a peacock dances in the forest, who saw it?"* In other words, *"I was doing a great thing, who would believe it?"* He continued *"We needed an RCT for validation, authentication and we knew that a collaboration would help. This experience also helped us design the framework, the material, the activity… An RCT gives organization, structure to learn something. Any kind of research work helps you to think differently, RCT is one of the examples, but internally we do a lot of R&D, there are a lot of innovative ideas and we share with others also, internally and externally. Then, validation and authentication will add some credibility and it will help to be recognized at a large scale."*

This perspective, that RCTs have a small contribution to the overall learning activities at Pratham, is shared by most of Pratham's senior staff. Imago worked with an informal leadership group of about 40 Pratham staff between 2019 and 2023. In an in-person survey of this group in 2022, the dominant view was that the most important source of learning came from implementation teams. This perspective was the same 18 months later, among an extended leadership team consisting of 80 people (Figure 7).

Figure 7. What is the most important source of learning?

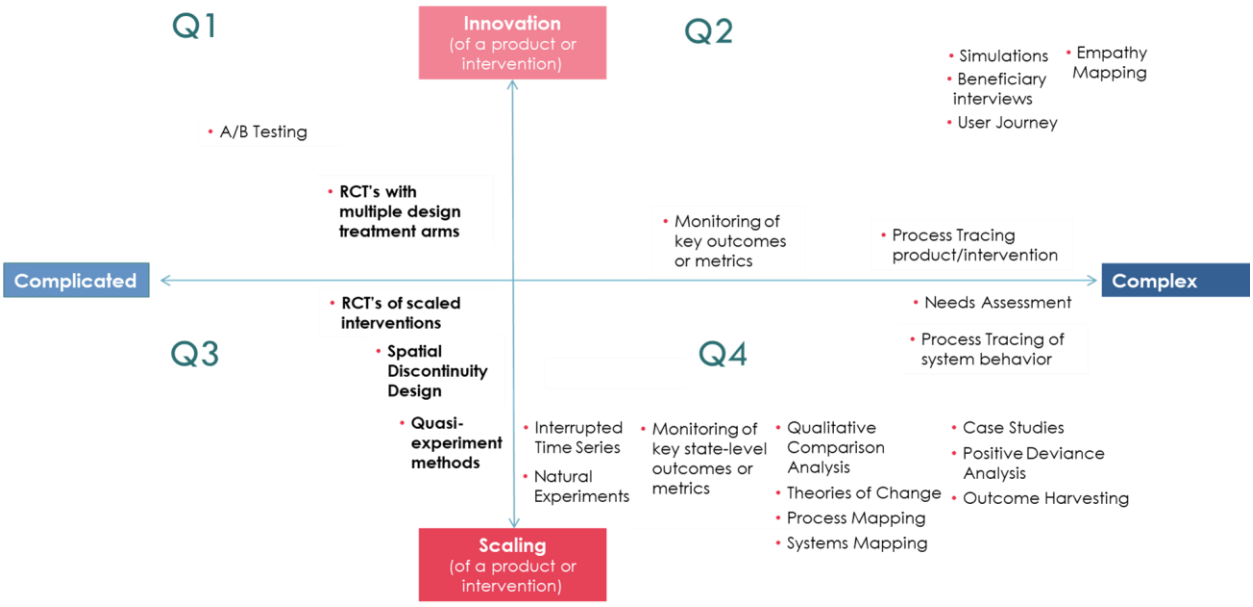


Source: Workshop surveys of Pratham's leadership group in 2022 and 2023.

None of this is to say RCTs were unimportant. As Rukmini Banerji says in the quotation at the beginning of this paper, the relationship with J-PAL and the associated sequence of RCTs, has been of great value to Pratham. However, this is only one part of their learning, and Pratham's capacity to make use of RCTs effectively is very much a reflection of their broader learning system, into which they have been able to strategically locate and then manage RCTs.

In an Adaptive Evaluation, we like to think of RCTs as one method in a constellation of research techniques, appropriate to specific situations. In particular, RCTs are most relevant and informative in situations involving lower levels of complexity (in terms of scale, programmatic size, and number of stakeholders involved), typically after significant small-to-medium scale piloting has already taken place. They are best suited for situations in anticipation of a larger rollout, and when the primary question of interest is on determining the efficacy of the intervention rather than explorations of systems functioning, process implementation, and design improvement. When the system allows, they can also play a role in assessing well-specified organizational innovations, in an intermediate phase of scaling, where an innovation is tried out in parts of the core existing institutional structure, such as a public education system. Figure 8 places RCT in a framework involving the level of complexity and the stage in the innovation and scaling continuum (starting with ideation, and early exploration, and ending with large scale rollouts).

