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What We Have Learned in the Past Decade: RTI's Approach to Early Grade Literacy Instruction

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Abstract

Over the past decade, RTI International has pursued the goal of quality, inclusive, differentiated early grade literacy instruction in nearly 30 early grade reading or early grade literacy programs in low- and middle-income (LMI) countries. Across our diverse portfolio, we have supported Ministries of Education (Ministries) in diverse contexts in their development and implementation of research-based early grade literacy programs and have learned important lessons based on our experience working with Ministries to design, develop, and implement early grade literacy programs. This paper describes the core elements that we have found to improve early grade literacy instruction and learner outcomes: the approach to teaching (Teach), the availability of quality, relevant learner materials (Text), the effective use of instructional time (Time), the use of formative assessment to guide instruction (Test), and provision of instruction in the most effective language (Tongue). This paper focuses on the acquisition of literacy in alphabetic and alphasyllabic languages in the early primary years (most typically, academic levels 1 through 3) and the kinds of exposures, instruction, and support learners need to become fully literate. These are the elements of a literacy program that can be taught, that should be present in teaching and learning materials and in teacher trainings, and that relate specifically to what happens in a classroom.

Many more factors contribute to literacy acquisition. However, we focus on the core elements in this paper to delve deeper and facilitate a richer discussion about these components. No one-size-fits-all approach to the development and implementation of literacy programs exists; the local context and constraints of any implementation can require adaptation and adjustments. In many cases, the fully diversified approach to early grade literacy instruction described in the classroom scenario has not yet been achieved. However, we hope that this compilation of lessons learned and best practices achieved through our experiences will help to further the efforts of all to provide high-quality, effective literacy instruction to all learners, particularly those in LMI countries.

Introduction

Over the past decade, RTI International has pursued the goal of quality, inclusive, differentiated early grade literacy instruction in nearly 30 early grade reading or early grade literacy programs in low- and middle-income (LMI) countries. Across our diverse portfolio, we have supported Ministries of Education (Ministries) in diverse contexts in their development and implementation of research-based early grade literacy programs, and we have learned important lessons based on our experience working with Ministries to design, develop, and implement early grade literacy programs. This paper describes the core elements that we have found to improve early grade literacy instruction and learner outcomes. We focus on the acquisition of literacy in alphabetic (such as Spanish and Kiwsahili, Arabic) and alphasyllabic (also known as abjad or abugida, such as Kannada)[1] languages in the early primary years (most typically, academic levels 1 through 3) and the kinds of exposures, instruction, and support learners of these languages need to become fully literate. These are the elements of a literacy program that can be taught, that should be present in teaching and learning materials and in teacher trainings, and that relate specifically to what happens in a classroom. No one-size-fits-all approach to the development and implementation of these programs exists; the local context and constraints of any implementation can require adaptation and adjustments. In many cases, the fully diversified approach to early grade literacy instruction described in the classroom scenario (see text box) has not yet been achieved. Also, many more factors contribute to literacy acquisition; however, we focus this paper on the core elements to delve deeper and facilitate a richer discussion about these components.

[1] An alphasyllabic language shares features of an alphabetic language (in which each sound has its own symbol, such as Spanish) and a syllabary language (in which each syllable has its own symbol, such as Cherokee). In an alphasyllabic language, the syllable is represented by a symbol that includes the consonant and the associated vowel, noted by diacritics. As a point of comparison, languages that have many words with open syllables (such as Spanish: "mesa;" and Kiswahili: "kitabu") can be read syllable by syllable but are still considered to be alphabetic, as each sound that comprises a syllable still has its own symbol.

These core elements are grounded in a vast body of rigorous scientific thinking and evidence about learning theory, reading development, adult learning theory, and stages of development. Equally, if not more important, they reflect the very courageous decisions by governments to improve literacy and our engagement with local governments and other education stakeholders to identify the most effective elements in their local contexts. These elements embrace and build upon teachers' knowledge and existing practices as well as the realities of resource-constrained environments in which the tension between extreme diversity and extreme potential colors every classroom and every learner's experience. In some cases, to meet these realities, the programs reflect steps toward, rather than the full realization of, the level of inclusion and differentiated instruction

Core Elements of Improving Early Grade Literacy Instruction:

Teach

Text

Time

Test

Tongue

Imagine you are visiting a Grade 3 classroom in rural Nigeria. Your first observation, other than a dirt floor and bare walls, is of two eager learners, dressed in matching uniforms, squeezed onto a wooden bench. They are excitedly pointing to the pictures in a storybook and taking turns reading to one another. Just beyond them, in the back of the classroom, a group of learners are crowding around a box filled with books, enthusiastically waiting their turn to choose their allotted number of books and return to their small groups scattered around the room. The classroom is abuzz with sounds of learners reading aloud, decoding new vocabulary words, and sharing their opinions about the book they are reading. The teacher is moving diligently from one group to the next, engaging learners with questions about the stories and encouraging them to make connections between what they have just read and their real-life experiences. As he does, he notes specific skills learners struggle with, so that he can reinforce them during the next part of the lesson.

This scenario illustrates a vision of early grade literacy instruction to which teachers and learners can aspire; yet, this goal is achievable.

that Ministries and we ultimately hope to achieve. They are important steps, however, upon which we and others can build.

Many factors other than those highlighted here also affect literacy development. Learning to read requires mastery of foundational skills, such as decoding and comprehension (as proposed in the simple view of reading, Gough & Tumner, 1986), but other factors augment the development of these literacy skills: motivation, vocabulary, linguistic knowledge, background knowledge, strategy knowledge, and cognitive capacities (Snow & the RAND Reading Study Group, 2002). In addition, no school-based implementation can succeed without the engagement of teachers, school-level staff, teacher support networks, staff of Ministries at all levels, parents, and community members.

What Is Literacy?

The definition of reading articulated by the Commission on Reading (Anderson, Hiebert, Scott, & Wilkinson, 1985) has guided decades of research on and implementation in reading instruction: "Reading is the process of constructing meaning from written texts. It is a complex skill requiring the coordination of a number of interrelated sources of information" (p. 7). Constructing meaning from, or comprehending the meaning of, written text is the ultimate goal of all of RTI's reading instruction programs. However, reading is not a natural process; a child does not learn to read the way she learns to speak, through natural exposure to language (or text) in her environment (Lyon, 1998). Thus, for many learners achieving the goal of reading requires explicit instruction in the foundational skills that lead to comprehension (Cunningham, 1990; Lyon, 1998; Stanovich, 2000). Although some learners can acquire foundational reading skills with less formal and implicit instruction, many learners require explicit, systematic instruction in and practice with these foundational skills. Learners may require explicit instruction because they come to the class missing important prereading exposure and knowledge, because they have specific learning disabilities, or because of a particularly opaque language orthography. A child's attention must be directed to the specific skill to be learned, explicit instruction on how to master that skill has to be provided, and sufficient practice opportunities to solidify the skill must be available.

The process of developing literacy is similar across languages. Beginning at birth, children develop an understanding of language and the conventional uses of print. In the early grades in primary school, children's implicit knowledge about language is formalized. This paper focuses on the acquisition of literacy in alphabetic and alphasyllabic languages in the early primary years (most typically academic levels 1 through 3) and what kinds of exposures, instruction, and supports learners need to become literate.

Learning to read with comprehension is one of two components of literacy development. The second, writing, is an important skill that allows humans to communicate with and influence others who are both physically and temporally removed. Like reading, writing is also a tool for learning, as we come to understand and remember content better when we write about it. Learning to write is a parallel, complementary process to reading acquisition and reading comprehension. Research has identified correlations between reading and writing performance (Tierney & Shanahan, 1991). At the level of foundational reading skill development, reading and writing are reciprocal in that each supports the development of the other (National Institute of Child Health and Human Development [NICHD], 2000; Shanahan & Lomax, 1986). Early stages of writing development—from invented spelling to more advanced letter, word, and sentence writing—do more than just provide an opportunity to practice the letter shapes and word spellings that one has learned via reading. Those early acts of writing actually reinforce the knowledge of phonemes, letters, and decoding/encoding (Chomsky, 1970; Ehri, 1995; Ellis & Cataldo, 1990; Invernizzi & Hayes, 2004; Read, 1971). In addition, in their meta-analysis Graham and Hebert (2010) found that spelling instruction leads to improvements in word reading and fluency, and that explicit writing instruction and time spent writing leads to improvements in reading comprehension.

When taught together, reading and writing mutually benefit each other, in part, because they share common meaning-making processes (Tierney & Shanahan, 1991) and because writing about a text enables the writer to record, connect, analyze, personalize, and manipulate key ideas in the text (Graham & Hebert, 2010). Because of these natural synergies between reading and writing development, RTI encourages the introduction of writing—including writing letters and words as well as creative writing, informative writing, and writing for learning—from the beginning of the first year of formal instruction.

A Balanced Approach to Early Grade Literacy Instruction

The overarching goal in any early grade literacy program is to ensure that all learners acquire the literacy skills needed to be able to read independently, at the appropriate rate, and with comprehension. In addition, developing a love of reading among learners is important. Meeting these goals allows learners to effectively transition from learning to read to using reading skills to learn content area, a shift that typically begins in earnest in primary level 4. Achieving these goals can also be challenging in multi-language contexts where resources are constrained and teacher in-service training may be limited. Research on literacy instruction, learning theory, and motivation provides important guidance in how to accomplish these goals in many high-income settings. However, little research exists that specifically addresses how best to teach literacy in many local indigenous languages, and misalignments between national language policies and research-based practices can result in the development and implementation of suboptimal literacy instructional programs. Below, we outline the five core elements of an approach to early grade literacy instruction that have been successful across diverse implementations of reading programs in multiple languages and countries. These elements align with the 5 Ts of effective reading instruction: teaching, text, time, test, and tongue (RTI International, 2011b). In presenting these core elements, first we highlight various contextual factors, and then provide examples of RTI's implementations across our diverse portfolio of projects.

A balanced approach to literacy combines explicit instruction in reading skills with holistic reading and writing experiences for learners (Pressley & Allington, 2015). In this balanced approach, development of the foundational reading skills is coupled with an appreciation for, instruction in, and practice with comprehension and meaning-making.

Our reading programs are implemented in LMI countries, which face challenges of undertrained teachers, insufficient budgets, strained infrastructure, heterogeneous populations of learners with diverse languages and learning needs, and school-based violence. Many LMI contexts lack sufficient quantities of early grade literacy teaching and learning materials and/or materials that provide sufficient coverage of the important components of reading development (Dubeck, Jukes, Brooker, Drake, & Inyega, 2015). In fact, many countries lack basic school infrastructure and struggle with poorly designed and implemented teacher in-service programs. They also struggle with high levels of learner and teacher absenteeism and learner dropout. Despite these challenges, Ministries are strongly committed to overcoming these barriers.

The Importance of Context

Teaching and attaining early grade literacy does not happen independent of context. We recognize the importance of adapting to the local context to implement our programs and make efforts to understand how the local context both constrains and enables our approach. Throughout this paper, we discuss various contextual factors that may influence the implementation of what research has demonstrated to be fundamental to early grade literacy instruction. These factors can include the language environment (such as a need for learners to become biliterate), learners' development of literacy skills, the capacity of teachers and support personnel, existing pedagogical practices, learners' literacy experiences at home and at school, and issues related to the production of teaching and learning materials.

