Structured Pedagogy

What do Education Leaders Need to Know?



INTRODUCTION

Improving foundational literacy and numeracy requires changes in day-to-day teaching practice. Structured pedagogy programs have demonstrated impact when they have succeeded in getting teachers to use the desired teaching and learning materials every day, consistently employ class time more productively, and systematically deploy improved instructional methods. What aspects of the education system are most critical to supporting those ingredients for success?



It is almost cliché to say that leadership is important, so we will focus on the aspects of education system leadership within a country that are instrumental to improving foundational literacy and numeracy. First, national leaders must state clearly that improved learning outcomes are the ultimate objective of the education system.

The results of assessments can be used to secure a stronger commitment to that objective. For example, one of the main achievements of the USAID Education Data for Decision Making project was the development and systematic use of the Early Grade Reading Assessment and Early Grade Math Assessment. In numerous countries, the results of these assessments were used to generate interest in and attention to early learning. Pratham in India and Uwezo in East Africa have also used assessment results to advocate for improving foundational literacy and numeracy outcomes. Low performance on these kinds of assessments, and extremely low in some cases, act as jolts to education systems. And when leaders in the education sector took seriously the implications of those assessment results, improving early grade learning became a priority objective in their sector strategies and plans.¹

When considering the outcomes of their country's education system, education leaders and other

stakeholders often are most concerned about performance on high stakes exams or whether students have access to a more advanced curriculum. Therefore, education sector leadership should understand and then emphasize in its communication the link between success in the foundational years of school and success at achieving better outcomes in upper grades and more advanced subjects. Ministries of finance can be shown the link between better early literacy and numeracy outcomes and cost savings through reduced dropout and improved persistence (using metrics such as learning adjusted years of schooling to show improved educational efficiency).

Education systems can sometimes become focused on improving outcomes for their most advanced students, with stakeholders thinking that is how they get better performance on national exams or international comparative assessments. We need to help education system leaders understand that the exact opposite is true. To counterbalance this tendency, systems should be helped to explicitly prioritize equity. An argument to support an emphasis on equity is that improved overall performance is achieved by bringing up the bottom. As illustrated in the graph shown here, countries with a much greater share of students who attain the lowest reading

NATIONAL LEADERS MUST STATE CLEARLY THAT IMPROVED LEARNING OUTCOMES ARE THE ULTIMATE OBJECTIVE OF THE EDUCATION SYSTEM

proficiency level on an international assessment have the lowest overall assessment outcomes. Higher performing countries are those that have reduced the share of students scoring in the lowest level, while increasing substantially the proportion of those in the intermediate levels. Moving students out of the lowest levels of proficiency not only helps overall system performance, but reduces inequities and helps more fully realize a country's human potential.

Furthermore, systems need to make sure that typically disadvantaged populations are not overlooked. Data should reflect the extent to which implementation is not only reaching but is appropriately adapted to the challenges faced

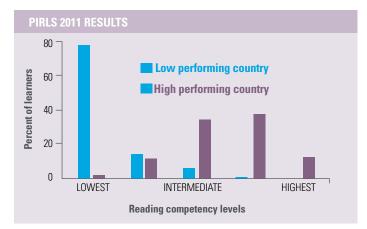
COMMUNICATE EXPECTATIONS

When leadership has committed to improving learning outcomes as a priority goal. And when they have targeted foundational learning as a critical facet of that, it is imperative to define student outcomes in terms that can be understood by the broad spectrum of stakeholders. Making such information available in curriculum documents or ministry policy papers is not enough, however. Rather, we advise ministries to publish specific goals in public forums and media and to show, for example, a paragraph of text that students should read fluently or examples of the math operations they should perform automatically.

For example, Prime Minister Modi of India publicly announced in September 2020, "The journey from 'learn to read' to 'read to learn' can only be completed through foundational literacy and numeracy," then added, "We have to ensure that all children who have passed Class 3 should read 30 to 35 words in a minute."³

Expectations regarding what students should be able to do make up only a piece of the overall puzzle. Education leadership must also explicitly define what actors in the system are expected to do to achieve those student outcomes. This includes expectations for teachers obviously, but also for how staff throughout the system provide the resources, materials, training, and support that teachers need to succeed.