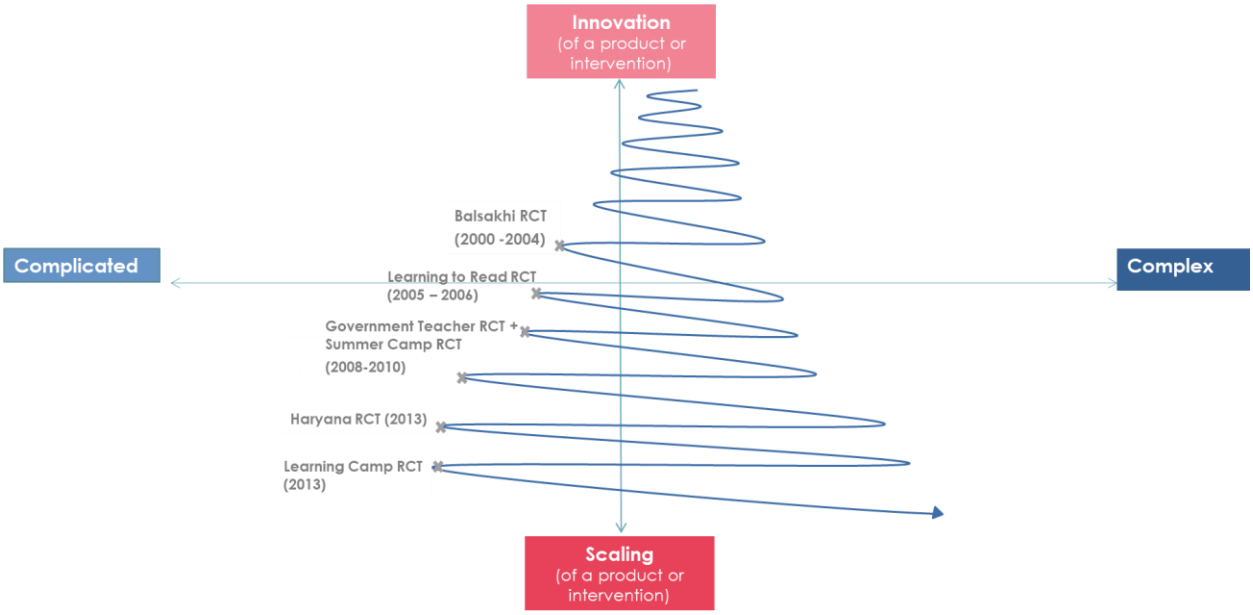
Figure 8. RCTs In the Broader Evaluation Landscape



Source: Gokhale and Walton, 2023

We conceptualize an Adaptive Evaluation as a long-term process or learning journey in this 2-dimensional space, with different tools becoming relevant at different points of time. In fact, we see Pratham's overall journey as being one of moving to greater scale, but with each phase solving one problem to only bump into another larger and more complex problem at a larger scale, and then solving that to uncover even grander challenges and so on! The blue line in Figure 9 illustrates this evaluation journey. RCTs were used in five specific points in an overall long zigzag line that involved continuous exploration, adaptation, and rapid iteration.

Figure 9. Pratham's Evaluation Journey



To give a glimpse of this, consider a short, illustrative history of Pratham's incredible learning journey.[6] Pratham began with the problem of trying to tutor children in Mumbai and Vadadora, and improve their reading and math, beginning a phase of intensive exploration of pedagogies that work. But this uncovered the larger, first order problem of how to measure reading and learning in the first place, sending Pratham into a search for simple, effective, low-cost learning tools for assessment—a voyage that culminated in the creation of ASER as an practical instrument for testing and action. In parallel, Pratham continued honing pedagogies to get children to learn, developing, among other things, TaRL. These worked for Pratham staff but led to a new question–how to train others, who may have lower skills, to implement this. However, it was discovered that TaRL was effective even when undertaken by volunteers. In parallel, the ASER surveys were introduced to working on documenting the problem for a broader audience.

As TaRL and ASER began working in tandem, another grander challenge awaited–how to take these to scale, which involved influencing teaching in the state systems of India. Taking these innovations to states unfurled a host of difficulties, among them, the denial that learning was a problem (the consensus was attendance was the binding constraint). This is where debate generated by ASER helped break through mindsets in some cases. In other instances, motivated politicians and bureaucratic champions took ownership of the issue.

