Executive summary

Learning to read is fundamental to human dignity, freedom, and development. Literacy serves as the foundation for all learning and significantly expands opportunities throughout life. At the national level, countries with higher literacy rates experience stronger economic growth, reduced inequality, and improved public health outcomes. At an individual level, students who read well are more likely to succeed across all subjects in school, while children who do not learn to read face limited educational and career prospects and lower lifetime earnings. Moreover, when children cannot read, investments in other areas of education fail to achieve their potential impact. Ensuring that all children learn to read is therefore both a moral obligation and an economic necessity for every nation.

Unfortunately, many children in low- and middle-income countries (LMICs) are not learning to read. By age ten, a shocking 70% of children in LMICs cannot read and understand a simple, age-appropriate text. In many countries, after several years of instruction, children are so far below expected proficiency, they have very little chance of becoming readers. However, there is substantial evidence that improving reading instruction can sharply increase reading levels.

One of the primary causes of this literacy crisis is the failure to use instructional methods proven by research. Many education systems continue to use outdated approaches that research has shown to be ineffective or lack clear guidance on how to teach reading effectively. Other factors that contribute to poor reading outcomes include insufficient books, inadequate teacher training and ongoing professional development, high absenteeism, limited class time, instruction in unfamiliar languages, and teaching that doesn't match children's learning levels—all compounded by a broader failure to adopt science-based reading practices.

Fortunately, scientific research now provides clear guidance on how children learn to read and how to teach them effectively. Reading is one of the most extensively studied areas of human learning, with over a century of research. While early research focused primarily on English-speaking, high-income countries, the research base has expanded significantly. This report synthesizes the growing research from LMICs, reviewing more than 151 studies on effective reading instruction conducted across Africa, Asia, Latin America and the Caribbean, and the Middle East and covering more than 167 different languages. This expanded evidence confirms that certain fundamental principles of effective reading instruction are universal, though specific aspects of instruction can be adapted to different languages, writing systems, and cultural contexts.

This research shows that reading with comprehension is a complex process that relies on multiple, interconnected skills. These skills can be grouped into two broad domains: **decoding** and **language comprehension**. *Decoding* is the ability to recognize written symbols (e.g., letters) and convert them into the sounds they represent to recognize words. *Language comprehension* involves understanding what those words, sentences, and texts actually mean. Both decoding and language comprehension skills are essential and work together when children read: without decoding skills, children cannot recognize words; without language comprehension, they cannot grasp their meaning (Gough & Tunmer, 1986). Effective reading instruction must develop both skill areas simultaneously. These foundations start in the early years, at home or in formal early childhood education, and become the focus of the primary grades.

To develop these essential reading abilities, children need direct, systematic instruction in six core areas:

1. **Oral language development:**: this includes listening and speaking skills, and vocabulary development. Children must understand spoken words before they can comprehend written text. While children naturally develop some oral language skills, targeted classroom instruction significantly accelerates this development.
2. **Phonological awareness**: this is the ability to identify and manipulate the individual sounds in spoken language. Children must understand that spoken words are made up of smaller sound units before they can connect letters to those sounds and blend them into words.
3. **Systematic phonics instruction**: this refers to teaching children the specific relationships between letters and sounds, and how to combine these to form words. Children learn to "sound out" unfamiliar words by identifying each letter's sound and blending them together.
4. **Reading fluency**: this is the ability to read text accurately, quickly, and with appropriate expression. Fluent reading frees up mental energy for understanding meaning rather than struggling to identify individual words.
5. **Reading comprehension**: as part of reading instruction, children also benefit from explicit instruction in specific techniques to understand texts, such as monitoring their own comprehension and building knowledge about the world.
6. **Writing**: a strong evidence base, including emerging research from LMICs, demonstrates that writing instruction—including letter formation, spelling, and composing texts—significantly supports reading development and reinforces the other core skills.

These six skill areas must be taught explicitly, systematically, and comprehensively. *Explicit instruction* means teachers directly demonstrate and explain each skill, providing clear examples before students practice independently. *Systematic instruction* means that skills are taught in a logical order, following a planned scope and sequence. *Comprehensive instruction* means addressing all six skill areas, since weakness in any single area can prevent children from becoming successful readers. This approach contrasts with methods that expect children to discover reading skills on their own or that focus on only some aspects of reading.