Expectations for teachers must align with what research shows improves outcomes: the curriculum scope and sequence teachers



in neglected areas of a country. Of particular concern is assuring that efforts reach communities impacted by conflict or crisis.

should be following, the materials they should be using, the amount of class time they should be spending on foundational literacy and numeracy, and the instructional methods and assessments they should be regularly employing. All of which should be realistic within the given operating environment of schools (e.g., see textbox).4 Professional norms or standards for those teaching in the early grades can enumarate such expectations, but this is not just a question of definition. Of even greater importance is communicating those expectations through mutliple, mutually reinforcing channels (e.g., official ministry communiques, union or professional association newsletters, public service announcements, newspaper articles, website postings, etc.).. Training and support activities should be designed around helping teachers learn how to fulfill these expectations. And school heads and other decentralized administrative staff should repeatedly convey



Dana and her sister are walking. They are going to the park to play with friends. Suddenly, it begins to rain. "Where is your umbrella?" asks

Dana's sister. Dana opens her bag but she finds no umbrella.

"I'm sorry. It's not in my bag."

The two run back home so wet and sad. Now they have to stay home.

Example of an English text that a grade 3 student in the Philippines should read fluently and understand

these same expectations to teachers. Using the full range of media and social media channels currently available is strongly recommended, if not required, if expectations for teachers are going to be widely known, understood, and applied.

If students and teachers are being asked to meet new expectations for learning and teaching,

REALISTIC EXPECTATIONS

Education system expectations should be ambitious, yet realistic. Is the curriculum too broad? Is enough time allocated for foundational literacy and numeracy? Furthermore, does allocated time translate into actual opportunities for students to learn? How much time is lost to teacher absence, school closure, or poor management of the school day? A mismatch between an ambitious curriculum and the effective opportunity to learn offered in school negatively impacts learning outcomes. then the education system also has to establish clear expectations for the supports they will receive. The minimum package of materials, the amount of training and professional support provided to each teacher, should be clearly defined and communicated broadly. Everyone teachers, administrators, parents—should know what to expect and should be able to say whether their school received the required inputs and supports.

Data on teacher adherence to the structured sequence of lessons and on system provision of the desired package of inputs are indicators of whether the preconditions for improving outcomes are being assembled systematically across the education system. School heads and districts should collect and review such information throughout the school year.

MANAGEMENT DOWN THE SYSTEM

As important as the central ministries are, the district and subdistrict levels, that connect most directly with schools, are essential as well. Actors at these levels are important links in the communication chain needed to help schools, teachers, and communities understand the new expectations mentioned above. Not all communications should go through the bureaucracy, but these internal actors should be reinforcing the expectations in all their interactions with schools.

Teachers, school heads, and local administrators do need to gain specific knowledge and understand the instructional methods aimed at improving foundational literacy and numeracy (and teachers need to practice those methods). Training can provide that, but what training alone does not address is the normative environment within which teachers, school heads, and administrators will apply that knowledge and skill. The social and institutional context within which they live and work must inform a new set of norms (expectations) related to their comportment and practice. This requires taking time to understand the social and organizational context and to identify sources of "friction" (as described by Dan Ariely, James B. Duke Professor of psychology and behavioral economics at Duke University). that work against teachers' adopting new behaviors. We have to make it as easy as possible for teachers to adopt and sustain new teaching methods.

All this requires multiple, multi-channel efforts to gather information and then influence knowledge,

attitudes, and beliefs at the local level. Behavior change and social behavior change techniques, and the lessons from behavioral economics, should be called on. For example, conduct research into teachers' pre-existing beliefs and behaviors, and into the prevailing norms among teachers related to instructional practice. Target messages based on those findings and engage influential actors in communicating those messages to teachers. Make changed behavior easier to take up and nudge and support teachers as they try out new techniques.

In addition, district and subdistrict personnel and school heads should direct their efforts to supporting the delivery of the instructional core. Luis Crouch refers to this as tight management—management focused on a specific, limited number of priorities—to ensure teachers buy into the structured pedagogy approach.⁵ Low-performing systems improve when they manage to and deliver on implementing that approach.