In Malawi, we studied how teachers used their teacher's guide, paying special attention to the types of modifications they made to the lesson plans to understand existing teaching practices. We found, for example, that teachers added content into the lessons as a way to informally assess students, and they added energizers and songs as a way to effectively manage the flow of the lesson. We integrated these practices into teacher trainings and revisions of materials to make them more relevant to and useful for teachers.

RTI works with teachers to identify strategies that they already use and knowledge they already possess and helps teachers to draw upon these important resources as they master new strategies. For example, we know that singing is central to many cultures and local languages, and we encourage teachers to use songs with movement to foster the development of phonological skills; once learners memorize the words, however, we also encourage teachers to introduce learners to the individual words of the songs in writing. (Examples of this approach can be found in Nigeria Reading and Access Research Activity [RARA] and Kenya Tayari programs at https://www.eddataglobal.org.) Meeting teachers where they are, honoring the deep knowledge they have of their learners, and respecting the cultural norms and values that exist are central strategies to the work we do and are supported by theories of adult learning (TEAL, 2011).

Equality and Inclusion

RTI Funders and Ministries are increasingly asking RTI to help develop inclusion plans for learners with special needs. The intent of these plans is to provide quality materials and instructional approaches to effectively teach students with a range of ability levels and learning needs. The Teach section of this document describes such differentiated, equitable instructional techniques, and the Text section of this document describes goals for equitable and inclusive teaching and learning materials. In addition and more explicitly, in countries such as Uganda, Ethiopia, and Malawi, RTI has developed and is implementing innovative approaches specifically to promote the inclusion of children with disabilities in schools and classrooms. The following are selected examples of this important work.

- Within the United States Agency for International Development (USAID)/Uganda School Health and Reading Program, RTI proposed strategies to engage learners with special needs and their teachers. As of January 2016, nearly 9,000 teachers and practitioners were oriented on how to identify and support learners with special education needs. In addition, guidance on developing literacy skills of learners with special needs is embedded in our teacher's guides; teachers are being trained to write and use individual education plans; and materials are developed specifically intended to support learners with special needs. At the Ministry's request, RTI developed an *Individualized Education Plan* teacher's guide and a functional assessment toolkit. By July 2016, approximately 43,000 learners benefited from this intervention.
- The USAID Reading for Ethiopia's Achievement Developed Technical Assistance (READ-TA) Project focuses extensively on vulnerable populations, including learners with disabilities. For this project, all materials are developed with attention to gender and disabilities inclusion. READ-TA is also working with the Ministry to determine how materials can be made accessible for learners with cognitive, intellectual, physical, and other severe disabilities. This review will include transcribing all learner materials into Braille. READ-TA also has explored and is providing training on innovative assistive technology options to support both teachers and learners struggling to learn.
- The USAID-funded Malawi Early Grade Reading Activity (EGRA) program developed a *Disability Education Resource Guide*, which serves as a centralized data collection and dissemination resource, linking health and education programs to strengthen referral systems and enhance awareness of specialized services available to learners with disabilities in Malawi. During teacher training workshops, special needs education teachers train and provide actionable guidance to their mainstream teacher counterparts. Malawi EGRA has also held national Braille literacy

competitions—Braille Cups—to further raise awareness and celebrate the progress of learners who are blind or have low vision.

Teaching

RTI's approach to supporting Ministries in refining their early grade literacy programs is based in current theories of child development. Within this approach, literacy skills develop on a continuum, beginning at birth, and continue to build upon one another until a child can read with fluency and comprehension (Fountas & Pinnell, 2010). A critical element in this process is the development of positive attitudes toward reading and motivation to learn to read, emphasizing the need to create fun and exciting engagement with print from an early age. All of these skills are developed through conversation, storytelling, songs and rhymes, and interactions with books and print, as well as opportunities to write and play with language. The concept can be summarized as follows: "As learners weave together the many strands of reading, including background knowledge, vocabulary, language structures (syntax, semantics), and literary knowledge (print concepts and genres) with knowledge of print-sound relationships and decoding, they get closer to skilled reading and comprehension" (Scarborough, 2002 as cited on p. 5 in Gove and Cvelich, 2011).

- **Phonemic awareness:** The ability to manipulate the smallest units of sounds (or phonemes) in words.
- **Alphabetics (or phonics):** The understanding that the sequence of letters in a written word represents a sequence of sounds in spoken words.
- **Fluency:** The ability to read accurately and at an appropriate rate.
- **Vocabulary:** The breadth and depth of word knowledge and the ability to use and understand these words.
- **Comprehension:** The ability to extract meaning from text.

RTI's approach to teaching literacy embraces this development approach and is grounded in explicit instruction in the five key components identified by the US National Reading Panel (NICHD, 2000) in a meta-analysis of literacy instruction studies as the core elements of effective literacy teaching: phonemic awareness, phonics (alphabetics), fluency, vocabulary, and comprehension. August & Shanahan's (2006) meta-analysis research confirmed that these skills are important for children learning to read in a non-native language. Although the foundation is largely research conducted in the United States (see, for example, research on Hindi [Gupta & Jamal, 2006]; Kannada [Nag & Snowling, 2012]; and languages of South and Southeast Asia [Nag & Perfetti, 2014], research increasingly shows that these components directly apply to LMI contexts in which languages are alphabetic or alphasyllabic and in which words are formed by subword components of letters, combinations of letters (such as matras in Nepali), or syllables. Specific approaches to teaching literacy may vary across languages. For example, it is important first to identify the level of opaqueness of the language,[2] the morphemes (smallest meaningful unit in a language) that exist in that language, and the appropriate order in which to introduce them to learners. Even so, an integrated focus on these five components of reading development has proven to be an effective foundation for literacy development across languages.

The Five Components of Effective Reading Instruction

Phonological Awareness and Phonemic Awareness

Phonological awareness—the ability to hear and manipulate sounds and sound segments—follows a largely "language universal" sequence (Goswami, 2006, p. 463). Phonological awareness (a general ability to discriminate the sounds of a language) a phonemic awareness (a focus on the individual sounds [phonemes] in words) are key components of literacy development in all alphabetic and alphasyllabic languages (Share, Jorm, MacLean, & Matthews, 1984; Stanovich, 2000). The development of phonological awareness is particularly crucial in

[2] An opaque language, such as English, does not have a consistent symbol-to-phoneme relationship and includes a number of spellings for the same sound. For example, the words weigh, day, bait all have the same vowel sound. Spanish is an example of a non-opaque, or transparent, language, as it has consistent symbol-to-phoneme relationships.

[3] Twelve Bantu languages are spoken across central, southeast, and southern Africa by more than 5 million people (https://www.britannica.com/topic/Bantu-languages).

languages—such as Bantu languages[3] (Trudell & Schroeder, 2008)—which, due to verbal structure and word-break rules, have very long, multisyllabic words. In such contexts, an argument has been made that reading is best mastered through methods characterized by the following approaches, among others:

- early focus on phonological awareness, and
- practice with syllable recognition (Trudell & Schroeder, 2008).

The frequency and intensity of phonological awareness instruction varies across languages. In all cases, however, RTI recommends the use of short, explicit activities (Adams, 1990, Goikoetxea, 2005) that focus on all of the relevant linguistic units of a target language. These activities should be engaging, interactive, and motivating, and they usually will involve some kind of gesturing or other body movement. In an example activity from Haiti (Figure 1), teaching the phonological awareness skill includes the use of rhyme, gesture, and repetition.

Figure 1. Teaching phonological awareness: Haiti

Grade 2 French Lesson in Phonological Awareness

(Instructions translated here into English)

a. Listen to and Repeat the Rhyme

Teacher: Now, we are going to learn a new sound. The sounds that we are learning are going to allow us to speak better, read better, and write better. I am going to read to you a rhyme. Listen carefully. [*The teacher makes gestures to accompany the rhyme while reading. S/He stresses the sound of the day each time it appears in a word.*]

Assis sur un chat,
(Pretend to be seated.)

Zaza, le gros rat
(Open arms wide.)

Mange un ananas.
(Pretend to eat.)

Teacher: Now, I am going to repeat the rhyme, phrase by phrase, and you are going to repeat after me. You are going to make the gestures with me. [*The teacher reads the rhyme line by line, aloud, articulating correctly and with intonation the sound of the day. S/He asks the students to repeat after her/him, making the gestures to the rhyme.*]

Figure 2 shows other examples of microteaching phonological awareness teaching activities.

Phonics

Phonics is a method of instruction used to teach reading skills. It is sometimes referred to as alphabetics or the alphabetic principle. Building on phonological awareness, effective literacy instruction teaches that the sounds (phonemes) or syllables in spoken words can be represented by letters (graphemes), that letters can be written to form words, and that sentences have meaning.

Establishing an optimal sequence for teaching letters and letter combinations is language-specific. It should be a collaborative process with Ministries and language experts that takes many factors into consideration, such as the following:

- **Ease of production.** For example, the sounds of continuant consonants—such as /*m*/ and /s/—can be elongated and thus are easy for a teacher to model for a class. Stop-consonant sounds—such as /*t*/ and /*k*/—cannot be elongated and, thus, can be harder for learners to hear and master. The difficulty of letter instruction should be considered in a sequencing of letter introduction.
- **Utility.** To move learners to forming words as quickly as possible, teachers should present letters that can be used to make many familiar words.
- **Visual appearance.** Learning letters that have distinctive shapes is easier than learning letters with similar shapes. The letters *b* and *d*, for example, share a similar appearance and should not be introduced at the same time.

Little research has been conducted on specific phonics instruction approaches in local, indigenous languages across the globe (de Vos, van der Merwe, & van der Mescht, 2014). A growing corpus of literature acknowledges, however, that phonics instruction remains relevant for alphabetic and alphasyllabic indigenous languages. African and other indigenous languages can contain complex and nuanced sounds and letter combinations—for example, the Bantu language isiXhosa uses longer, multisyllabic words that incorporate blends, digraphs, and trigraphs (such as *inkcenkce*, *intsimbi*, and *isitshixo*) (de Vos et al., 2014)—and any approach to phonics instruction must take such complexities into account (de Vos et

Figure 2. Phonological awareness instruction examples: Indonesia

1. Scavenger or treasure hunt
Select three or four sounds. Distribute pictures around the room of items that begin with these sounds. Have students find the pictures for each sound. The class may be divided into groups, with each team looking for a particular sound (e.g., the /*s*/ team, the /*b*/ team).

Or

Pick a sound and have students find objects in the classroom that start with that sound.

2. Clapping
Say a simple sentence. Repeat it slowly and have students clap for each word you say. Start with sentences that use all single-syllable words. Then use names of students that have more than one syllable. Gradually, add more multisyllable words. Remind students to clap each word, not each syllable. For example:

- I have a cat.
- John saw a blue book.
- Matilda has a pretty dress

3. Counters
Have children put five counters in a row on their desk (rocks, bottle caps, etc.). As you say a sentence, have students move a counter forward (above the row) for each word you say.

4. Boxes and counters
Give each child a mat with four boxes, as well as four counters (rocks, bottle caps).

Activity 1: Say a sentence of up to four words. Children must put a counter in a different box for each word they hear and then count the number of words in the sentence.

Activity 2: Say a word of up to four syllables. Children must put a counter in a different box for every syllable they hear, and then count the number of syllables in the word.

5. Teacher read aloud
Activity 1: Read a Big Book, poem, or chart. Then have students identify some of the on "long" and "short" words they heard. With each word identified, have students clap out the syllables to verify if it is a long or short word.

Activity 2: Have students be "syllable detectives" and find words in the story that have a certain number of syllables (3, for example).

