



# Learning at Scale: Instruction and Systems Research

## Concept Note

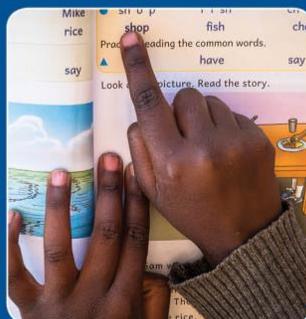
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## Summary

This research focuses on two areas: (1) identifying instructional strategies that are essential for improving learning outcomes at scale in low- and middle-income countries; and (2) learning about the characteristics of the systems within which successful scaled-up programs operate. A number of projects have demonstrated impact on learning at scale, but few observers or implementers have rigorously and systematically analyzed the ingredients and mechanisms for the success.

We will study the most effective large-scale education programs by collecting new data on classroom practices and education systems as well as by reanalyzing existing evaluation data. Key questions will focus on what the essential elements of effective instruction are, as well as what institutional structures are required for low-capacity teachers to employ effective instruction at scale. These findings will yield essential, adaptable guidance for policy makers.

## Introduction

Learning outcomes are poor and instruction is ineffective in many low- and middle-income countries. Although the number of successful programs is growing, few have demonstrated impact at scale. This work will identify existing projects that have demonstrated impact on basic skills at scale and use them to learn more about the components of effective instruction and the elements of the education system that support effective instruction. The research will be implemented by RTI International and is part of the Center for Global Development (CGD) education research consortium, funded by the Bill and Melinda Gates Foundation. The research will be guided by a technical working group hosted by CGD and co-chaired by RTI and CGD.

## Criteria for Project Selection

We are seeking projects that have demonstrated impact on basic skills at scale in low- and middle-income countries and that are willing to participate in further research. Table 1 lists the selection criteria.

**Table 1. Criteria for projects to be considered in the instruction and systems research<sup>1</sup>**

Effectiveness:	<ul style="list-style-type: none"> <li>▪ Evidence of causal impact at scale or causal impact at pilot with evidence of effective scale-up</li> <li>▪ Local demand for the project</li> </ul>
Scale:	Operating in all schools in at least two administrative subdivisions
Level of schooling:	Lower primary, upper primary and secondary
Subject:	Includes a literacy component (may include other subjects as well)
Geography:	Low and middle-income countries
Type of program:	Program aims to improve classroom teachers' effectiveness
Data available for analysis:	<ul style="list-style-type: none"> <li>▪ Impact evaluation data</li> <li>▪ Raw data on cost or cost-effectiveness</li> </ul>
Time frame:	Active through 2019
Sector:	Public sector; civil society; private sector
Access requirements:	<ul style="list-style-type: none"> <li>▪ Key personnel and key stakeholders available for interviews</li> <li>▪ Schools available for site visits (in high- and low-performing areas)</li> </ul>

<sup>1</sup> Meeting these criteria will not guarantee inclusion in this research. All viable projects will be reviewed by the lead researchers, and the final project selection process will be overseen by a Technical Working Group hosted by CGD.

## Research Questions and Methods

### Understanding Components of Effective Instruction

1. What classroom ingredients (i.e., teaching practices, classroom environment) lead to learning in projects that are effective at scale?
  - a. Do these ingredients differ by context (e.g., large vs. small classes, high-capacity vs. lower-capacity teachers)?
2. What methods of training and support lead to teachers adopting effective classroom practices?
  - a. Do the methods of training and support differ by context (e.g., high vs. low budget)?

We will address these research questions through primary data collection, including classroom observations and interviews with teachers. To collect the data, we will sample schools from both a high-performing and a low-performing district. Analysis of data across projects should illuminate the principles and intermediate goals of effective instruction, the methods projects can use to achieve these aims, and the ways in which these methods differ by context. We will also conduct secondary analysis of available impact and cost data.

### Understanding System Support to Effective Instruction

3. What system support is required to promote effective classroom practices and learning at scale?
  - a. Does the type of support differ by context (e.g., more vs. less decentralized, high- vs. low-capacity civil servants)?

We will address these research questions by interviewing teachers and head teachers, district officials and central ministry officials, and project staff.

The interviews will probe project support and system-level factors that led to successful implementation and outcomes of projects. At the central ministry and project levels, the interviews will examine contrasts between the current project and previous less-successful large-scale projects. All interviews will examine system factors that differentiate successful from unsuccessful districts within the current project. Analyses of data across projects will reveal how governments scale up programs, and also will clarify how system support differs by level of decentralization and in countries with limited resources and capacity.

## Engagement with research questions and findings

We aim to engage actively with several audiences throughout the study, from the finalization of research questions to the release of findings. The audiences will include:

- Participating countries and projects
- Key leaders in the education sector and in nonparticipating countries
- Donors funding large-scale projects (e.g., Global Partnership for Education, UK Department for International Development [DFID], United States Agency for International Development [USAID], UNICEF, World Bank among others)
- Implementers of large-scale education initiatives
- Education researchers

We will create multiple opportunities for these audiences to interact meaningfully with the study, to ensure that policy makers “see” how successful programs differ and to highlight the relevance to their own programs. For more information, or to suggest a program for inclusion, please email [Learning\\_at\\_Scale@rti.org](mailto:Learning_at_Scale@rti.org).