

This policy brief includes a **set of key findings and recommendations** stemming from a study on assessment-informed instruction. The study took place in 2022 and included Room to Read staff interviews and document reviews across six countries, deep-dive case studies in Nepal and South Africa with teachers and school leadership, and analyses of student assessment data across six countries.¹

Assessment-informed instruction constitutes “data-based decision-making,” which is the use of valid, reliable assessment data to determine what and how to teach. Teachers gather and interpret data to intentionally plan and modify instruction, identifying students who need supplemental instructional support, determining the type of support they need, and identifying strategies to meet those needs.²

Assessment-informed instruction requires that teachers are able to:

- Know **who** may be struggling or excelling
- Know **how and why** students are struggling
- Know **what** to do about it
- Have the **strategies and resources** to respond

And they need to be able to do this in classrooms that look like this:



Photo credit: Christine Beggs, Tanga Province, Tanzania

By its very nature, **assessment-informed instruction is a complex learning and adaptation system** that relies not just on having information about students’ skills but also on teachers and school leadership possessing the knowledge and skills to respond. Additionally, **assessment-informed instruction requires education systems that prioritize student learning outcomes, are flexible, and are structured to support continuous learning and adaptation processes.** The degree of **coherence within classrooms and systems** also influences the prospects for achieving effective assessment-informed instruction.

¹ The full study is available at: <https://scienceofteaching.site/wp-content/uploads/2023/07/Aii-Study-Room-to-Read-Final-June-29-2023.pdf>

² Young-Suk Grace Kim and Marcia Davidson, “Assessment to Inform Instruction: Formative Assessment,” *Global Reading Network Critical Topics Series* (Washington, DC: USAID, 2019), https://pdf.usaid.gov/pdf_docs/PA00W73W.pdf.



POLICY BRIEF: Using Classroom-based Assessments to Support Assessment-Informed Instruction

The **challenges that stand in the way of effective implementation of assessment-informed instruction** include:

- Assessments that do not provide teachers with timely, reliable, or valid data that are aligned with learning objectives
- Limited time available for teachers to administer and reflect on assessments
- Teachers' limited capacity and decision-making autonomy to adapt lesson plans and instructional delivery
- Tension between pressures to deliver ambitious curricula and the need to ensure that students have mastered the content being taught
- The perils of assessment data being utilized to “teach to the test” or to focus on students “on the bubble” to raise the performance of a classroom or school

Study background. The framing for this study was based on prevalent theories about what is required for successful assessment-informed instruction and the current evidence on the factors that facilitate or inhibit the use of student assessment data to inform instruction. We also considered what we **could learn from the scope of Room to Read's experience implementing an assessment-informed instruction model** (see Student Tracking overview on page seven) across six countries over the past seven years.

The study's areas of inquiry included:

- Knowledge and beliefs about literacy instruction and assessments
- Implementation of assessments in the classroom
- Utilization of data and linkages to resources within the education system
- Robustness of student tracking data

This brief focuses on findings from **two case study countries—Nepal and South Africa**—that were developed through surveys of teachers, school administrators, and Room to Read staff, in addition to a review of classroom-based assessment records in both countries. The sample for this study is not representative of the Nepali or South African education systems more broadly.

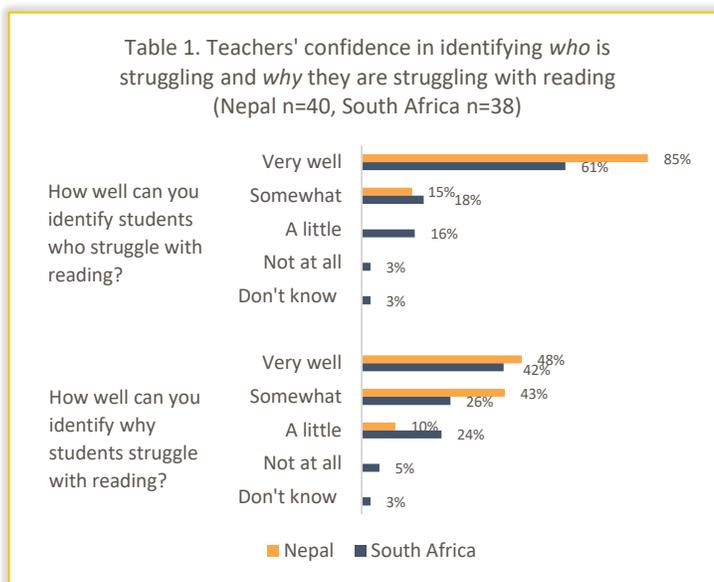
FINDINGS AND RECOMMENDATIONS

FINDING 1. Classroom instruction and **student outcomes can be improved in the absence of assessment-informed instruction.** Even with minimal evidence of adapted instruction based on student data, students in Room to Read-supported schools are learning to read. With **high-quality and cohesive teaching and learning materials, training, and coaching - education systems can deliver results for most children.**

RECOMMENDATION. Education systems **should institute a high-quality, cohesive literacy instruction model in classrooms that delivers overall learning gains before demanding that teachers use data to adapt instruction on a regular basis.** Policy makers should prioritize the use of assessment data to **identify students with the lowest scores** (rather than focus primarily on analyzing mean scores at the classroom or school level) and provide that support in addition to regular instructional time.