6. Bag it
Use real objects or pictures for this game. Put the objects or pictures in a bag. Have students take turns pulling a picture or object from the bag, saying the word, and then tapping out the syllables in the word.

7. Picture or object sort
Put a syllable chart, with accompanying drawing, on the board (see example for English below). Then have students choose an object in the classroom or picture, say the word, tap the number of syllables, and place the object or picture under the appropriate column.

1	2	3

8. Name sort
Make room for three or four rows in the classroom. Choose a student whose name has one (two, three, or four) syllable(s) to represent the keyword for each of the number of syllables. Then have students take turns saying their names and figuring out which key name has the same number of syllables as theirs.

Figure 2. Phonological awareness instruction examples: Indonesia *(continued)*

9. Name detective
When calling students by name for attendance or when choosing them for an activity, say their names in syllable segments (one syllable at a time with a pause between the syllables) to see if they can guess who the person is.

10. Guess the word
Have students say words in syllable segments (one syllable at a time with a pause between the syllables). Other students guess what the word is.

11. Ball toss
Have students stand in a circle. Say a word and toss a ball (or beanbag) to a student. That student has to think of a word that rhymes. If he or she cannot think of a rhyming word, he or she simply tosses the ball to another student. If a student gives a rhyming word, he or she tosses the ball back to the teacher. The teacher then chooses another word and the game continues.

12. Fists together, fists apart
- Start with words with a single consonant as the onset (e.g., m-an; b-ook), and then use consonant clusters or blends (e.g., st-op; fl-at; br-own).
- Use your hands to demonstrate:
  - Put your fists together and say the word book.
  - Then move your fists apart as you say each segment
    - b-ook
  - Then bring your fists back together and say book again.
- Give several examples and then have students model after you.
- During the day, present words in onset and rime and ask students to guess the word.

13. Pat-clap
Have students sit in a circle. Ask them to practice a pat/pat/clap rhythm by patting their legs twice and then clapping. Once they have the rhythm, use it to reinforce rhyme segmentation.

Provide a word segmented in onset and rime (b-at). Students pat their legs as they say the onset (b) and then the rime (at) and clap as they blend the word together again (bat). For example:
- b (pat legs)
- at (pat legs
- bat (clap hands)

Use students' names, words from across the curriculum (animals, colors, numbers), or stories.

14. Matching
Sound-matching activities help students learn to listen to words to hear if they begin or end with the same sound.
- Start with students' names. Pick two or three students whose names start with the same sound. Have them come forward and say their names: Michael, Manuel, and Maria, for example. All their names start with the same sound—/*m*/. (Make sure you say the sound and not the letter.)
- Repeat with other groups of students. Each day, pick a different group of students and have them tell what is the same about their names.
- Extend this activity by having students think of other words that begin with the same sound.

15. Travel game
Pretend to pack a suitcase for a trip, but tell students that only things that begin with a secret sound may be packed. Have students make suggestions of things that can be put in the suitcase. If the item starts with the secret sound, pretend to pack it. If it does not, tell students that it cannot go in the suitcase because it does not start with the secret sound. Continue with the game until several students appear to know what the secret sound is. Then play the game again, using a different sound.

al., 2014; United Nations Educational, Scientific and Cultural Organization [UNESCO], 2016).

RTI's early grade literacy approach emphasizes the explicit teaching of phonics. This approach employs instructional routines that allow regular practice with letter-sound correspondence, letter identification, word decoding, and word encoding (spelling). In many languages, instruction progresses from synthetic phonics (a focus on individual letter sounds) to a more analytic approach (focusing on combinations of letters, also known as chunking). The speed of this progression can vary by languages, and, in particular, little research has been done on optimal phonics instructional approaches in agglutinative languages, such as Bantu and Algonquian languages. Where optimal letter sequences are not yet established, as in the Malawian language of Chichewa, RTI engages with local linguists and language experts to determine the best sequence in which to introduce graphemes. As with phonological awareness, the optimal amount of time allocated to phonics practice varies by language. Decoding in orthographically consistent languages (such as Haitian Creole) tends to be easier than decoding in orthographically inconsistent languages (such as French). More time might need to be allocated to phonics instruction within orthographically inconsistent languages to ensure learner mastery. We recommend that comprehensive phonics instruction includes regular opportunities to both read and write the phonics patterns being studied.

Teachers, researchers, and others are increasingly aware that the process of learning to *write* facilitates, and is not just itself facilitated by, learning to *read*. The alphabetic principle is the concept that letters represent speech sounds, and many learners begin to fully understand this concept when they begin to write their own names and spell out words phonetically. Research in multiple languages with alphabetic and alphasyllabic orthographies has shown that spelling develops along predictable stages (Bear et al., 2016). Explicit spelling instruction targeted to the learners' developmental level, word studies, and opportunities for frequent writing have been shown to be effective for spelling development (Graham & Santangelo, 2014), which in turns aids in reading words.

Learning how to form letters on paper is also an important skill that complements the teaching of letters in early primary grades. Learning how to print letters includes learning correct pencil grip, hand position, letter shapes, relative letter sizes, letter alignment on the page, spacing, and more. Moreover, learners need to be able to write fast enough to express their ideas fluently. Research shows that learners with better physical writing skills write with better quality because, when their attention is no longer tied up with letter formation, they are free to focus on the organization and flow of their ideas (Graham & Harris, 2013).

Fluency

Fluency is the ability to read with accuracy, speed, and prosody (expression); it can also refer to saying the sounds of letters or reading syllables or words in isolation accurately and quickly. Without achieving a level of fluency that allows them to shift from word identification to overall meaning, beginning readers find it difficult to derive meaning from text (NICHD, 2000; Samuels, 2002).

Again, little research on the role of fluency in learning local, indigenous languages as primary languages has been conducted, and even less has been conducted on learning indigenous languages as second languages (L2s). Unlike English in the United States, no common benchmarks exist for local, indigenous languages regarding the number of words per minute a learner should be able to read to be considered fluent at a given grade (Pretorius & Spaull, 2016). That said, assessments carried out in indigenous languages suggest that children can only begin to comprehend once they reach a certain threshold of fluency, although this threshold may vary by language. Recognizing the importance of achieving mastery of foundational reading skills, RTI focuses on building both accuracy and speed of foundational prereading and reading skills. For example, in Liberia and Kenya, we encouraged letter identification speed by using flashcards. In Indonesia (Figure 3), we regularly use guided reading to increase fluency,

Figure 3. Fluency instruction example: Indonesia

Note: The most important activity students do during guided reading is READ. Students should be reading the majority of the time.

The frequency with which students should do guided reading depends on their reading abilities.

READING ABILITIES

Struggling readers	**Students reading at grade level**	**Students reading above grade level**
Daily session with teacher	*Session with teacher at least 4 times/week*	*Session with teacher 2–3 times a week*

WHAT TO DO DURING A GUIDED READING SESSION

Before starting session

- Identify that the text is at students' instructional level (not too hard, not too easy).

Before having students reading

- Have them look at title and picture and predict what is going to happen in the story.
- Model reading the text for the students. Have students follow along with their finger as you read.
- After you have finished reading, ask students questions to build their comprehension of the text and their understanding of key vocabulary words.

As students reading are reading the text

- Have them read the text in a variety of ways:
  - Whisper reading (students read aloud in a quiet voice
  - Pair reading (pairs of students read the same aloud at the same time)
  - Echo reading (The teacher models reading a small section of the text (sentence or two) with accuracy, fluency and good expression. Students repeat the modeled reading)
  - Choral (all students read aloud with the teacher)
- Listen to students as they read. Give them feedback about what they are doing well and what they need to work on.

After students have read the text

- Ask them their opinions about the book or text and have them make connections between what happened in the book or text and their own experiences.
- Ask additional questions to develop students' comprehension of text.
- Have students summarize the text.

instructing teachers in how to conduct effective guided reading sessions.

In Nigeria, we included notations in the teacher lesson plans to have learners read every lesson aloud—as a group, singly, or in pairs—to build accuracy. In Egypt, as the next example shows, we embedded multiple fluency activities in materials, including encouraging learners to reread texts with a corresponding decrease in the level of teacher support (Figure 4).

Vocabulary

Vocabulary knowledge is the fourth key component of and is an important factor in reading comprehension (Butler, et al., 2010; NICHD, 2000). As learners decode words in text, those words will map onto

Figure 4. Repeated reading example: Egypt

Egypt Primary Learning Program: Repeated Reading

Use: To support beginning reading.

Why: In the beginning stages of reading, pupils may read slowly and with pauses. This is normal. Teachers can help their pupils become fluent readers. They do this by decreasing the amount of support they provide.

How:

Echo Reading: Use with the text when it is first introduced. The teacher reads first and then the class reads. Read enough material that pupils cannot rely on memory alone.

Choral Reading: Everyone reads the text together. The teacher's voice helps the pupils.

Partner Reading: Several pupils read the text together orally.

Teacher Responsibility
echo
choral
partner
whisper

Teach the procedures to the pupils:

1. Take turns.
2. Follow along while your partner(s) reads.
3. Don't talk about other things.

The teacher should monitor pairs or small groups offering help as needed.

Whisper Reading: Beginning readers are not ready to read silently, but they can read the text in a whisper.

1. Remind pupils to listen only to their own voices.
2. Remind pupils to use whisper voices.
3. Provide pronunciations as needed.

their oral vocabulary, and their existing knowledge of the words will enhance fluency and support comprehension. Conversely, when learners cannot automatically identify the meaning of most of the words in a text, they have difficulty comprehending the text (Perfetti, 1985).

A learner's vocabulary is developed through frequent and regular opportunities to listen to language and to read both with the teacher and independently, especially when multiple genres of text are used. In addition, in the early grades—and especially in contexts where learners typically do not have access to extensive reading material—explicit teaching of vocabulary is crucial. The approach that RTI uses to build vocabulary gives learners the opportunity to see, say, write, and talk about the meaning of words. In this way, when learners come across words as they read, they have a better chance of recognizing the words and reading the text with understanding. The following example from Liberia shows how the explicit introduction of new vocabulary can be embedded in a reading exercise, with vocabulary instruction happening within the prereading of the text (Figure 5).

Figure 5. Vocabulary instruction example: Liberia

4 Reading and Comprehension 17 minutes

Review

Before students read the text, review sight words with them. Write the following words on the board: ***call***, ***live*** (verb form of the word), ***these***, ***were***, ***laugh***, ***water***, ***about***, ***learn***.

These are some sight words that are in this text. We have learned these words, but we'll review them to make sure we can read them quickly.

Randomly point to each word and have students read them quickly. Repeat several times, focusing on words that seem to cause students problems.

Have students turn to ***Student Activity Book page 101***.

Today we will read this new nonfiction text and look for main ideas. A main idea is what the text is mostly about. We will look for main ideas in paragraphs. Then we will decide what the main idea of the whole text is. We can get a clue about the main idea of the whole text from the title.

Read Page 101

Read the title with students.

Based on the title, what do you think this text is about? Look at the photograph on the page. What do the photographs tell you about what the text is about?

The words in bold are words that you may not know. These words are important to the meaning of this text. Let's look at the words.

Read each bold word aloud with students: ***feathers***, ***African***, ***parrot***, ***Liberia***, and ***Africa***. Briefly discuss the meaning of each word.

Point out the map, and have students point to where Liberia is in Africa.

Read page 101 aloud with students. After reading, discuss the main idea.