A fundamental insight from reading research is that children do not learn to read naturally—reading must be explicitly taught. Unlike spoken language, which children acquire naturally through exposure, reading requires direct instruction. Evidence from neuroscience and cognitive psychology shows that skilled readers process words by rapidly connecting letters to their corresponding sounds, rather than memorizing whole words or guessing meaning from context. This scientific understanding confirms that children need explicit, direct teaching of how letters represent sounds and how to blend these sounds into words.

The core principles of effective reading instruction are universal, but successful programs adapt certain aspects of instruction to language features and individual student needs. First, children within the same classroom often have dramatically different reading abilities. Instruction must be tailored to meet students at their current learning level, ensuring struggling readers receive foundational support before moving to advanced skills. For those struggling, specific adaptations can include individualized or small-group support, multi-sensory approaches and accessible instructional materials. Second, different

languages require somewhat different instructional approaches. For instance, while systematic phonics instruction is beneficial in all alphabetic and alphabet-like languages, there are some differences in the amount of phonics instruction required. Languages with more consistent spelling patterns (like Kiswahili and Spanish) require less instructional time on letter-sound relationships than languages with complex, irregular spelling (like English and French). Similarly, alpha-syllabic writing systems such as Devanagari, Kannada and Tamil use a larger number of symbols and require more extensive instruction in symbol knowledge.

Three additional principles are critical for successful reading instruction:

First, the language of instruction significantly impacts children's reading development. Over one-third of children in LMICs are taught to read in a language they don't speak or understand well. This creates major barriers to literacy acquisition, resulting in slower progress and lower reading proficiency. Research consistently shows children learn to read most effectively when they are first taught in their home language. When using the home language for instruction is not possible, children need much more time and intensive support to develop oral skills in the instructional language before they can successfully learn to read in that language. Policymakers should carefully evaluate their country's language context before deciding on the language of instruction policies.

Second, implementation quality is critical for program success. Even the best-designed reading programs can fail without effective implementation. Success requires aligning with existing government priorities and systems; ensuring sustainable designs that can continue beyond initial funding; supporting teachers in adopting new methods; developing easy-to-use teaching and learning materials; and including the relevant content in skills-based initial teacher education and ongoing professional development. Programs must continuously monitor how well teachers are implementing new methods and provide rapid feedback to make necessary adjustments.

Third, evidence-based reading instruction may be more cost-effective than alternatives. Investing in proven reading methods during children's early school years is likely to reduce the need for expensive remedial programs later, decrease grade repetition, and lower dropout rates. Structured pedagogy programs that incorporate evidence-based reading instruction are among the most cost-effective education interventions available. This makes evidence-based reading instruction particularly attractive for countries seeking maximum impact from limited education budgets.

We urge education policymakers to promote evidence-based instruction so more children become skilled readers. Dramatic improvements in reading outcomes are not only possible but achievable within reasonable timeframes. Such improvements are essential for educational progress, economic development, and social advancement. Based on the comprehensive evidence presented in this report, we recommend policymakers:

1. **Make a national commitment** to ensure all children become skilled readers through effective, evidence-based instruction.
2. **Choose appropriate languages of instruction** and give children the support they need to learn to read in those languages.
3. **Deliver explicit, systematic and comprehensive reading instruction in all six core skills**: oral language, phonological awareness, systematic phonics, reading fluency, reading comprehension, and writing. Ensure that instruction is explicit and systematic—without leaving children to 'figure it out on their own'. Provide students sufficient time to practice reading—including ample opportunities to engage with books, read a variety of texts independently, and build a culture of reading.
4. **Adapt instruction to language characteristics:** the core principles of evidence-aligned reading instruction are universal, but successful programs tailor instruction to address contextual needs.
5. **Focus on effective implementation** by providing teachers with structured support, user-friendly materials, and ongoing professional development.

These evidence-based approaches must be thoughtfully adapted to each country's specific linguistic, cultural, and educational context while maintaining fidelity to the core principles that research has proven effective.