FINDING 2. Teachers in both Nepal and South Africa that we surveyed have a **solid understanding of the skills that children need in order to read with fluency and comprehension**. Teachers feel comfortable in their ability to identify which students are struggling but **less comfortable identifying why certain students struggle**. Teachers generally **did not indicate using differentiated instructional strategies** when a whole class is struggling versus when individual students are struggling. Overall, **teachers are not translating student assessment data into improved instruction and support** for students.

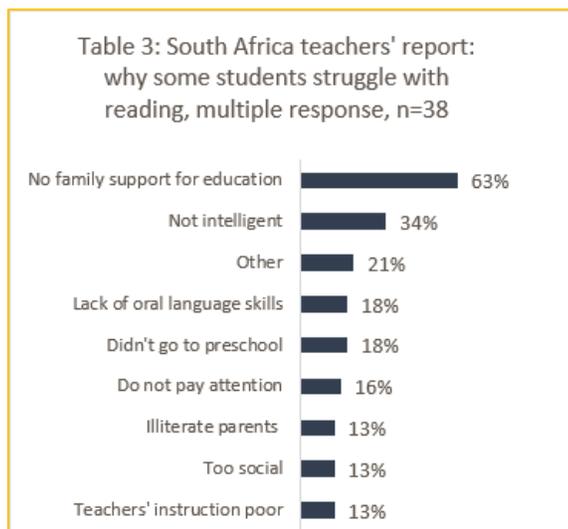
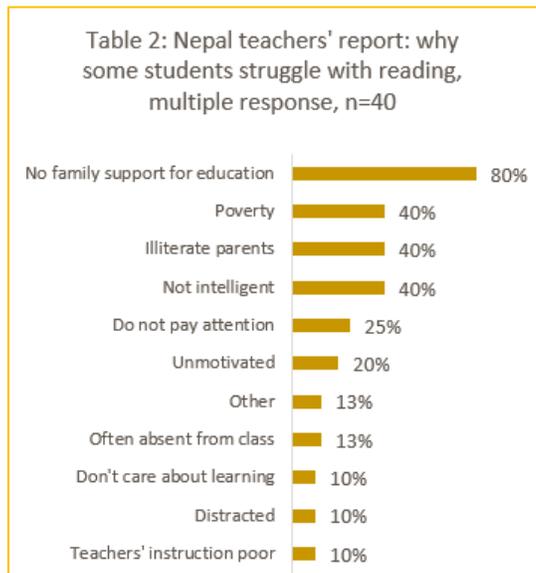
RECOMMENDATION. Enhancements to existing assessments should include making data more meaningful and actionable for teachers. This effort should also include **more detailed strategies for teachers to use during instruction that are linked to curricular content and pedagogical practices**. Equally importantly, policy makers should **prioritize school- and system-level strategies** to make space for adapted and differentiated instruction to support improved learning.



FINDING 3. Teachers have **limited opportunities to reflect on data and collaborate to develop specific strategies**. There are general structures at schools for reflection on student performance, including periodic staff meetings, but these **settings do not offer sufficient time, focus, or literacy-specific expertise to generate new and diverse ideas about how to respond to both whole-class and individual student progress**. Room to Read's Student Tracking system and coaching **provide teachers with important information about students' reading skills as well as information about strategies to improve outcomes**.

RECOMMENDATION. Education actors should **continue their efforts to build well-resourced, structured collaboration systems to improve instruction based on data**. However, in the interim, **partnerships with local nongovernmental organizations and other entities** can offer classroom-level support and coaching to teachers until these broader systems and capacities are in place.

FINDING 4. Both teachers and school leadership in Nepal and South Africa **overwhelmingly cite student and family factors as the most important reason why some students struggle** to learn to read (as compared to teacher- or school-related reasons). “No family support for education” was by far the most frequent response, with 80% of teachers in Nepal and 63% of teachers in South Africa citing this reason. Student intelligence, attention, and motivation were among the top reasons cited in both countries (responses with 10%+ shown in Tables 2 and 3). In both countries, **school-related reasons were rarely identified by teachers or school leadership as the primary reason for students struggling to read**. Respondents expressed **only moderate confidence in their ability to engage families and school administration to support struggling students**.