Where Pratham was able to get states to implement its program, steeper challenges around implementation arose. This led to another phase of exploration and experimentation, now at a larger scale. Eventually, this led to two broad strategies: first building regular classes within the school week, for which students were tested and sorted into groups by their learning level; and second, short-term "camps" with intensive use of the pedagogy by teachers trained in the technique that worked. They also provided specific advice to the state bureaucracies including on an array of issues from printing of materials, training of teachers and instructions to principals.

Today, the challenges are even bigger and grander. These include how to move beyond basic reading and math, how to move to higher grades, and how to take this internationally. For these, seeds are sown and the exploration has already begun!

6. How Pratham "works"—on values and culture

> *"She's so Pratham!"...said Michael about Gurveen. That really stayed in my mind. I agreed one hundred percent and yet at the same time questioned what that really meant. How it was that every person I had met shared this indistinguishable but distinct way of being, of thinking, of acting, that perfectly aligned, while preserving the fun and each person's own individuality. "Being so Pratham" got translated into being resourceful, engaged, and not being afraid of taking action to make things work. Of course, always with one purpose in mind, helping children to learn better. "Being outcome-centric", a key value highlighted by Pratham's leadership team as part of their core values, permeates every level of action, from new hires to state heads that started as volunteers in their youth. At Pratham, there were no artificial visible formal structures, only tacit ones. I was casually invited to an internal meeting, the very first in-person meeting of the Measurement, Monitoring, and Evaluation (MME) team with Rukmini Banerji since the pandemic had started. The meeting name was written on the whiteboard, "Chat with*

[6] For a more comprehensive account of Pratham's 20 year learning journey, see Banerji and Venkatachalam (2023)

Rukmini." And that was the perfect name for it. The layout was a circle in the middle of the office. The meeting was not a leader giving guidelines to an evaluation office, it was a shared strategic planning that started by recognizing the new members in the team, the work that everyone had been doing during the pandemic and the direction in which the world was currently moving. I tried to sit on the back and let them talk as if I was just an observer. "You are part of the team now", they said, so I had no way of hiding and I needed to actively participate and share my observations as well. It was a conversation, an exchange in which curiosity, observation, feedback and introspection were applauded and taken into planning. Learnings from the field and adaptation during the COVID-19 pandemic were seamlessly used as part of the key experiences to be considered when implementing further monitoring and evaluation systems.

Jossie Fahsbender field notes

We have described what Pratham *does* through the prism of its behaviors, actions, and practices. These behaviors are evident across all levels of the organization, they go from daily interactions between frontline workers and heads of field teams, between field teams and the management and monitoring unit, and between the many leaders and everyone else. In this section we explore the relationship between Pratham's values and culture, and the way it works as a learning organization. This uses observation of Pratham over many years, interviews, the in-depth field work of Jossie, and a series of workshops with an informal leadership group of 40 senior staff that we worked with between 2019 and 2022. As motivation for this section, Figure 10 presents a word cloud of what the leadership group expressed in terms of the features of a learning organization. Openness, innovation, change, and adaptability feature strongly, while measurement also makes an appearance!

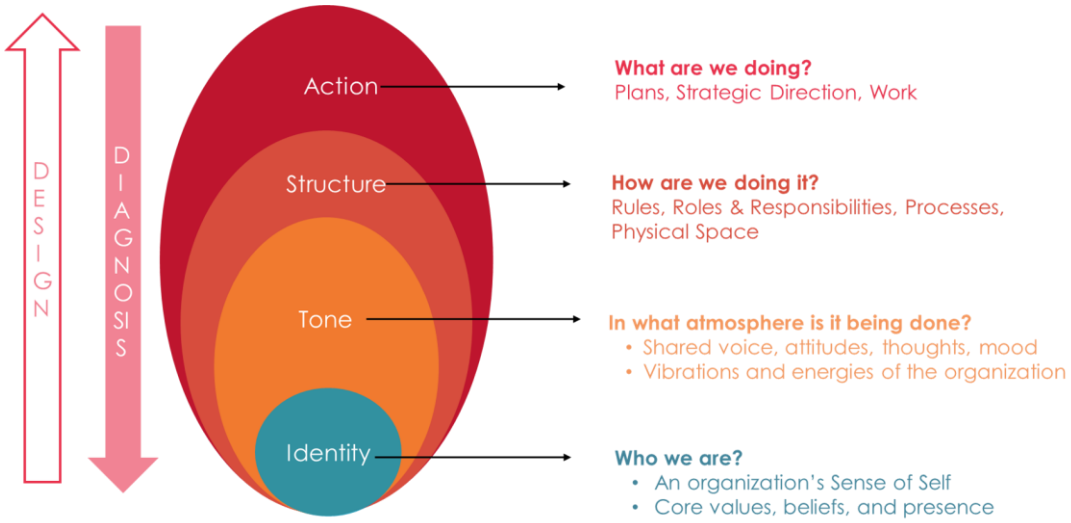
Figure 10. Pratham's leadership group has sharp views on what a learning organization is like