We also regularly encourage teachers to bring in objects, use gestures, and use each word in sentences (both orally and in writing) to further support understanding, and we introduce strategies that learners can use to help them work out the meaning of an unfamiliar word in context. Repetition is one of the most important aspects of vocabulary instruction, and RTI supports exposing learners to the same word repeatedly, both orally and in writing, and learners are required to use the new words they learn in speaking or writing.

The following example from the Kenya PRIMR program (Figure 6) further demonstrates the use of repetition and engaging fellow learners when teaching vocabulary words.

Figure 6. Vocabulary instruction example: Kenya

Vocabulary

T: **The word is picks.** *Read it two times slowly*.

T: **How many of you know what the word picks means?**

L: If more than half of the pupils raise their hands, have pupils share with partners and ask at least one pair to tell the class what the word means. If not, continue as below:

T: *Pick up a pencil. Say,* **I pick up a pencil.**

T: *Pick up an exercise book. Say,* **I pick up an exercise book.**

We do:

T: **What is the word?**

T & L: ***picks.***

You do:

T: **Your turn. Who can pick up something in our classroom?**

T: *Let 2-3 children do the gesture. Say,* ***I pick up a*** ____.

Repeats steps 1-2 with the following words:

Long *(Draw two lines of different lengths on the blackboard. Point to the long one. This is long.)*

Name: Say: My name is ____.

Ask a pupil: What is your name?

Help the pupil to respond by saying: My name is ____.

Give the pupils time to ask their partners: What is your name?

Comprehension

Comprehension, or the ability to understand, interpret, and use what is read across all types of genres, is the main goal of learning to read. Comprehension not only requires the ability to read words fluently but also draws heavily on personal knowledge of the content matter being read (Pearson & Duke, 2002; Snow, Burns, & Griffin, 1998). Teaching comprehension skills is not an easy task, and the complexity of the approaches that can be used depends on the ability of the teacher to use them. In some countries, teachers have been implementing explicit literacy instruction regularly and are able to adopt new comprehension strategies, whereas other teachers might struggle.

In RTI's early grade literacy approach, comprehension features prominently in all of the processes of learning to read, starting at the earliest grades, and is achieved using a variety of strategies and activities. Listening comprehension instruction should begin even before instruction in the alphabetic principle to strengthen the cognitive skills required to attend and respond to questions about information that is presented. At the same time, learners should be explicitly taught how to derive meaning from text. Comprehension strategies should also be introduced along with rudimentary sentences and short texts.

As an example, the Nigeria RARA team developed a Story Read Aloud book to strengthen learners' oral language and comprehension skills. The book comprised age- and culturally appropriate stories adapted from existing Hausa language materials. Questions for teachers to ask learners were included with the stories to facilitate their instruction in comprehension and to build learners' vocabulary. In the Egypt Primary Learning Program project, listening comprehension activities, such as the following, were also included in early grade lessons to develop attentive listening skills (Figure 7).

Figure 7. Listening comprehension example: Egypt

Egypt Primary Learning Program

Listening Comprehension: Do You Remember?

Use: To develop attentive listening needed for understanding and following verbal instruction. To develop attention for specific words.

Why: Listening to multistep directions will develop a student's working memory.

How:

1. Put children in groups.
2. Ask one child in each group to complete a series of oral actions (directed by the teacher).
3. Tell the other students to listen, watch, and give a thumbs up or down if the child does the actions correctly (including the order).
4. Increase the complexity (length, syntax, specificity) to match the needs of the students.

In the following examples, the teacher gradually provides the learner with multistep auditory instructions:

- **Easy:** "Go to the desk. Pick up the paper."
- **Medium:** "Crawl under the table. Sit down. Pick up a book. Smile."
- **Harder:** "Stand on your right foot. Take four hops to the table. Pick two books while waving to Amir."
- **Hardest:** "Jump twice but not before you shake Merimee's hand. Knock on the desk last."

Figure 8. Comprehension instruction example: Liberia

5 Reading and Comprehension 16 minutes

Have students turn to ***Student Activity Book page 150***. Ask them to look at the first two sentences.

We know all of the sounds and sight words in these sentences, so let's read them together: Jake is a big dog. Sam is not a big dog.

Draw a Venn diagram on the board. The activity page shows an example.

This is called a Venn diagram. We can use this diagram to help us see things that are the same and things are different. The outer parts of the circles are where we write the things that are different. We will be comparing Jake and Sam. I'll write* Jake *in the circle on the left and* Sam *in the circle on the right. In the center of the Venn diagram, the two circles overlap. This is where we can write things that are the same.

What did we learn about the two dogs, Jake and Sam? (Jake is big and Sam is not big.) ***These are things that are different. I'll write the words* big dog *in Jake's circle on the left and* not big *in Sam's circle on the right.***

Let's read the next sentence together: Jake and Sam have a lot of fun. Is this sentence telling you about something that is the same or something that is different about the two dogs? (the same) ***Yes, it's telling us that both dogs have a lot of fun. So we will write the words* have fun *in the center circle.***

Tell students to read the rest of the sentences by themselves. As they are reading, they should think about the things that are the same about the two dogs and the things that are different.

Explain that after they have read the sentences, they should write the words on the Venn diagram to show how the two dogs are the same and different.

For materials developed in Liberia, we used a Venn diagram to help more proficient learners visualize similarities and differences between words and to make meaning from a short text comprising two sentences, one five words and the second six words long (Figure 8). In this example, learners practiced comprehension skills on short sentences based on letters and letter sequences that had already been taught.

As early as possible, teachers must give learners metacognitive strategies for comprehending text, so that text comprehension is a learner-centered or reader-centered activity rather than one where the teacher asks comprehension questions. As part of early primary instruction in Egypt, for example, teachers learned how to use comprehension strategies such as Question–Answer Relationship, in which learners were prompted to use four types of

questions—Right There, Think and Search, Text and Me, and On My Own—to promote understanding a text (Figure 9). Teachers used these strategies with stories in textbooks and prompted learners to derive meaning from text on their own while reading.

In Jordan, prediction skills are explicitly taught and practiced to support the comprehension of text, as demonstrated in Figure 10 (predicting the content of text based on the illustration and title) and Figure 11 (predicting the context of text based on elements of the text).

When addressing comprehension, it is important to consider the role of writing in helping to reinforce instruction. Research has shown that learning comprehension skills for reading is facilitated by learning to write (see Graham & Hebert, 2010, for a useful meta-analysis of the impact of writing on learning to read). We use writing to discover ourselves, express ourselves, chronicle our experiences, create imaginary worlds and stories, build relationships with others, persuade others, and preserve and transmit information. We also use writing to learn; writing about a topic helps us to examine it closely and reflectively, analyze it, make connections between ideas, synthesize ideas from several sources, construct knowledge, and remember it. Learners, therefore, need to learn how to write for multiple purposes.

Figure 9. Comprehension instruction example: Egypt

Comprehension: Question Answer Relationship (QAR)

Use: To promote looking back to the text for the answer. It includes teaching children four types of questions: Right There, Think and Search, Text and Me, and Own My Own. This is for students who already can answer explicit questions.

Why: Children need to learn techniques for understanding text on their own.

How:

1. Select text with at least 100 words that can be used to read aloud to your students.
2. Create questions that fall in the four categories.
3. Read the text and and use think alouds to help your students understand what type of question it is and how you connected information across the text. .
4. Later, when you have students answer questions, support their understanding that comprehension is not always direct.

Question Types	
Right There • The answer is usually found in one specific sentence. • STRATEGY: Find the words used to create the question; look at the other words in that sentence for the answer.	**Think and Search** • The answer is in the text but requires information from more than one sentence or paragraph. • STRATEGY: Skim across text segments to find question and response information.
On My Own • The answer is found in the reader's own knowledge. • STRATEGY: Determine what background knowledge can be applied to this question.	**Text and Me** • A combination of information from the text and the readers' background is required to answer the question.

Notes:

Figure 10. Comprehension instruction example 1: Jordan

Predicting the Content of a Text Based on the Illustration and Title

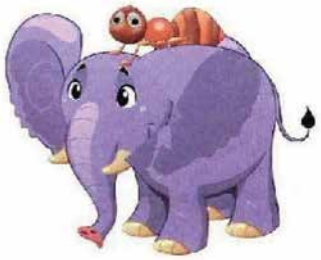
Objective: Students predict the events of a story by looking at the illustration and reading the title.

Icebreaker: The teacher says, "Today we will learn how to predict the content of a text by looking at the illustration and reading the title."

Modeling:

The teacher displays the illustration and asks himself/herself: What do I see in the picture? I can see an elephant and an ant. I will use the picture and title to predict what will happen in this story. It seems to me that this story is about a dialogue between the ant and the elephant because the ant is near the elephant's ear. Maybe the ant is trying to talk to the elephant. This is my prediction, and it could be either right or wrong. That is what readers do—they rely on the title and illustration to predict what will happen.

The Ant and the Elephant



The ants built an underground village. The ants used to collect grains every day. The ants heard the footsteps of an elephant heading towards the village. An ant approached him quickly and said, "Please don't stomp on our village." The elephant responded, "Get out of my way! I want to continue walking." The ant clung to the elephant's foot and walked over his body until she got inside his ear. The elephant then started spinning around himself until he fell on the ground. He shouted, "Get out, and I promise not to stomp on your village." The ant got out of his ear and said, "Power lies in the mind." The elephant apologized and went away from the village.

Guided practice:

- The teacher says, "And now, it's your turn. Look at the picture. Can you make some predictions about what will happen in the story like I did? Talk to your partner and discuss your predictions."
- **The teacher encourages** the students to make predictions irrespective of the extent of certainty.
- The teacher listens to the predictions and writes them in a table drawn on the chalkboard:

Predictions		

- The teacher reads the text aloud and asks the students to verify their predictions.
- Upon the completion of reading, the teacher discusses the predictions with the students and puts a happy face next to the correct or close predictions and a sad face next to the incorrect ones.

The teacher summarizes the learning: "Always remember that we can make predictions about what will happen in the text using the title and the illustration."

Figure 11. Comprehension instruction example 2: Jordan

Predicting the Content of the Following Parts of the Text

Objective: The students are able to predict the next events of a story while reading.

Icebreaker:

- The teacher says, "While reading a story, we can pause to think of what will happen next."
- The teacher explains to the students that he/she will read a part of the story, and then stop so he/she—together with the students—thinks of what might happen next in the story.

The Eid Gift

Layla's family went out to the market to buy clothes for Eid. The family wandered around the beautiful spots in the market. They reached a corner where gifts and toys are sold. Layla gazed in wonderment at the toys and was fascinated with a doll that was placed on a shelf. Her father said, "Come, my dear girl; choose the doll you want." Layla chose a small baby doll and thanked her father. She then said, "What a beautiful time Eid is!" Everyone was happy on the way back home.

Modeling:

- The teacher says, "I will start reading now. Watch how, as I read a part of the story, I stop to think and predict what will happen next—'*Layla's family went out to the market to buy clothes for Eid. The family wandered around the beautiful spots in the market. They reached a corner where gifts and toys are sold.*'"
- The teacher thinks out loud, "It seems to me that Layla and her family will not buy clothes from this place; they will buy some gifts and toys."
- The teacher says, "I will continue reading and confirm whether or not I made a correct prediction."
- The teacher proceeds, "*Layla gazed in wonderment at the toys and was fascinated with a doll that was placed on a shelf.*"
- The teacher says, "My prediction was correct; it seems that Layla will buy a doll."