Teacher observations and feedback should be designed to reinforce use of the materials and deployment of the desired instructional methods. Fast feedback loops are essential. School heads and district or subdistrict personnel should observe lessons just after teachers receive training to reinforce the approach and learn where teachers may be struggling. Waiting until the end of the year to conduct an evaluation wastes precious opportunity to reinforce, encourage, learn, and iterate to improve. It should be made explicit that conducting such observations is an expectation for these staff. MULTIPLE, MULTICHANNEL EFFORTS ARE REQUIRED TO GATHER INFORMATION AND INFLUENCE KNOWLEDGE, ATTITUDES, AND BELIEFS AT THE LOCAL LEVEL

MONITORING, INTERVENING, AND ACCOUNTABILITY

In Guide 7, on data and accountability we discuss data that are useful for monitoring the implementation and impact of structured pedagogy approaches. Here we add to the advice of that guide by stressing the value of monitoring as a means to reinforce the changed normative environment and expectations for teachers and schools. Most systems use school visits by district or subdistrict personnel to conduct inspections or to verify administrative compliance. Too often such inspections draw attention away from teaching and learning and end up reinforcing the wrong things. Visits to schools should focus explicitly (if not exclusively) on teaching and learning and, in doing so, demonstrate that these are the priorities of the education system. Pritchett refers to this as aligning the education system for learning-meaning administrative and managerial requirements should be aligned to improving learning outcomes.6

Even if administrative personnel are not pedagogical experts, the mere fact that they observe a lesson and look for a few key features of the structured pedagogy approach signals expectations to the teacher. Feedback to teachers on those few key aspects of their instruction again reinforces the expected new practices.

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In Jordan, data collected at the school level informs decisions about which teachers should get a more intensive level of coaching and which teachers require less.

Besides serving to reinforce expectations, collecting the data referred to in Guide 7 also provides the basis for identifying schools that may be struggling. Such information is vital, provided the system is prepared to respond and support those who need extra help. Thus, systems should create forums where officials can review school-level data and make decisions about where to target additional resources. Too often resources are distributed based on a philosophy of "fairness" defined as each district or school getting an equal allocation. Effort must be directed toward showing education system actors that equal distribution is often actually inequitable. After ensuring the basic allocation of resources to all schools, to promote equity the system could target additional training, additional support visits, or extra resources to help

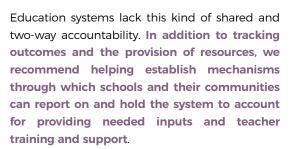
Some key features of structured pedagogy, easily observed and reinforced:

- 1. Can the teacher explain the objectives of her lesson? Can she state the goals for her students for the year?
- 2. Does the teacher instruct students to take out their books and open to the appropriate page?
- 3. Is the teacher referring to her teacher's guide throughout the lesson?
- 4. Are the students engaged in activities throughout the lesson period?
- 5. Was there time in the lesson for students to practice the learned skill individually?
- 6. Do teacher and student materials show obvious signs of use?

overcome disadvantages in some communities as needs are identified.

Finally, monitoring performance at the school level is also essential to establish accountability. The extent to which monitoring communicates and reinforces changed expectations, it also contributes to accountability within an evolving organizational normative environment. Accountability at each level-for teachers, school heads, and subdistrict and district personnelmust be aligned.7 If teachers are accountable for specific instructional practices and the learning outcomes of their students, then everyone else must share that accountability and be accountable for providing the support schools and teachers need.

> PROVIDE ADDITIONAL SUPPORT BASED ON SCHOOL-LEVEL NEEDS



TWO-WAY ACCOUNTABILITY



System accountable for: • Supports schools need to succeed • Learning outcomes

Schools accountable for:

 Learning outcomes
Implementing structured pedagogy

CONCLUSION

A theme that runs through this "How-To Guide" is the need for education systems to have robust two-way communication conveying expectations and hearing back about fulfillment of those expectations. Many systems will establish strong policy frameworks and strategies and plans, and recently many of those plans have recognized the need to accord priority to improving foundational literacy and numeracy. Ministries must do a much better job translating their commitment to improving learning into clear expectations for actors throughout the system. They must make use of a variety of communication resources, channels, and media to repeatedly convey those expectations to all concerned and for all concerned to monitor and be held to account for fulfilling those expectations. Ultimately, administrators and managers must be accountable for providing the sustained support and resources teachers and students need.