Source: Imago workshop with Pratham's leadership group in April 2022

To any visitor, observer, interlocutor, or staff-member these features of a learning organization ring true of Pratham. They seem totally internalized in organizational functioning and the attitudes and behaviors of individuals. The quote – "She's so Pratham!"– that we open this section with, and the vignette that follows, illustrates Pratham's openness.

Organizational culture is recognized in the literature as a key source of functional effectiveness (or ineffectiveness!) of an organization, whether public, private or non-profit. This is vividly the case for Pratham. In working with Pratham, we have used the diagnostic prism of an "organizational flame" (Figure 11). This prism assesses an organization in terms of four levels: the level of *action*, that is all the activities that an organization does; the level of *structure*, that describes its organization and formal processes; that of *culture,* the patterns of practices, inter-relations, behaviors, and internalized attitudes; and finally the *values* that are held by leaders and staff. However, the fundamental drivers of any organization's behavior lie in the domain of values and culture. The key question is then whether an organization's structure and actions are *aligned* with its culture and values. In Pratham's case we see a profound alignment, most clearly between values, culture and action. See Rivera (2022) for a discussion of our work on organization flame with Pratham.

Figure 11. The "Flame" illustrated with questions on culture

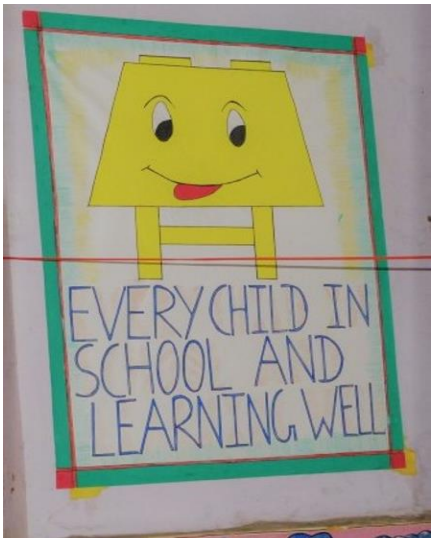


Source: Imago workshops with Pratham leadership group

Pratham's core identity and values are beautifully captured in their mission statement of "every child in school and learning well." (See Figure 12, from a Pratham office.)

Then the question is how personal and professional values support this goal. As part of our work with the leadership group, we surveyed some 150 senior members on how they saw Pratham's values and then workshopped the results with the leadership group. Figure 13 presents a high level synthesis of what emerged. This has words expressing core values– "honesty", "commitment", "innovation", and also more focused themes, including "do it simply," "trust," "inclusion," and "openness". What is striking both from Pratham's self-perception and all our observational engagement is how fully they live these values.

Figure 12. Pratham's core values are easy to understand!