Guided practice:

- The teacher asks, "Do you think her father will agree to buy her an Eid doll? Or will they continue walking to reach the clothes store?"
- The teacher asks the students to work in pairs in making predictions. The teacher walks around and listens to the students' predictions.
- The teacher says, "I will continue reading so you can verify your predictions: *Her father said: "Come, my dear girl; choose the doll you want.*'"

Independent practice:

- The teacher says, "Can you predict what will happen next? I want every one of you, by themselves, to think for a while."
- The teacher listens to some of the students' answers and then continues reading: "*Layla chose a small baby doll and thanked her father. She then said, 'What a beautiful time Eid is!' Everyone was happy on the way back home.*"

The teacher summarizes the learning saying, "Remember that while reading, you can always stop and make some predictions about what might happen later in the story. This would encourage you to continue reading and interact more with the events of the story."

As with reading, before learners' cognitive attention can be fully devoted to higher-level writing skills, they need to build strong foundational skills. Because reading and writing are mutually reinforcing, many components of early writing instruction overlap with those of reading instruction. For example, as learners develop a grasp of the relationship between letter names and letter sounds, teachers can provide opportunities for learners to engage in emergent writing activities. Learners in the early primary grades need daily practice thinking and writing for meaning and expression rather than solely for form, with guidance from the teacher on the application of different strategies at each stage of the writing process (Kim et al. 2016).

Two components of particular relevance to the early grades are knowledge of different genres of text and construction of sentences and paragraphs.

Text genre knowledge. Even before they can read themselves, learners encounter a variety of genres through teacher read alouds in class. In addition to fiction, teachers should also read aloud informational and other kinds of texts to expose learners to the different attributes of each genre. Knowledge about genres can also be built through explicit analysis of good models of each kind.

Sentence and paragraph construction. Explicit instruction and practice in employing precise, descriptive vocabulary in grammatically correct sentences that accurately reflect the writer's intended meaning is a multifaceted skill that requires practice in writing sentences of varying lengths and complexity.

Both experimental studies and extensive observations of highly effective writing teachers suggest that the following practices lead to improvements in writing:

- Giving learners time to write, frequently, and for a variety of authentic tasks (writing for a real audience and a real purpose) across the curriculum. The What Works Clearinghouse Practice Guide recommends 30 minutes of writing instruction and another 30 minutes of writing practice a day (Graham et al., 2012);
- Creating a conducive writing environment, that is, one that is supportive, collaborative, orderly, and tailored to the learners' interests and needs (Graham & Harris, 2013); and
- Engaging learners in writing to learn. When learners write about what they are reading or hearing in class, they will examine it more closely, understand it more deeply, and remember it longer (Graham, Harris, & Santangelo, 2015). For primary school learners, writing-to-learn activities can include filling out graphic organizers, such as Know, Want to Know, Learned, or keeping brief but reflective learning logs, especially in response to metacognitive prompts (Klein & Yu, 2013).

Although progress has been made in understanding the importance of writing instruction, more research is needed on how learners best learn to write in LMI country contexts (Kim et al. 2016). These authors suggest that the integration of process writing into curricular materials widens the scope of writing instruction from handwriting, copying, and spelling instruction to learning activities that bridge reading, thinking, talking, listening, and writing.

Explicit, Systematic Instruction

Researchers have thoroughly documented the role of a teacher's effective use of instructional time to promote learner gains (see, for example, Fuller & Clark, 1994; Tan, Lane, & Coustère, 1997; and Verwimp, 1999), especially for learners who have limited learning time out of school (Farbman, 2015). Unfortunately, in many LMI countries, learner and teacher absences, unscheduled school closures, transitions between lessons and activities within lessons, and other interruptions can limit learning opportunities (Abadzi, 2009). In response, to maximize the instructional time that is available, RTI encourages the use of systematic and explicit instruction. Within this model, teachers systematically introduce simple foundational skills before they add complexities in a predetermined sequence. This preplanning ensures that all skills are covered. Explicit instruction means that teachers

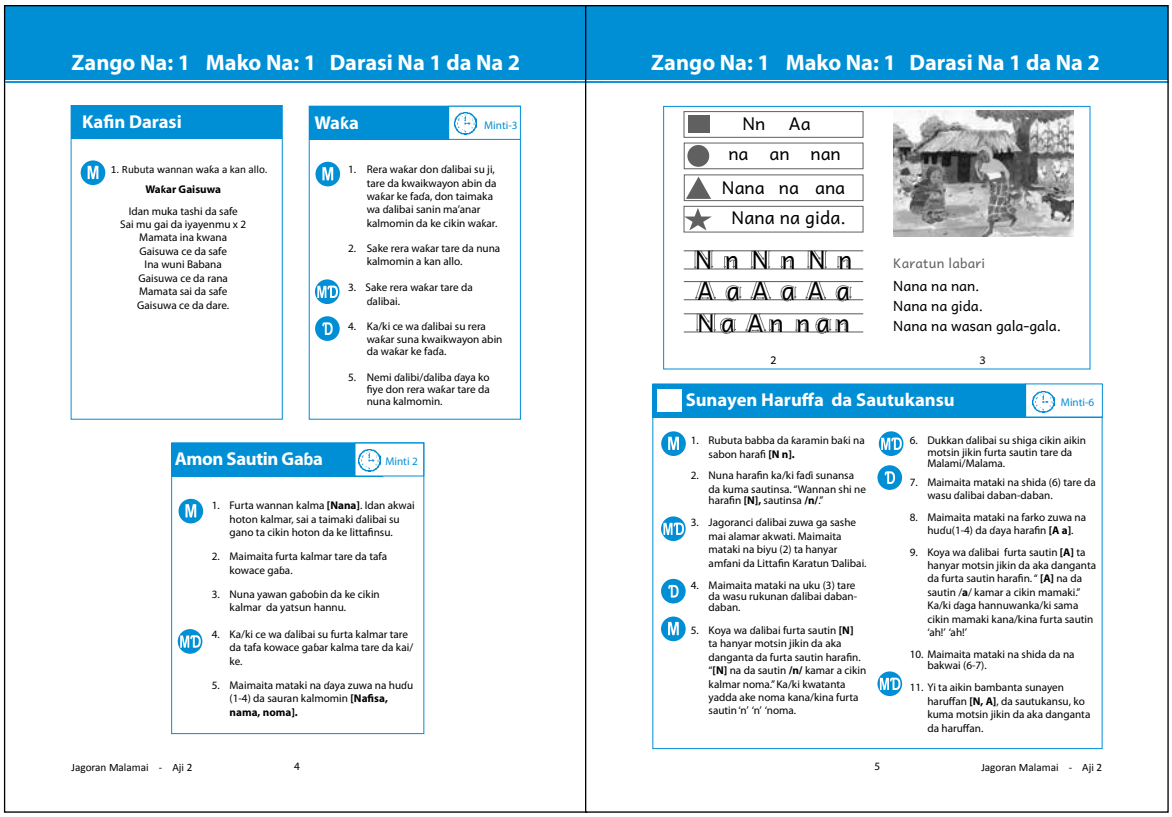
clearly describe and model the information needed to master a skill, rather than assuming that learners will pick up a skill simply through engaging with text. By guiding teachers on explicit, systematic instructional methods—including how to structure lessons, how to provide instruction that learners need, and how to do so consistently (while minimizing transition time and repeatedly using familiar routines)—instructional time can be most efficient.

Explicit instruction with teacher guidance. Across the projects on which we consult, RTI also encourages instructional strategies that address both the constraints (such as insufficient teacher pedagogical training and experience, insufficient literacy-building experiences in the learner's homes, and multiple languages in use in the classroom) and opportunities in the learning environment. Doing so helps to create a safe environment for the acquisition of new knowledge and skills. This approach uses explicit, paced, and guided lesson plans, groups to meet learners' needs, and ongoing formative assessments that are integrated to help teachers adjust instruction as needed. Teacher's guides and corresponding teacher training typically provide this guidance. The following example is an excerpt from a Nigeria RARA teacher's guide (Figure 12). This guide reflects an intentional design based on an articulated set of skills and concepts that the Ministry decided should be taught in a given level.

In all contexts, the goals are to (1) support teachers adequately so they can deliver effective instruction appropriate to learners' needs and (2) offer teachers the flexibility to move beyond the script to enhance the instruction in appropriate ways. The "Do More" examples from the Uganda School Health and Reading Program illustrate one way in which teachers can be encouraged to move beyond the core lesson when the learners—and teacher—are ready to do so (Figure 13).

Systematic Systematic instruction. The systematic instruction in the key components based on structured or guided lesson plans for teachers is critical to foster learning for all learners in a

Figure 12. Sample teacher's guide: Nigeria



Zango Na: 1 Mako Na: 1 Darasi Na 1 da Na 2

Kafin Darasi

M 1. Rubuta wannan waka a kan allo.

Wakar Gaisuwa

Idan muka tashi da safe
Sai mu gai da iyayenmu x 2
Mamata ina kwana
Gaisuwa ce da safe
Ina wuni Babana
Gaisuwa ce da rana
Mamata sai da safe
Gaisuwa ce da dare.

Waka Minti-3

M 1. Rera wakar don dalibai su ji, tare da kwaikwayon abin da wakar ke fada, don taimaka wa dalibai sanin ma'anar kalmomin da ke cikin wakar.

2. Sake rera wakar tare da nuna kalmomin a kan allo.

M'D 3. Sake rera wakar tare da dalibai.

D 4. Ka/ki ce wa dalibai su rera wakar suna kwaikwayon abin da wakar ke fada.

5. Nemi dalibi/daliba daya ko fiye don rera wakar tare da nuna kalmomin.

Amon Sautin Gaba Minti 2

M 1. Furta wannan kalma **[Nana]**. Idan akwai hoton kalmar, sai a taimaki dalibai su gano ta cikin hoton da ke littafinsu.

2. Maimaita furta kalmar tare da tafa kowace gaba.

3. Nuna yawan gabobin da ke cikin kalmar da yatsun hannu.

M'D 4. Ka/ki ce wa dalibai su furta kalmar tare da tafa kowace gabar kalma tare da kai/ke.

5. Maimaita mataki na daya zuwa na hudu (1-4) da sauran kalmomin **[Nafisa, nama, noma].**

Jagoran Malamai - Aji 2 4

Zango Na: 1 Mako Na: 1 Darasi Na 1 da Na 2

Nn Aa
na an nan
Nana na ana
Nana na gida.

N n N n N n
A a A a A a
Na An nan

2

Karatun labari
Nana na nan.
Nana na gida.
Nana na wasan gala-gala.

3

Sunayen Haruffa da Sautukansu Minti-6

M 1. Rubuta babba da karamin baki na sabon harafi **[N n].**

2. Nuna harafin ka/ki fadi sunansa da kuma sautinsa. "Wannan shi ne harafin **[N],** sautinsa **/n/.**"

M'D 3. Jagoranci dalibai zuwa ga sashe mai alamar akwati. Maimaita mataki na biyu (2) ta hanyar amfani da Littafin Karatun Dalibai.

D 4. Maimaita mataki na uku (3) tare da wasu rukunan dalibai daban-daban.

M 5. Koya wa dalibai furta sautin **[N]** ta hanyar motsin jikin da aka danganta da furta sautin harafin. "**[N]** na da sautin **/n/** kamar a cikin kalmar noma." Ka/ki kwatanta yadda ake noma kana/kina furta sautin 'n' 'n' 'noma.

M'D 6. Dukkan dalibai su shiga cikin aikin motsin jikin furta sautin tare da Malami/Malama.