RECOMMENDATION. Education officials and their technical partners should orient school leadership and teachers regarding the **evidence that students from even disadvantaged backgrounds can learn and that quality education has the power to overcome historic and contemporary patterns of learning poverty**. Concepts such as fixed versus growth mindsets should be integrated into professional development curricula. **School leaders should be supported to identify parental and community engagement strategies** that are responsive to local opportunities and limitations.

FINDING 5. In both Nepal and South Africa, most teachers report **providing additional instruction time** in the form of after-school reviews or revision lessons, **but there is very little focus on the delivery of specific content or on targeting students who need extra support**.

RECOMMENDATION. Using the ample student assessment data that are available in classrooms, **support teachers in identifying students who need additional support and in tailoring content delivery**. Provide **flexible funding or materials** to implement supplementary instruction time and strategies. Consider **student ability grouping** for supplemental instruction and **rotating teachers and teaching strategies across groups**.

FINDING 6. Both the Nepali and South African education systems have committed to **expanding the availability of early-grade reading assessment data** in the classroom with the aim of improving instruction and student outcomes. We also found a **high level of convergence across the different types of assessments** being used in the classroom. This convergence has helped establish a steady focus on specific foundational reading skills, and teachers seem to be getting consistent messages about what is important in terms of student reading outcomes. This good news is tempered by the **reality that teachers are navigating increasing demands for assessment of their students' reading skills without the attendant additional time or support**. In both South Africa and Nepal, **teachers are administering at least three different assessment types**, all of which aim to understand students' mastery of reading and associated processes such as oral language skills, writing, and so forth. **Assessment fatigue** is lowering demand for and engagement with the data.

RECOMMENDATION. Government assessment policies and investments should focus on **strategies and resources to ensure that existing assessments produce reliable and valid data and support better use of those data**—rather than introducing new or expanded assessments. Now is an opportune time to take a hard look at the totality of assessments taking place in the classroom and to **identify opportunities to streamline the scope of assessments and encourage the use of data across assessment types to inform instruction**.³ Policy makers and education officials could introduce explicit guidance about how to use term-wise summative assessments in a formative manner or experiment with reducing the scope of specific assessments once their overall reliability and validity have been determined.

FINDING 7. Both countries are **aspiring to strike a balance between standardization of summative assessments at the national level and contextualization and assessment preparation at the local level**. This seems to have introduced **deeper engagement with reading assessments by local education officials and school staff but has also introduced variability in assessment items and leveling**, which has important implications for how these data should be considered in terms of monitoring systems and school performance.

RECOMMENDATION. In much the same way that education sector actors and governments have engaged in **policy linking exercises**⁴ for formal national-level assessments, there may be an opportunity to structure similar processes **at the local level**. These local-level processes could bring the perspectives of teachers, school leadership, and subject advisors more squarely into the assessment development process and also serve to **help consolidate how teachers understand and utilize assessments**. Policy linking exercises could **help harmonize the reference points and norms that are guiding decisions about assessment types and leveling**.

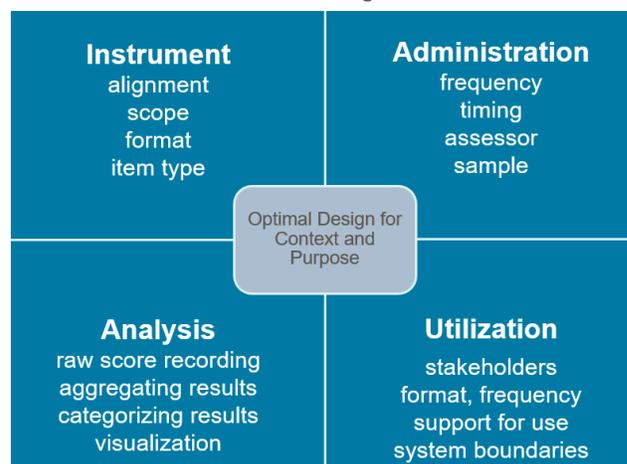
FINDING 8. The literature reflects a set of generally agreed-on assessment categories and definitions that are used in policy and guidance on best practices. However, as classroom-based **assessment ecosystems across countries are evolving, there are few consistent and meaningful dividing lines between the type of assessment and how the assessments are used by teachers**. Teachers rely on a variety of assessments—including summative, interim, and formative—in a variety of ways to understand how their students are doing.

³ This study found very relevant and detailed assessment items in government-required termly summative assessments in Nepal and South Africa. But because these data were derived from summative assessments, there was minimal orientation toward using these data as part of a formative process, even though the frequency and type of data would support such use.

⁴ Additional information on policy linking for learning outcomes can be found at <https://www.edu-links.org/resources/policy-linking-measuring-global-learning-outcomes>.