Source: Pratham office

Figure 13. Pratham's values, as expressed in words from senior staff

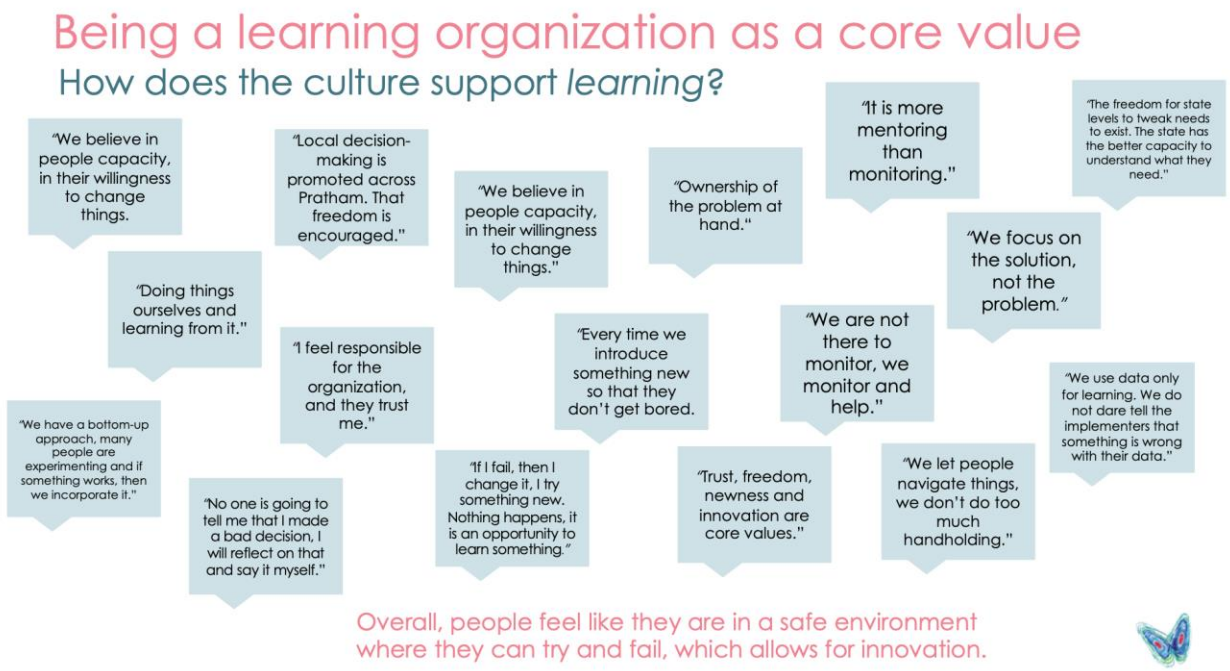
Source: Imago online survey of senior Pratham staff

In the words of Manisha Bharti, CEO of Pratham USA, Pratham's culture is very much reflected in the phrase "just do it", which has been there from the beginning in the leadership team and now embedded at all levels in the organization. As she put it, "*Pratham is made of people who have been with us for so long. There are many people who have grown up in the organization, and they have become flag bearers of the culture.*"

When talking with different staff members, it was evident that the values of "innovation" and "trust" led to a strong support for learning at all levels of the organization (this is the domain of tone/culture in the organizational flame). Figure 14 provides a collection of quotes from Jossie's field visit, where different members pointed to this insight in their own words. Trust is clearly embodied in the more specific elements for learning around local adaptation, many

people experimenting, using data to support implementers, allowing people to fail, adopting what works, and mentoring not monitoring.

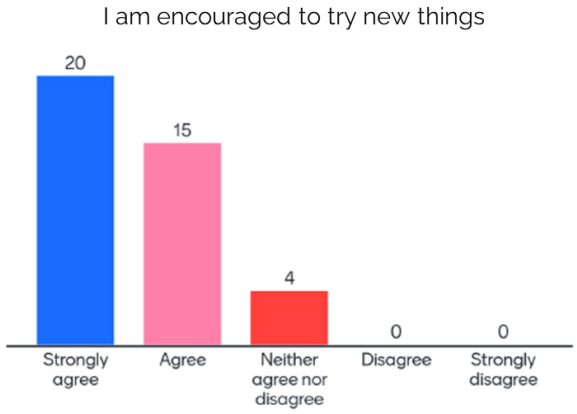
Figure 14. How Pratham's staff see learning in Pratham's culture



Source: Compiled from Jossie Fahsbender's field notes

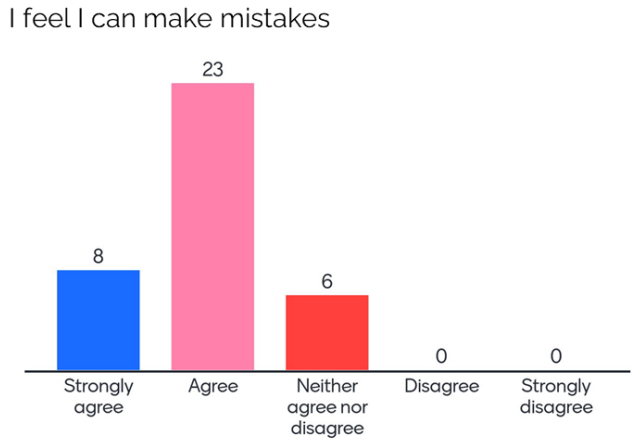
This was further supported by anonymous responses from the management team to questions of whether they are encouraged to innovate. 90% feel that they are encouraged to try new things, 84% of people said that they feel they can make mistakes and 73% said that they feel free to share their concerns. All this pointed to a safe culture to try and fail (Figures 15 and 16).

