State of the Evidence

Description of the Evidence
Rigorous research from Chile (Cabezas et al. 2011), India (see Banerjee et al. 2016, Banerjee et al. 2017, and Banerjee et al. 2010), Kenya (Duflo et al. 2011), and the United States (Cook et al. 2014) has shown that programs that target instruction to students’ current learning level rather than their age or grade can increase learning outcomes by up to 0.75 standard deviations. This involves assessing children to understand their current learning level, then re-grouping them for a period of time based on level. This can occur during the school day, after school, or in a “learning camp” model during school holidays. Targeting instruction to current learning levels can also be achieved via technology, including using software that personalizes content, as in India (see Muralidharan et al. 2018 and Banerjee et al. 2007), or simply using mobile phones to deliver targeted educational messages based on children’s current learning level, as in Botswana (Angrist et al. 2020).

Notes on Context
These types of programs are likely most effective in contexts where students are struggling to master basic skills, there is large variation in learning levels within grades, and teachers are incentivized to teach to the top of the class. These programs require trained instructors (government, volunteer, NGO employees, etc.) as well as monitors who can coach and monitor the instructors during implementation. Instructors also need access to easy-to-use assessments to group children by learning level and re-group children as they progress.

Equity Considerations
Targeted instruction approaches are inherently designed to support the furthest behind children, who are often from the most vulnerable backgrounds. Research from different contexts shows that first assessing childrens’ learning levels helps identify those with the greatest need for support. Through access to targeted instruction approaches, students with the lowest levels of learning, e.g. children who cannot read simple words or sentences, generally see significant progress in a short period of time.

However, since many examples of targeted instruction programs occur during or after school, or during summer breaks, out-of-school children or unenrolled children, who likely have low learning levels, may first need to be reached through other approaches.

Operationalization

Generalizability
Drawing on J-PAL’s Generalizability Framework, below are questions that will help you determine if a targeted instruction program might increase learning outcomes in your context. The below questions are not meant to be an exhaustive list of questions you will need to answer to determine if this type of program is appropriate for your context. They can, however, provide a starting point for applying the global evidence on this type of program to your specific context.
Local Conditions

- Is there a way to quickly assess students’ learning levels in literacy and numeracy?
- Is primary school enrollment relatively high, but students are falling behind in learning levels, particularly in early primary grades?
- Are students falling behind in basic literacy and numeracy or in more advanced skills?
- Is there variation in learning levels within classrooms? I.e. Are there students with test scores/knowledge far below the expected grade level?
- Is this issue country-wide or are there particular regions where this is an issue?
- Does age vary within each primary school grade?
- Are there other types of remedial education or targeted instruction programs that have been tried in the past?

Generalized Lessons on Behavior

- Children are better able to learn foundational skills when they are taught interactive engaging material that is appropriate for their current learning levels

Local Implementation

- For targeted instruction programs, such as Pratham’s Teaching at the Right Level approach to work, the following general conditions apply. Are these feasible in the context?
  - Students must be tested for baseline knowledge and grouped with other students at similar learning levels, and the curriculum must be taught to that level
  - Content can be delivered in different ways, including: in-school, out-of-school, with government teachers, with volunteers.
  - Key factors include: Dedicated time for re-organizing classes and ongoing mentoring/monitoring of teachers.
- What languages do the children in the prospective implementation areas speak?
- Is there a partner who has the capacity to implement this program in the country? What level of support might be needed from partners such as Pratham or TaRL Africa?
- On average, how many kids are in each grade and classroom in urban and rural areas? For example, in Indian rural schools there are about 25 students per grade but in Zambia there are 40+ students.
- Are there any groups within the government or education system broadly that might be resistant to this type of program? What would be the reasons for their opposition and how can this be mitigated?

Successful Examples

- Using Learning Camps to Improve Basic Learning Outcomes of Primary School Children in India (Banerjee et al. 2017)
- Balsakhi Remedial Tutoring in Vadodara and Mumbai, India (Banerjee et al. 2007)
- Case studies of Pratham’s Teaching at the Right Level in African countries

Further Action Options

Approaches with high and consistent effectiveness are recommended for direct action through pilots to demonstrate local proof of concept and generate momentum in-country; scale-up is recommended especially if an existing country effort is operational and ready for scale. These takeaways are meant to only be a guide rather than a definitive recommendation. In some cases, even effective and well-studied interventions might benefit from further research, for example, to test scale pathways or to optimize programs for cost-effectiveness. Based on the evidence for this category, potential next steps might include:

- Connecting with implementers to learn more about how to adapt and pilot evidence-based programs in this category;
- Connecting with researchers to identify relevant open questions on implementation and scale that may benefit from further research;
- Other activities to think through the policy implications of this evidence in your context.

If you are interested in exploring these or other options, please contact the J-PAL Education team at JPAL_Education@povertyactionlab.org, to set up an initial exploratory meeting. The team will be happy to brainstorm potential next steps.