What helps children to learn?
Evaluation of Pratham's Read India program in Bihar & Uttarakhand[1]
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The issue. India has made great strides in universalizing access to elementary education. However**,** one of India's most important developmental challenges now is how to raise the quality of basic educational outcomes. Enrollment is well over 95% but levels of basic learning (reading and arithmetic) are poor in rural government primary schools, and only slightly better in most private schools. The foundations for future learning are built in the early grades. Without these solid foundations built at the right time, sustained and meaningful progress in education is difficult.

For many years, India has had an automatic promotion policy through the primary stage. The new Right to Education law passed in 2009 prohibits examinations in the elementary stage. Both these policies allow children each year to move the next grade without ensuring that children are learning satisfactorily. Hence learning deficits accumulate over time. There is a huge risk that most of India's children will not be able to attain even the basic skills they need in order to participate effectively as future workers and citizens.

Read India. For many years, Pratham has been implementing large scale nationwide programs that deliver basic reading and math skills to rural and urban children.[2] Pratham's flagship Read India programme seeks to partner with village communities and government school systems to bring about a significant improvement in basic learning levels across the country. Pratham's strength lies in participative organizational strategies combined with practical pedagogies that can be practiced on scale by ordinary people. Between 2007 and 2008, Pratham's Read India campaign was active in almost half of India's villages reaching close to 30 million children during the year.

Pratham's pedagogy is known as CAMaL (Combined Activities for Maximized Learning). In this approach, activities include focusing on a specific target group of children, articulating clear learning goals, using appropriate teaching-learning activities and materials, and organizing children into groups by ability level. Underlying the entire process, ongoing simple measurement of children's ability to read, write, comprehend and do basic arithmetic and solve problems, is used to assess progress.

The evaluation. J-PAL South Asia was asked to conduct a rigorous evaluation of the impact of Read India for a period that covered the 2008/09 and 2009/10 school years.[3]

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[2] See www.pratham.org for more details.

[3] JPAL-South Asia is the India-based field office of Abdul Latif Jameel Poverty Action Lab that is headquartered in MIT, Cambridge USA. See www.povertyactionlab.org for more details.

A "randomized control trial" was undertaken in rural areas of West Champaran district in Bihar and in Dehradun and Haridwar districts in Uttarakhand.[4] Villages, and associated government schools, were randomly allocated to three alternative "interventions" which offered different degrees and types of support. Each intervention involved a different combination of village volunteers, teacher training, monitoring support and teaching-learning materials. For example:

- Intervention 1 included teacher training, monitoring and support, supplementary learning materials for children and village volunteers (who worked after school hours to provide extra attention and teaching to lagging behind children)

- Intervention 2 included teacher training, monitoring and support, supplementary learning materials for children but no volunteers

- Intervention 3: in this intervention, only supplementary learning materials were distributed to schools (This intervention was done in Bihar but not in Uttarakhand).

- Additionally, in one group of villages—the control group—government schools received no Read India support.

In Bihar there was also an evaluation of a summer camp for the month of June 2008. Here teachers were paid for an extra month's work to give remedial education to children who were lagging behind academically, supported by school-based unpaid village volunteers.

The evaluation used a range of testing tools, including the ASER test, a "fluency battery" that involves measuring a child's speed of accurate reading (an adaptation of the Early Grade Reading Assessment), and written Hindi and math tests.[5]

The results. The evaluation assessed impact by comparing learning outcomes for different interventions with the control group. The results provide some good news and some bad news.

- There was a significant impact on learning levels in Hindi and math for the summer camp in Bihar. These gains were still visible even at the end of two school years. The summer camp was aimed at children in Std 3, 4 and 5 who were not yet reading or doing arithmetic at Std 2 level. Virtually all the learning gains were in children with

[4] In Bihar this involved over 12,000 children, in 158 villages, and 264 government schools; in Uttarakhand there were almost 9,000 children in 114 villages and 122 government schools.

[5] The "fluency battery" is a Hindi adaptation of EGRA - Early Grade Reading Assessment that is now widely used in many countries.

low levels of initial learning, indicating that the pedagogy was well-designed and effectively implemented for this group.

- In the summer camp the data indicated that there were a substantial number of children in the camps who already had some basic reading competencies and thus were not from the intended target group for whom the summer camp had been designed. Such children did not experience any gains. If indeed, the summer camp population had been only the children for whom the camp was intended (i.e children in Std 3, 4 and 5 who were not even at Std 2 level), the average learning gains would probably have been higher.

- For activities during the school year, the intervention which had teacher training, monitoring, materials and village volunteers (who worked with weak children after school) showed significant learning improvement in Bihar. Moreover, in this intervention, the learning gains extended also to children at higher initial learning levels in Standards 3-5.

- However, for most of the interventions that relied entirely and only on teachers in the regular school year, there was little or no impact on learning levels, relative to the control group. Only the written test showed a small positive impact in schools that received teacher training and monitoring support, in both Bihar and Uttarakhand.

- These results have to be understood in the context of very slow average learning progress: for example, in Bihar 50% of children had *no change* in their learning levels during the entire duration of the study period of two school years.

Interpretation. These results support two important findings:

(a) Pratham's CAMaL methodology *can* have a significant impact on learning levels with minimal resources. This was apparent in the large impacts of the intervention involving volunteers. Teachers can also have impacts on learning, as the summer camps demonstrated. This is especially the case if learning goals are clearly defined and understood by teachers, if children are grouped accordingly and if they are continuously present. Moving away from the usual age-grade system and providing targeted help to specific groups of children who are lagging behind can be effective in dealing with the huge learning deficits in the Indian education system.

(b) *But* this rarely happens during the regular school year. There are a broad set of factors which in aggregate result in low levels of learning. These include: low teacher attendance and even lower child attendance (both documented in the study); a curriculum that is unrelated to the initial learning levels of children but teachers are compelled to follow; and very diverse learning needs in the same

classroom because children at different levels of learning are together in one grade. All of these factors combine to make the teaching-learning system in these states misaligned with the actual level and learning needs of children.

Implications. The first order challenges in rural schooling in India are ensuring that children come regularly and stay in school for the duration of the school year, and that they learn satisfactorily while in school. This requires incorporating activities and organizational principles that made the summer camps effective into the school year, such as grouping children in homogenous groups by ability level and conducting classroom activities designed for each group using appropriate teaching-learning materials. These strategies need to be supported by regular assessment of children's progress. The usual age-grade organization of our schools, combined with unrealistically fast-paced and broad-based curriculum standards, seem to be major constraints in helping children learn effectively given where they are today.

The emphasis given to school infrastructure and inputs under the Right to Education Act is important, but appears to be statistically unrelated to improving learning outcomes. In fact, RTE's emphasis on completion of the curriculum and automatic advancement is likely to be detrimental to improving children's learning. What is required is continued experimentation within government school systems as to what does and does not work, supported by regular, publicly available data on outcomes. Learning goals, teaching methods and grouping of children in education must take into account the actual needs of children, the actual capacities of teachers and the realities of the schools. The results of this evaluation add to a growing body of evidence across the country that points to the same conclusion.

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