D 7. Maimaita mataki na shida (6) tare da wasu dalibai daban-daban.

8. Maimaita mataki na farko zuwa na hudu(1-4) da daya harafin **[A a]**.

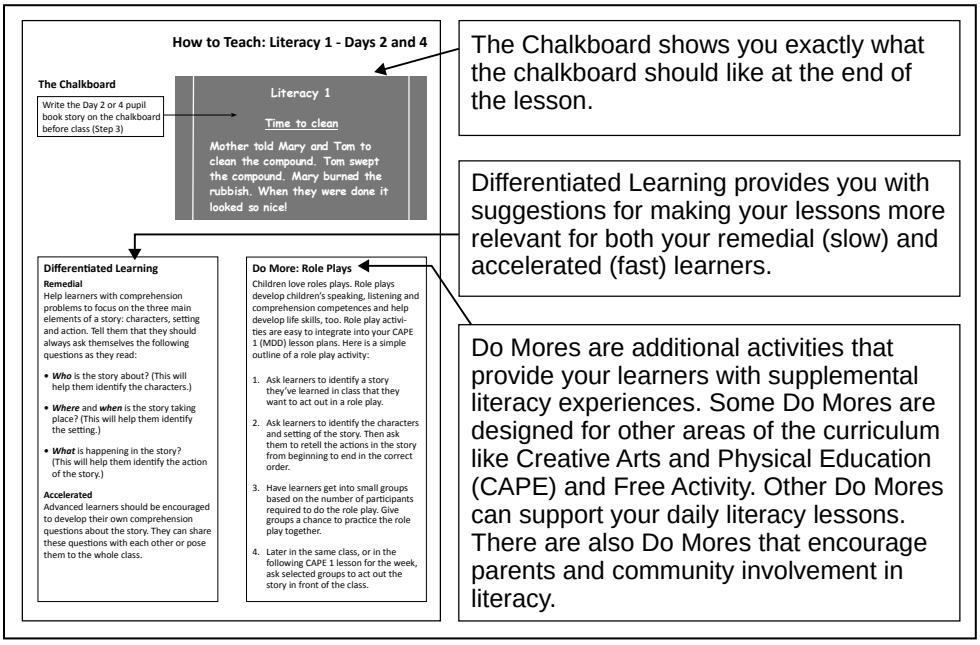
9. Koya wa dalibai furta sautin **[A]** ta hanyar motsin jikin da aka danganta da furta sautin harafin. " **[A]** na da sautin **/a/** kamar a cikin mamaki." Ka/ki daga hannuwanka/ki sama cikin mamaki kana/kina furta sautin 'ah!' 'ah!'

10. Maimaita mataki na shida da na bakwai (6-7).

M'D 11. Yi ta aikin bambanta sunayen haruffan **[N, A]**, da sautukansu, ko kuma motsin jikin da aka danganta da haruffan.

5 Jagoran Malamai - Aji 2

Figure 13. "Do more" example: Uganda



classroom (Adams, 1990; Pressley & Allington, 2015). This is particularly true for learners with specific learning disabilities (Pullen, Lane, Ashworth, & Lovelace, 2011). This model plans the content to progress from easier to more difficult and encourages teachers to instruct using consistent formats. In each lesson, teachers summarize prior content and then introduce and review new content, and learners are exposed to a limited number of activity types. Systematic instruction is achieved in part by the use of teacher's guides and learners' books designed to be consistent, easy to use, fully aligned with each other and that provide the level of guidance needed for that context.

Why Use Finger Pointing?

RTI encourages the use of finger pointing, or using a finger to track along with text as it is being read. The action of finger pointing to text is important in beginning reading because it helps learners make a voice-to-print match. This print match facilitates word segmentation (i.e., breaking apart the sounds of a word), an important skill for beginning spelling (Uhry, 2002).

Gradual Release Model

In general, within a lesson, RTI recommends a balance between the amount of time a teacher talks to learners and the amount of time that learners have to talk and engage. As learners master a concept or skill, they can work more independently and require less teacher engagement. This shifting from teacher instruction to learner practice can take different forms, depending on the local context and even the teacher preference. In projects in Kenya and Liberia, for instance, we recommended a "My Turn" approach, whereby the teacher intentionally introduces a concept and asks learners to then take their turn in practicing the concept. Another common approach uses the Gradual Release of Responsibility Model (Pearson & Gallagher, 1983). This model is particularly effective for teaching discrete skills, such as letters and words; however, it is not as useful for teaching vocabulary and complex skills, such as comprehension. In this approach, lessons consist of an opening introduction that clearly defines what learners are supposed to do and learn. Lessons then include modeling by the teacher (presented in the teacher's guide as an "I Do" activity), guided practice in which the learners practice along with the teacher (presented as a "We Do" activity), and finally, independent practice by learners alone (presented as a "You Do" activity). The lesson structure has a consistent planning, teaching, and practice cycle to maximize learning outcomes and use instructional time effectively. This structure also explicitly includes time for learner engagement and practice.

Diverse Practice Opportunities

Adequate time to practice is crucial in learning how to read and write. Research has shown that learners who spend more class time on a learning task perform better than learners who spend less time (Berliner, 1990). A combination of whole class and group instruction creates opportunities to build on learners' strengths in oral language and social interaction (Heath, 1983) and provides the necessary scaffolds (Vygotsky, 1978) and meaning making that draw from background knowledge and experiences (Rosenblatt, 1978). For example, peer shared reading and group reading can allow learners to practice with and to scaffold each other, while independent reading, whether orally or silently, gives learners additional time to use and master the skills they have been taught. Participation in whole class and small group literacy activities also actively engages learners in listening and speaking and helps learning to read and write along a developmentally appropriate continuum (Wood, Bruner & Ross, 1976). These methods of guided engagement with text help learners to acquire comprehension skills by engaging them in multiple ways and providing diverse practice opportunities throughout the entire reading process (Rogoff, 1990).

Particularly with large classes, engaging one group of learners can be difficult when others are working on meaningful, targeted activities. Approaches designed to accomplish engagement must build upon the teacher's needs and skills. Where possible, we embed guidance in teacher's guides for working with small groups of learners. The Uganda School Health and Reading Program "Do More" activities highlighted earlier are one example. In other cases, we train teachers to create additional instructional materials in advance that learners can use for constructive independent practice. The Kenya Tayari program uses the newstelling approach both to build oral language skills and allow learners to work independently in pairs or small groups; within these smaller groups, learners use the vocabulary being taught to tell their "news" to the rest of the group.

Positive, Constructive Feedback

Providing constructive feedback to learners is an important part of the learning process. Feedback is part of the formative assessment process, as described in the Test section of this paper. More than that, however, it is a part of every teacher–learner interaction and can either foster improved learning (when done constructively) or intimidate and demoralize (when done punitively). Positive, constructive feedback addresses both cognition and motivation: it gives learners the information they need to understand and improve in a given skill or concept, and it does so in a way that makes learners feel encouraged, respected, and empowered (Brookhart, 2008).

RTI encourages teachers to use positive constructive feedback that includes three components—communicating, offering an explanation, and modeling—and that adheres to the following guidelines (adapted from Brookhart, 2008):

- Focus: feedback should focus as precisely as possible on the underlying cause of the misunderstanding.
- Approach: the teacher should first work with the learner by giving an incorrect response to help the learner identify the correct response; if the learner is unable to respond correctly, the teacher should engage other learners to provide the correct response. Only if no one in the class is able to give the correct response should the teacher do so.
- Level: teacher feedback should consider the learner's development level and level of proficiency in the skill.
- Timing: feedback should be provided immediately following an incorrect learner response.

Positive, constructive feedback has three primary components: (1) the teacher should communicate to the learner whether his understanding is correct or incorrect; (2) the teacher should explain why an answer is correct or incorrect. Finally, (3) if the understanding is incorrect, the teacher should model a correct response or understanding and engage the learner to provide the correct response (Askew, 2000). RTI provides explicit guidance in teacher trainings on how to provide positive, constructive feedback, and we are embedding more prompts and reminders in our teacher's guides to promote the adoption of these strategies. Figure 14 shows an excerpt from the Liberia Teacher Training Program teacher training guide that illustrates some strategies we encourage teachers to use.

Figure 14. Guidelines for responding to learners: Liberia

Content. Phonics Introduction: Instructional Strategy—Responding to Learners

Tell participants that until the break, we will introduce the content area of phonics, and focus on a new instructional strategy, "responding to students."

Ask participants:

1. What do you say when a student answers a question wrong?
2. What are some other things you can do? Write down the answers. If these don't come up, add:
   - Make sure to listen to the student.
   - Reteach by modeling.
   - Ask another student to help, and then go back to the student that didn't understand and make sure he/she understands.
   - Figure out what the student is struggling with and reteach that part.
   - Try to model in a different way.

Guided Remediation

RTI has explored the use of guided remediation to complement a Ministry's core teaching and learning program as a way to raise struggling learners to grade-level proficiency. The objective of this approach is to assist teachers to (1) objectively identify those learners performing below the general performance level of the class, (2) describe the performance level of these learners relative to the expectations of the syllabus, and (3) provide remediation to these learners using appropriately targeted materials. This remediation uses two classroom-based diagnostic tools to identify underperforming learners: (1) a "coarse-grain" tool the teacher administers to the entire class to identify learners who need remedial support, and (2) a "fine-grain" tool the teacher administers individually to each identified learner. The fine-grain tool determines the grade-level equivalent performance of the learner relative to the expectations of the syllabus. The remediation approach also provides materials for teachers to give targeted support to learners who need remediation.

RTI has piloted guided remediation strategies in Senegal and Jordan, and this approach has shown substantial potential by providing explicit, targeted support to teachers in meeting the needs of struggling learners. RTI will continue to refine and evaluate the impact of this approach on teacher behaviors and learner outcomes and will explore expanding this approach to other projects.

Differentiated, Equitable Instruction

In LMI classrooms, as elsewhere, classrooms routinely have learners with different levels of proficiency in reading, language, communication, and other skill dimensions; different learning styles (Fischer & Rose, 2001); and different levels of comfort with the language used to instruct. Many learners also face learning challenges posed by diagnosed or undiagnosed disabilities and/or by biases that exist in the learning environment. Helping all students learn to read and meeting their diverse needs require a differentiated approach to teaching.

The philosophy of differentiated instruction is based on the premise that learners learn best when the instruction accommodates their individual readiness levels, interests, and learning profiles (Tomlinson, 2005). Research on the effectiveness of differentiated instruction as a specific practice in high-income countries is growing and shows positive results (Rock, Gregg, Ellis, & Gable, 2008, Tieso, 2005). Although research specific to LMI countries is limited, existing studies validate practices that serve as the foundation of differentiated instruction (Huebner, 2010).

As much as possible, RTI works with Ministries to adopt differentiated instruction strategies, such as using formative assessment to identify struggling learners, giving teachers strategies to reteach and reinforce lessons, and engaging learners in out-of-school literacy enrichment activities. Core to all of RTI's programs is the creation of safe, equitable learning environments, and all of RTI's programs provide explicit guidance to teachers on how to engage all learners in a classroom in fair, unbiased, and productive ways, regardless of gender, ethnic or racial affiliation, language, or disability. In addition, RTI has developed explicit guidance for teachers about how to establish classrooms that are inclusive of learners with disabilities (Bulat et al., 2017). We know that movement toward fully inclusive and

differentiated learning environments is not yet attainable in most LMI countries; it remains, however, an important goal to which to aspire.