About the symbols in this guide:



negotiable": a must-have

RESOURCES

Lant Pritchett on learning as a priority (5-minute video): https://www.youtube.com/watch?v=wUehLnWdtxQ

Luis Crouch's RISE blog on three cases of system alignment: https://riseprogramme.org/publications/ systems-implications-core-instructional-support-lessonssobral-brazil-puebla-mexico

Schuh Moore, DeStefano and Adelman on opportunity to learn: https://www.epdc.org/sites/default/files/documents/ EQUIP2%20OTL%20Book.pdf

Lant Pritchett and Amanda Beatty on overambitious curriculum: https://www.cgdev.org/publication/negativeconsequences-overambitious-curricula-developingcountries-working-paper-293

Dan Ariely on Behavioral economics (TED talk): https:// www.ted.com/talks/dan_ariely_how_to_change_your_ behavior for the better?language=en

Brookings Institute on social accountability: https://www.brookings.edu/blog/education-plusdevelopment/2016/12/21/from-data-to-learning-the-roleof-social-accountability-in-education-systems/

Complete Series of Structured Pedagogy How-To Guides: https://scienceofteaching.site/how-to-guides/

AREAS WHERE TECHNICAL EXPERTISE WILL BE NEEDED

Pedagogy: to identify a limited set of "signal" aspects of instructional change so that observers of teaching practice know what to focus on when monitoring teachers and what must be communicated as "the new normal."

Behavioral economics: to design approaches to influencing teacher and administrator behavior that take into account the realities of human decision-making, incorporating such concepts as the overconfidence effect, temporal discounting, loss aversion, anchoring and framing, and social norms. Behavior change communications: to design surveys that provide insight into the knowledge. attitudes, perceptions, and prevailing social norms that influence people's existing behaviors, and based on those findings, design multichannel strategies for promoting behavior change.

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- article/education/mark-sheets-turned-into-prestige-sheet-for-parents-pressure-sheet-for-children-pm-6591811/ On opportunity to learn, see Audrey-Marie Schuh Moore, Joseph DeStefano, and Elizabeth Adelman, "Opportunity to Learn: A High Impact Strategy for Improving Educational Outcomes in Developing Countries," EQUIP2:
- Educational Policy, Systems Development and Management, U.S. Agency for International Development report, FHI 360, Washington, DC, March 2012. https://www.globalreadingnu learn-high-impact-strategy-improving-educational-outcomes-developing?g=eddata/opportunity-learn-high-impact-strategy-improving-educational-outcomes-developing-countries. On the limitations of overly ambitious curriculum see Lant Pritchett and Amanda Beatty, "The Negative Consequences of Overambitious Curricula in Development Countries," Center for Global Development (CGD), Working Paper 293, CGD, Washington, DC, April 2012. https://www.cgdev.org/publication/negative-conse pitious-curricula-developing-countries-working-paper-293 iences-overa
- See Luis Crouch's blog on the Research on Improving Systems of Education (RISE) programme's website: https://riseprogramme.org/publications/systems-implications-core-instructional-support-lessons-sobral-brazil-6
- Lant Pritchett, "Creating Education Systems Coherent for Learning Outcomes: Making the Transition from Schooling to Learning," RISE Programme Working Paper 15/005, RISE Programme, Oxford, UK, December 2015. ps://riseprogramme.org/publications/creating-education-syste https://riseprogramme.org/publications/creating-education-systems-coherent-learning-outcomes Benjamin Piper, Joseph DeStefano, Esther M. Kinyanjui, and Salome Ong'ele, "Scaling Up Successfully: Lessons from Kenya's Tusome National Literacy Program," Journal for Educational Change 19, (2018): 293–321. 7
- /10.1007/s10833-018-932 8 Ibid; Pritchett, Creating Education Systems, 2015.

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Guide authored by Joseph DeStefano