Figure 15. Trying new things is supported in Pratham



Source: Imago workshops with Pratham's leadership group in April 2022

Figure 16. Pratham has a culture in which it is fine to make mistakes



Source: Imago workshops with Pratham's leadership group in April 2022

These findings from the leadership group were fully borne out in the field work. Trust, freedom, newness and innovation were constantly referred to as Pratham core values. *"There is no culture of penalization at Pratham. When something fails, then people are more likely to give suggestions of what to do next time to ensure success", shared the Delhi MME team. In the words of Samyukta Subramanian, co-lead of the ECE content team: "If I fail, then I change it, I try something new. [Even if] nothing happens, it is an opportunity to learn something." "Local decision-making is promoted across Pratham. That freedom is encouraged",* shared one member of the MME team. Pratham's bottom-up approach facilitates decentralized prototyping of innovations and learning programs. At the same time, it represents a challenge when trying to incorporate a new technique to the whole team. *"We have a bottom-up approach, many people are experimenting and if something works, then we incorporate it",* said Faiyaz Ahmed, Head of content and training (Elementary).

People in various roles, in different state offices would go back to the same internalized idea, that the reason to collect data is not only to assess progress, and especially not to compare results. It is to understand how to improve the current approach.

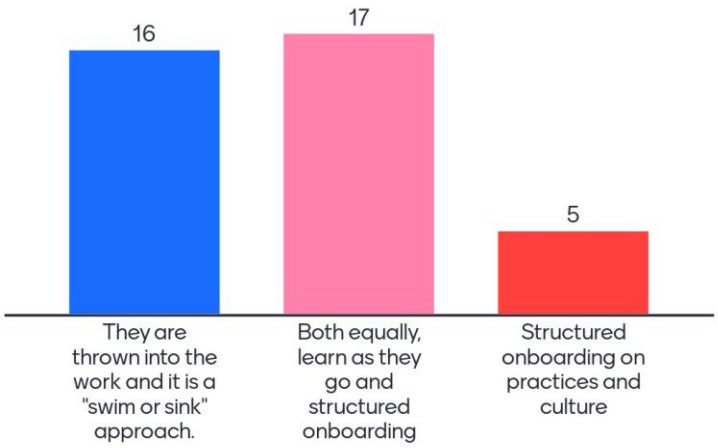
This learning through experimentation is also internalized in the work of the MME team. This group is as close to the field as the implementation and content teams. They work as a unit towards one purpose. *"We are not there to monitor, we monitor and help…. It is more mentoring than monitoring",* explained Karthik Menon, co-lead of the MME team in Delhi. This partly explains why implementers do not tend to get defensive when asked about their data. Hiding data or competing with other states would be counterproductive. People in the field see monitoring as a key support for their work, and about supporting the learning process, not to monitor performance. If data is showing that their children are not doing well, implementers do not question the numbers because they are the ones collecting them, and because data is always assessed and triangulated with anecdotal observations. "Anecdotal" in this context usually refers to the interpretative observations of Pratham staff with many years of experience with learning in schools.

This relationship between implementing teams and both internal and external MME groups is borne out in the views of where the most important source of learning is: as Figure 7 above illustrated the leadership group sees the most important source to be in the work of the implementing team. This isn't to say that the work of the MME team and RCTs is unimportant– as discussed above. Rather they provide the support, in different phases of the learning and innovation process. When reviewing data results, the discussion is never from a point of blaming but to help teachers teach effectively. As Shakti Kumari and Nikalesh Kumar, from Bihar's MME team shared *"We cannot even dare to tell them that they are not correct. The data is reviewed from a perspective that this is what the data looks like, and this is what the plan moving forward should be. It is never from a perspective of why is your data like this? We do not ask questions, we just say that this is what the data looks like and this is what your plan could be."*

This relates to a broader point on Adaptive Evaluation, that this can only be really effective, especially in iterative design processes, with very close collaboration between implementers and evaluators.

As a result of this blend of support and ability to fail, Pratham staff excel at taking ownership of their tasks and talking with whoever needed to make it happen. As Samyukta put it *"We are always doing things ourselves and learning from it."* New staff are brought into Pratham's way of being and acting through a mix of structured onboarding and throwing into the waters of work, where they "sink or swim," with a large majority of the leadership team saying that sinking or swimming was at least part of the process!

Figure 17. How do new people in Pratham learn about their job?