Strategies for working with large classes include the following:

- Change seating assignments periodically to allow all learners to be in the front of the class
- Move around the classroom
- Have learners work in pairs or small groups
- Assess different learners each day, making sure to assess all learners at least once during a unit or term

Text

The literacy programs in which RTI is engaged are the result of collaboration with Ministries, taking into account existing curriculum policy, teaching practices, and other contextual factors. They reflect a balanced approach to literacy curriculum content that addresses the urgent need for dramatic and sustained improvement in reading performance of young learners in the first 3 years of schooling. This approach explicitly addresses the challenges of large classes, limited resources, and teachers who have not received specialized training as reading teachers. It also integrates literacy and language learning (Fountas & Pinnell, 2010) at all stages of instruction. Thus, before, during, and after the process of learning to read print, learners engage in literacy activities by listening, thinking, and talking about stories, which are important elements in reading acquisition (Moore & Lyon, 2005). During the process of learning to read, the objective is to weave the five basic components of reading systematically and explicitly so that learners build the skills and strategies needed for decoding, word-solving, and meaning-making (NICHD, 2000; Snow et al., 1998).

Explicit Scope and Sequence

As mentioned, teachers face significant challenges delivering instruction to large classes, often with limited materials and training. Having access to an instructional program that encompasses the right skills and concepts and presents in them in the most effective manner provides a useful structure for teachers and ensures that learners are being exposed to what they need to become literate. RTI's instructional programs are based on articulated scope and sequence documents that provide this guidance. Determining a sequence for the gradual introduction of content, skills, and routines significantly helps to guide teachers' instruction by providing them with a clear road map for teaching a given language in a productive and effective manner. A scope and sequence should outline how content, such as letters, will be introduced. For example, a scope and sequence in Grade 1 should build upon oral language competencies, phonological awareness, and the alphabetic principle and slowly integrate more complex reading skills as learners progress. In English, this might look like formally introducing the letters *a*, *m*, *d*, and s because these letters produce a large number of decodable, familiar words (e.g., mama, sad, and mad), include continuants (m and s), and are relatively easier to pronounce. A scope and sequence document should also take into consideration whether a language is being taught as a first language (L1) or L2 and its relationship to another language taught.

As part of any curriculum development process, RTI works closely with local Ministry staff, linguists, language experts, and early grade teachers to build a comprehensive scope and sequence that flows across each academic year and builds continuity across years. Developing the scope and sequence collaboratively helps everyone to understand the advantages of teaching a specific language and literacy skills in a specific way, particularly if content and skills in a newly developed scope and sequence are different from what has been done previously (e.g., teaching the English letters of the alphabet in sequential order). This scope and sequence exists as a working document during development and is often embedded into the teacher's guides themselves. This is done to give teachers as much clarity as possible regarding the overall progression of skills and content being taught.

In some cases, depending on the preference of the Ministry, the scope and sequence document can be included in the introductory section of a teacher's guide, thereby providing the full roadmap in one place (see Annex 1 for an excerpt of a scope and

sequence document). An equally valid approach is to introduce the scope and sequence for each week at the beginning of that week's lessons, as was done in a project in Liberia and illustrated in Figure 15.

A summary of the correlation of skills with the country's academic standards can also be included in the scope and sequence (example taken, again, from Liberia teacher's guide) (Figure 16).

Development of a Print-Rich Environment

Research suggests that the best predictor of reading success is time spent with books (Boissiere, 2004; Cipielewski & Stanovich, 1992). To develop fluency, learners should be exposed to sufficient and appropriate text and to different types of text, and they should also be afforded the time and opportunity to practice reading in school and at home (Cunningham & Stanovich, 1998; Davidson, 2013; Stanovich, 1986). Studies conducted by RTI on early grade literacy in developing countries support existing research on the impact of access to books on literacy development. For example, in a study of Hausa literacy in two states in Northern Nigeria, oral reading fluency scores for pupils with books were found to be double or triple those of pupils who reported they did not have the Hausa textbook (RTI International, 2011a). In a study of early grade reading outcomes in Uganda, Piper (2010) found that the most important predictors of learner achievement across languages were whether the learners had a reading textbook and reading materials at home.

Figure 15. Example weekly scope and sequence document: Liberia

WEEK 1 SKILL OVERVIEW

	Day 1 (pp. 6–7)	Day 2 (pp. 8–11)	Day 3 (pp. 12–15)	Day 4 (pp. 16–19)	Day 5 (pp. 20–21)
Reading					
Phonological Awareness	Blend words to make sentences	Blend words to make sentences	Blend words to make sentences	Blend syllables to make words	Review
Concepts of Print	Alphabet recognition	Alphabet recognition	Alphabet recognition	Alphabet recognition Book concepts Concept of word Directionality Concept of sentence	Review
Phonics	***m*** Phonics activity page	***a*** Review ***m***	***t*** Review ***a, m***	***r*** Review ***m, a, t*** **Daily Reading:** Phonics activity page	Review
Spelling		***am***	***at***	Review ***am, at***	Assessment
Sight Words	***this***	***is***	***on***	***the***	Review
Reading & Comprehension			Oral Comprehension: Identify characters and setting	**Daily Reading:** Read new decodable book Identify and discuss character **Daily Reading:** Homework activity page	**Daily Reading:** Take home decodable book to read
Fluency		Practice sight words	Practice sight words	Practice sight words **Daily Reading:** Read decodable book for fluency	Practice sight words **Daily Reading:** Read decodable book for fluency
Vocabulary					
Supplementary Language Arts					
Handwriting	***m***	***a***	***t***	***r***	
Oral Language & Grammar			Use the word ***on*** in oral sentences	Review using the word ***on***	
Writing				Shared Writing: Sentence using the word ***on***	Continue independent writing

Figure 16. Example correlation academic standards: Liberia

CORRELATION TO LIBERIA NATIONAL READING STANDARDS

	Day 1	Day 2	Day 3	Day 4	Day 5
Reading Process: The student demonstrates phonemic awareness.					
The student will identify individual phonemes (sounds) in words.		X	X	X	
The student will manipulate individual phonemes to create new words through addition, deletion, and substitution.			X	X	
Reading Process: The student demonstrates the ability to read grade-level text orally with accuracy, appropriate rate, and expression.					
The student will apply letter-sound knowledge to decode phonetically regular words quickly and accurately in isolation and in context.		X	X	X	
Reading Process: The student demonstrates knowledge of the alphabetic principle and applies grade-level phonics skills to read text.					
The student will generate sounds from all letters and spelling patterns and will blend those sounds into words.	X	X	X	X	X
Reading Process: The student demonstrates knowledge of the concept of print and how it is organized and read.					
The student will locate the title, table of contents, names of author and illustrator, glossary, and index.				X	
Literary Analysis: The student identifies, analyzes, and applies knowledge of the elements of a variety of fiction and literary texts to develop a thoughtful response to a literary selection.					
The student will identify the characters and settings in a story.			X	X	
Communication: The student effectively applies listening and speaking strategies.					
The student will listen attentively to fiction and nonfiction read-alouds and demonstrate understanding.			X	X	
The student will retell specific details of information heard.			X	X	

Within the Nepal Early Grade Reading Program, the first step in materials development was reviewing existing materials. This was to take advantage of a range of student materials that had been developed in Nepal by other organizations, including the Ministry. During the first year of the project, the Ministry convened a review committee, with a core set of materials selected to revise.

RTI's approach to early literacy instruction is grounded in exposing learners to as much print as possible: the goal is that all learners have their eyes on print every day (Strickland & Morrow, 1988). RTI recommends making different types of texts available to learners at every level: the number of books learners read and their access to diverse text genres are important factors that influence reading achievement (Duke, Pearson, Strachan, & Billman, 2011). Young learners are most familiar with stories and songs, so early grade materials emphasize rhymes and narratives. Expository texts can also be introduced in early primary grades and take on greater complexity and a more central role as readers gain proficiency and maturity. In some cases, teachers can explore innovative text forms, such as using the graphic novel format to engage learners in Grade 3 in Haiti's Tout Timoun Ap Li (ToTAL) project; Figure 17 shows one spread from a novel that was woven throughout the year's lessons.

Figure 17. Sample from a graphic novel: Haiti

Whatever the form of the text, learners should be exposed early to materials at and slightly above their reading proficiency level to continually present them with more sophisticated vocabulary and complex syntax.

RTI encourages one learner's book for each learner per subject, because giving each learner a book increases learner engagement in the classroom, provides maximum time for practice, and—if approved by the Ministry—gives learners the opportunity to take materials home for additional practice. RTI also encourages the development and use of classroom libraries that can include books at a range of difficulty levels to provide even more reading practice opportunities.

All of RTI's early grade literacy programs provide core materials comprising teacher's guides and learner's books. In developing these materials, RTI draws upon existing materials—whether published stories and expository texts or orally transmitted stories—when those materials are of sufficient quality and relevance. The learner's book corresponds to the lessons in the teacher's guide and typically includes letters, words, sentences, and short stories for learners to practice reading and writing exercises. Either within the learner's book or in a complementary reading book, learners should have exposure to decodable stories (short stories that they can decode given current instruction on letters and sight words) and longer passages at increasingly complex levels. High-quality learner's books provide structure, guide the instructional activities, set the pace, and give learners access to the content more efficiently than the chalkboard alone. Learners can also take the books home, increasing the time they are exposed to text. Given the importance of increasing the time that learners practice reading, RTI-developed lesson plans often include reminders to teachers to encourage learners to take their books home and practice reading.

In the USAID/Uganda School Health and Reading Program, RTI worked closely with the Ugandan Ministry of Education and Sports to develop 104 separate titles—comprising learner primers and teacher's guides across 12 languages. In the first 3 years of the program, over 2 million individual books were developed, published, printed, and distributed.

Additionally, where possible given budgetary and other development constraints, RTI encourages the development and use of supplemental materials, often in the later years of a program when teachers are comfortable with the core materials. In Kenya, for example, the USAID/Primary Math and Reading

Program began introducing supplemental materials in the second year of implementation. These materials included supplementary readers and classroom libraries to bolster learners' exposure to print; an assessment kit including an assessor manual, learner stimulus sheets, a stopwatch, and a report card template; pocket chart and letter cards; and learner and read-at-home trackers to monitor learners' reading progress and engage parents.