RECOMMENDATION. Reconsider the strict categorization of assessments that is often imposed in policy and guidance documents. To better support the discussion about assessment-informed instruction, one strategy might be to **deconstruct the characteristics of assessments further so governments and their partners can think more explicitly about how assessments complement one another and overlap.** Figure 1 outlines four key domains to consider as we reflect on assessment models and research to improve assessments and their use in different contexts. The interplay of these elements highlights the many possible variations of assessment types, their characteristics, and their uses.

Figure 1. Assessment domains



SUMMARY RECOMMENDATIONS. This brief summarizes findings from two country case studies (Nepal and South Africa) on assessment-informed instruction for early-grade reading. These findings can offer insights for other countries as they work to expand the availability and use of student assessment data to improve foundational literacy outcomes. Policy makers should ensure that assessment data are timely, reliable, and valid, while limiting the burden placed on teachers to assess students. The focus should be on using existing data, assuming sufficient quality, rather than on implementing additional assessment systems. Policy makers should also have modest expectations about the degree to which teachers can adapt instruction in response to assessment scores until more supportive systems are in place (e.g., smaller class sizes, more robust teacher instructional capacities, flexibility in curriculum and materials, and additional instructional time for struggling students).



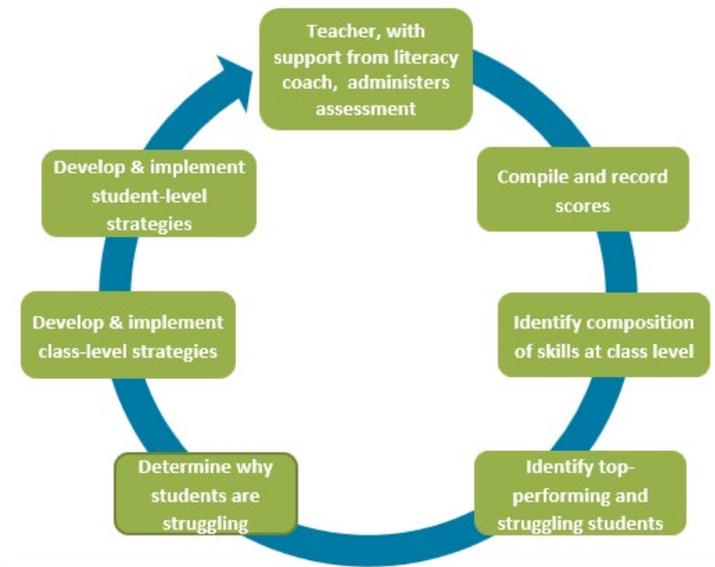
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SUMMARY OF ROOM TO READ'S STUDENT TRACKING MODEL

Who: Teacher administers the assessment to all grade 1 and grade 2 students, with support from Room to Read coaches.

What: The assessment is progressive and aligned with the curriculum. It includes letter sounding and syllable sounding, nonsense and familiar word reading, sentence reading, and comprehension questions.

When: Twice yearly. The assessment takes ten minutes per student.



LETTER RECOGNITION		SYLLABLES		NONSENSE WORDS		FAMILIAR WORDS		ANALYSIS & ACTION
Score range	No. students	Score range	No. students	Score range	No. students	Score range	No. students	
18 - 20	32	14 - 15	25	9 - 10	3	14 - 15	18	If most students fall in this range, most of the class is learning this skill well. Review will still be needed for students in lower ranges.
15 - 17		12 - 13		8	7	12 - 13	10	If most students fall in this range, consider reviewing this skill for the whole class.
11 - 14	5	8 - 11	10	6 - 7	6	8 - 11	7	Children in this range are struggling and need special attention. They can be checked on more and/or moved to the front of the classroom.
1 - 10		1 - 7		1 - 5	15	1 - 7	3	These learners are behind and need individual attention. Move them to the front of the classroom and check on them more often. Give them extra practice for this skill if appropriate.
0	3	0	5	0	9	0	2	

Scores are compiled at the classroom level.

Each country sets its own thresholds for each skill.

Scores are reviewed by teachers and coaches as part of the coaching process.

This brief was authored by Christine Beggs. For inquiries, please contact Christine.h.beggs@gmail.com. Funding was provided by the Bill and Melinda Gates Foundation through the Science of Teaching Grant managed by RTI International.

Suggested citation for full study: Beggs, C., Joddar, P. (2023) "Assessment-Informed Instruction: New Evidence on the Implementation, Utilization and Validity of Classroom-based Assessments"

See this study's Policy Brief on the Robustness of Student Tracking Data and the full study Final Report for a broader discussion on recommendations for implementing effective assessment-informed instruction. Policy Brief: <https://scienceofteaching.site/research/> Final Report: <https://scienceofteaching.site/wp-content/uploads/2023/07/Aii-Study-Room-to-Read-Final-June-29-2023.pdf>