Source: Imago workshops with Pratham's leadership group in April 2022

6.1 **A sense of ownership with implementers and communities**

A further manifestation of the culture of innovation at the front line and the associated trust is the way Pratham engages with external actors. As discussed above, Pratham's work with communities and state actors is a crucial part of their work. Community ownership is key for the sustainability of Pratham programs. This has been earned from a long process of entering into the community and creating acceptance. A field worker at an *Anganwadi* (pre-school center) in Lucknow shared from their experience *"It used to be that the people in the village thought that Pratham people were here to take their jobs but now that Pratham has been going for so long, they understand that they are here to help them. Also, now they believe in the programs."* Similarly, state heads have found a way of working through the complex government system, understanding the priorities of the current government officials and building ownership of Pratham programs within local governments. This has allowed them to maintain their connections to several public schools and early childhood centers despite the changing government priorities and officials.

As an example, for the Uttar Pradesh State office employees in Lucknow, "*being close to the field*" meant spending at least half of their time in the schools. *"I spend half as much time in the field as I spend with my family,"* a UP supervisor proudly said while on a visit to a rural school, looking at the crops. For field implementers and supervisors, it means to literally live in the community. An initiative with the communities was set to allow field supervisors and volunteers to stay as guests in a community for at least two days. When the community perceives Pratham as a part of it, then it's easier to install changes and to create sustainability with the community support. "*Buy-in*" in these communities is extremely high. Moreover, there is a sense of pride and gratefulness derived from being a community touched by Pratham and having a Pratham sign drawn on the wall.

A corollary of all this is that everyone at Pratham is a teacher. When Pratham's head of state, both for UP and Bihar, visited a learning camp or an early childhood center they sat with the children, taught them educational songs and games and practiced the reading lines with them. Everyone was sitting at the same level, on the floor, creating a trusted, non-stressful environment for a kid to actually show what they had learned so far. (The Pratham staff also look at documents and assessment results!) The familiarity of everyone in the room was easy to perceive. Gurveen proudly explained to me how Rukmini's visits to the learning camps were and how she had learned from that. *"There is never a different level between teacher and student, you sit on the floor with them, you start teaching and that is how you learn if it's working".*

> *"I often feel like when we are confused about something, we say let's go run 10 classes ourselves…Right now we are trying to create these little games for kids, so last week I was in the field trying to see how it works with the kids. I can ask another team member to do it, but I feel like I should do it… I have seen Rukmini and Madhav doing it."*
>
> *Samyukta Subramanian, co-lead of the ECE content team.*

6.2 **Pros and cons of informality**

Pratham's magic rests in its people and their freedom to act and try new things. What part of Pratham's "structure", that is an important part of any organization (See Figure 11 on the organizational flame), allows for this? While all Pratham's staff is in some specified position (state head, front line worker, member of the content or MME team, etc.) it is striking how informal Pratham's processes are. Informality is both a pervasive feature and a source of strength for the culture of learning and trust. It has almost certainly been part of the remarkable alignment between values, culture and action. It has supported the feeling of being in a family, the trust and the support for innovation. However it also brings challenges.

Pratham remarkably grew to some 7000 staff, with very little formal organizational structures and practices on human resources. The organizational glue came from the power of its internalized culture and this effectively substituted for more structure in the formal processes. But this also raised questions, tensions and concerns over sustainability. The lack of structures sometimes led to a certain degree of chaos that staff have to manage on a daily basis. In response to an anonymous survey, members of the team said: *"People hired need to know how to deal with chaos"*- many people said in different interviews, not even half-joking but in a very fond way. This is relevant to Pratham's overall functioning. It also matters to the learning process. *"We bring so much adaptation and experimentation that you get lost in the way."* And exploration and work on the ground never stops. *"There is no break, no moment to stop and reflect."* In particular cases it can even lead to teams' burnout due to the lack of clarity on their specific role and responsibilities. So, there is a delicate balance between innovation and scaling. *"Diversity and scale have to be built in any innovation, but we quickly get over an innovation and go to another thing."*

These lead to some questioning in Pratham's leadership team around strategic organizational issues, including how the Pratham team systematizes the processes that encourage, implement and transfer the learning culture within the organization. From 2019, a "people group" was formed to lead a process of designing more formal human resource issues and even this had a feeling of being counter-cultural.

In contrast to the clear alignment on external learning, it is still challenging to find consensus among Pratham's leadership team when reflecting on questions of internal learning: *"How do new people in Pratham learn about their job? How do you think it should be?"*, *"How much of the learning is systematized and how much is person-specific?"* Very few people consider that there is a structured onboarding process on practices and culture for new Pratham team members; most thought that *"swim or sink"* was the main approach. This was consistent with staff perspectives from the field. *"The way I was mentored is the way I mentor new people that come to work with me. There is not so much hand holding"*.

On the positive side, people are given a task and they are trusted to be able to accomplish the mission using their own instincts, while developing in a safe environment in which they can try and fail.

After a long conversation about her role at Pratham, Samyukta was very surprised when I asked her why it was that she felt so comfortable taking risks at Pratham, trying new things. She took some time and then recounted "I feel very responsible for the organization and they trust me. Madhav was never worried about trying new things, he would always say fine, let's do it. The kind of ownership and trust that people have in you gives you the courage to do it. Many people at Pratham make big decisions that in other organizations would be done at the top level. I can always call Rukmini, she is always available for us, but sometimes we need to make the decision in the moment and they would never question our decision… When I needed to undertake a big new program (around 60 million rupees), I was very conscious of the responsibility, but a lot of people had faith in me that I wouldn't let them down… Also it helps that we don't work in silos, we share responsibility."

Jossie Fahsbender field notes

6.3 **Where does Pratham's culture come from?**

Since Pratham's organizational values and culture are such an important part of its story and effectiveness, we want to know how it came to be. This isn't the place for full organizational history, but we do make a few observations. There is no question that leadership was important both in Pratham's formative period and now. Pratham's co-founders, Madhav Chavan and Farida Lambay, and the other two key leaders, Rukmini Banerji and Usha Rane, are all, in different ways, inspirational individuals, with a compelling blend of charisma, total commitment to the goal of children learning, and no concern for hierarchy. Importantly, Pratham was not originally conceived of as an organization. Madhav has said the original goal was to create a movement, and the choice to form an NGO was driven by the need to have an organizational home for funders to channel financial support. Indeed, Pratham often feels like a movement housed in an organization, and this integration is one of the keys to its effectiveness. The inculcation of values and practices cascaded down through the organization, all the way to frontline workers, generating the behaviors and culture described throughout this paper. It also extended to the broader community around Pratham, notably in the volunteers in the extraordinary citizens-led assessment of the ASER reports and in villages.

There is also an important role in selection. Pratham attracts individuals who share its values and pays modest salaries. Some of the current senior staff have been in Pratham for decades. Others, for example younger professionals, have come more recently with high levels of motivation, stay for a few years and then move on–often to post-graduate studies. In the frontline, there is significant turnover, both as new staff are effectively mutually tested for fit, and younger people often move on to other work. This is also true of younger educated staff who come for a few years with high levels of motivation and then move on—often to post-graduate degrees. Even with this turnover, it is striking how the phrase "She's so Pratham!" is so recognizable.

7. In Conclusion: What can other organizations learn from Pratham's experience and culture?

Pratham is a remarkable organization that has learning and scaling at the core of all its practices, and this is profoundly linked to the values and culture–of trust, experimenting, toleration of failure, teaching and focus on measurement–that pervades its staff. Does this make it hard for other organizations to draw any lessons? We conclude with some reflections on this.

First, it is useful to reframe the question: not "How to have a culture like Pratham's?" but rather "How to develop to support the array of adaptive innovation and evaluation practices in ways aligned with our organization's values, culture and structure?"

Second, one of the purposes of this paper has been to provide an interpretation of Pratham's approach that can be documented in a more "formal", or specified structure of processes and techniques. This we think of as a more formalized mirror to Pratham's processes. This is why we emphasized techniques, for example in systems diagnosis, process tracing and iterative mechanisms.

Third, the authorizing environment for learning is always crucial for any organization. While this pervades Pratham's culture, in another organization it can come from more structured support for local experimentation, tolerance for failures, tight links between intervention and evaluation teams, and an intense focus on measuring and interpretation in ways that are highly accessible and understandable. Even when a Pratham-style culture does not pervade an organization, it will still be important to foster the behaviors, practices and attitudes in those parts that are at the frontier of innovation. This is a central issue for leadership.

Fourth, while leadership is key, it is far from the only issue in organizational behavior. In our work on "flame" as an interpretative prism for organizational diagnosis, a major focus concerns the question of alignment. If the elements of an organization, between action, structure, tone/culture, and values, are misaligned, the result is typically unresolved tensions and mismatches between talk and practice. We all know of organizations that preach innovation but cannot tolerate failure! A more hierarchical organization can still support an Adaptive Evaluation process, but this needs to be structured into the rules, and processes. Just as Pratham adapts its approach to other organizations, and system diagnosis is, as we suggest, the starting point for undertaking Adaptive Evaluation, organizational diagnosis is an important element of developing the associated practices.

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