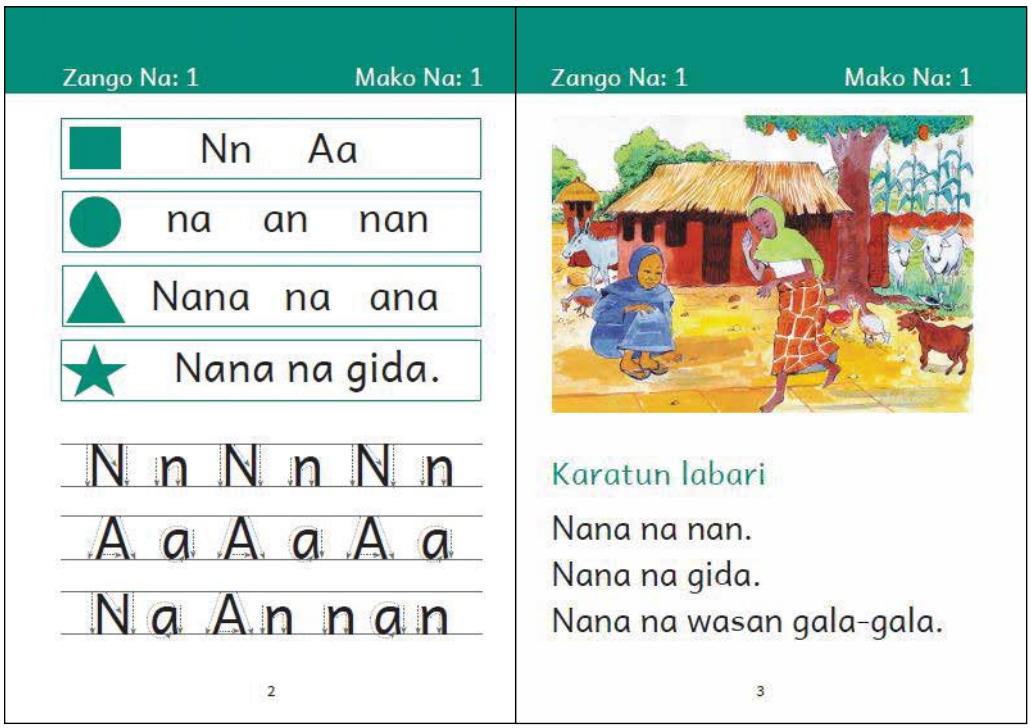
In all cases, materials for learners should be relevant to the contexts in which they are used, and they should be leveled appropriately to match the learner's skill level. As importantly, teachers should be trained explicitly on how to effectively use these materials and how to integrate them into daily lessons. The following graphic is an excerpt from a Nigeria RARA learner's book that illustrates one user-friendly approach to content and layout (Figure 18).

The use of Andika font in this example makes letter identification easier for learners than other fonts, and a wide space is left between lines of text. Also, the decodable text on the right-hand page uses letters and words that will be taught in the upcoming week's lessons and is limited to three lines. All of these layout considerations make the page more accessible to beginning readers.

Commitment to Equality and Inclusiveness

RTI is committed to ensuring the equality and inclusion of all learners. To achieve this goal, all teaching and learning materials that RTI helps to develop explicitly represent all subgroups in a country's population in fair, unbiased, and positive ways. In doing so, RTI regularly uses USAID's *A Guide for Strengthening Gender Equality and Inclusiveness in Teaching and Learning Materials* (USAID, 2015a) as a tool during our reviews of existing materials to identify where biases and stereotypes exist and to guide the development of new materials. This guide is used as a framework to assess the materials in terms of cultural relevance, equitable representation of gender and religious differences, and appropriateness of content and language. Such reviews are important to avoid perpetuating stereotypes and maximize the positive portrayals of girls, women, and other underrepresented and potentially marginalized groups.

Figure 18. Example content and layout learner's book: Nigeria



Time

Making good use of the time available during school hours is an important factor in effective instruction; the time allocated to literacy instruction can substantially impact learner achievement (Aronson, Zimmerman, & Carlos, 1998; Wright, 2000). The education system often mandates many aspects of instructional time—such as the length of the school day, the number of minutes that can be allocated to teach literacy, and the amount of emphasis to put on components of literacy instruction—and these factors are out of the control of any given program. Even within those constraints, however, available instructional time can be maximized by balancing the time allotted to skill development, practice, review, and assessment and maintaining a good pace of instruction.

In Egypt, under the USAID-funded Girls' Improved Learning Outcomes project, reading instruction increased by 20 to 30 minutes per day. After one year of instruction, students could read more words read correctly per minute compared with the control group.

The Nigeria RARA project explored the question of whether providing teachers with a structured approach and materials to teach foundational literacy skills would lead to changes in their instructional practice, including the amount of time they actually spent teaching. The research affirmed that such an approach substantially increased the amount of time spent teaching key literacy skills. Data from a classroom observation instrument administered in both control and treatment schools before and after the intervention indicated that the amount of teaching time increased in the treatment schools, whereas in control schools time spent teaching actually decreased. The structured approach to instruction not only helped teachers increase the amount of time taught but also helped to counter what appeared to be an end-of-the-year slump among the control group of teachers. These results suggest that supporting teachers' instruction with defined lesson plans and materials can help them increase the amount of time they teach and focus their instruction on key literacy skills.

Balancing Instructional Time

Although researchers and practitioners agree that sufficient time must be allocated to literacy instruction and that this time must be effectively used, research has not converged on an ideal total amount of time for literacy instruction, either during a school day or an academic year. Timothy Shanahan (2013), an internationally recognized educator and researcher, recommends 2–3 hours of literacy instruction per day through Grade 5. The Florida Center for Reading Research (2009), however, recommends 90 minutes of literacy instruction for schools with a large proportion of learners at risk for reading difficulties; this time should be adjusted as needed to meet the changing needs of learners. The consensus is that the more time learners are exposed to reading, the better the learning outcomes will be (Cunningham & Stanovich, 1998). RTI works with Ministries to review the amount of time allocated to reading/literacy acquisition (and mathematics where relevant) during the school day and to increase that amount of time as much as possible. Where the amount of time for literacy instruction during the school day cannot be increased, teachers might then find additional time during the day for independent practice, and schools can work with parents and families to encourage additional reading practice time at home.

Just as important as the overall time for literacy instruction is the way this time is allocated across activities to develop, reinforce, and measure component literacy skills. RTI found the following approaches to be effective, keeping in mind that the amount of total time available and the relative emphasis on skills are often predetermined.

- Literacy time should be divided across the five components of reading, story reading, syllable/word work, writing, review, and assessment, but the time should not necessarily be divided equally across these skills and activities. For example, phonological awareness instruction is most effective when given in smaller increments (Shanahan, 2005). RTI typically limits phonological awareness instruction to 10 minutes a day, and we often provide this instruction in even smaller increments of 2 minutes per activity. Other skills, such as word

work, comprehension, and vocabulary, are allotted more of the literacy time, especially as learners master more fundamental skills.

- The relative allocation of time can vary over a week. For example, while each day should include some type of lesson introduction and conclusion activity, Fridays are often dedicated to reviewing and consolidating the week's work, and work on specific skills can occur on alternating days. The primary objective is to ensure that sufficient time during the week is allocated to developing each skill. For example, in Malawi, Standard 1 learners are exposed to letter naming and writing instruction 2 days a week and to word work on one of the 2 alternating days. (In the Malawi project, literacy instruction is divided into two separate lessons every day.) Annex 2 provides several examples of lesson schedules, including those from Malawi.
- The relative allocation of time should shift during an academic year and from one year to the next. Although mastering all five components of reading is important and while overarching skills, such as comprehension, fluency, and vocabulary, should be embedded in instruction at all points of the year, certain skills should be emphasized in the earlier years. In many languages, learners should be able to master phonological awareness and letter knowledge by the end of the first year of instruction; the skills can be reinforced in later years without the same level of explicit instruction. In indigenous languages, such as some in Nepal and Ethiopia, with a particularly large number of symbols, full mastery may extend into the second year of instruction. Similarly, phonological awareness and letter knowledge often receive greater emphasis at the beginning of the first year of instruction, with time allocated to these skills decreasing over the year as learners gain mastery. This shift in focus is evident in the allocation of time used in an RTI project in Kenya during the academic year. Day 5 of each week focuses heavily on oral language, story-telling and reading, and review activities. During other days of the week, the overall focus shifts throughout the year from basic skill development, which is more teacher supported, to more reinforcement and metacognitive skill development (Annex 2). (Six weeks of oral language instruction is not typically considered sufficient; however, in this case, the Ministry mandated this amount of time only.)
- Comprehension can be integrated into other activities or separated into its own allotted time. RTI, however, encourages allocating specific time to reading and comprehension activities, in addition to building in opportunities to read and develop comprehension skills through other activities. Such specific time allocations allow the teacher to observe these activities and ensure they take place. The Ministry often mandates the approach to best align it with existing literacy program goals. If reading and comprehension activities are fully integrated and do not have separate time allocated, teachers should be given clear guidance on how to ensure that sufficient reading time and comprehension instruction are provided and how to provide them.
- Time should be allotted to transition between activities. During training teachers typically receive guidance on how to transition learners between activities and minimize disruptions during these transitions. Increasingly, however, RTI is observing the challenges transitions pose for teachers, even with extensive teacher training, and we see the need to even more clearly articulate in teacher's guides how best to transition and how much time should be allotted to transition between activities in a lesson.
- Time should be allotted during a week or a unit to review the content covered during that week or unit with learners and to monitor learners' mastery of that content. Accomplishing this goal can be done in various ways. In the Malawi project highlighted earlier in this section, every Friday is dedicated to review and enrichment activities. In the Liberia example, each day's lesson contains a 2-minute daily assessment; more comprehensive spelling and comprehension assessments occur every Friday (Annex 2). In a project implemented in Haiti, teachers were given guidance on how to conduct formative assessments throughout each day's literacy lesson, a lesson review was conducted after every 2 lessons, and a reinforcing period review was conducted after every 8–10 lessons.

Pace and Efficiency of Instruction

Researchers have long studied the pace of instruction as a factor affecting learners' success in a classroom (see, for example, Barr, 1973, 1975; Leinhardt, Zigmond, & Cooley, 1981). Instructional pacing is the rate at which an instructor presents the activities in a lesson. Many practitioners agree that a brisk pace of instruction is more conducive to learning than a slow pace: "Students learn more when their lessons are conducted at a brisk pace…[which] enhances student attention and increases the number of response opportunities—two factors that are strongly associated with increased learning" (Academic Success for All Learners, 2016). A brisk pace also may decrease disruptive classroom behavior by encouraging more learner engagement.

RTI agrees with this philosophy and typically provides explicit pacing guidance—indicating, for each activity, the amount of time that the activity is intended to take—in teacher guides. RTI establishes this time based on what is called a Perky Pace, a term that Dr. Anita Archer frequently uses (Archer & Hughes, 2011). A Perky Pace moves swiftly and fluidly but is not so fast that learners get lost. It is aimed to keep pace with 80 percent of the learners in the class, knowing that some learners may be able to move faster and that some may need to move slower. Learners who can move faster or have to move slower should be given extra instruction at their level as much as possible.

RTI works with teachers to understand how they are implementing the steps in each lesson's routine and with the content being taught for the day to maintain an optimal pace of instruction. During training and coaching sessions, RTI trainers consistently encourage teachers to prepare for the lesson ahead of time. Without preparation, teachers will not be able to keep up with the recommended pacing. Once teachers and learners are familiar with the routines, however, instruction can move efficiently and at a naturally quick pace.

Test

Although many types of assessments are used to monitor learner progress—ranging from intake assessments to large-scale summative assessments—RTI's literacy programs focus particularly on classroom- or curriculum-embedded formative assessments (Figure 19). It should be noted that a cohesive body of research on the effects of embedded formative assessments on learner reading growth does not yet exist. However, much existing research suggests that a teacher's attention to minute-by-minute and day-to-day formative assessment substantially improves learners' literacy outcomes (Wiliam, 2011). RTI's approach to formative assessment is based on the definition advanced by Black and Wiliam (1998), that formative assessment encompasses "all those activities undertaken by

Figure 19. Formative assessment cycle: Nigeria

In Nigeria RARA materials, teachers were encouraged to use formative assessment as part of their regular teaching. Different types of formative assessments were embedded in the lesson plans included in the teacher's guide, and the teacher was encouraged to use multiple opportunities to assess understanding during student response and practice time. RARA introduced the following assessment cycle to teachers. The cycle starts by assessing learners' prior knowledge or understanding. At each step, the teacher is expected to assess the learners' understanding of what has been taught. The instruction should be repeated if the learners do not understand, and then another assessment should be conducted.

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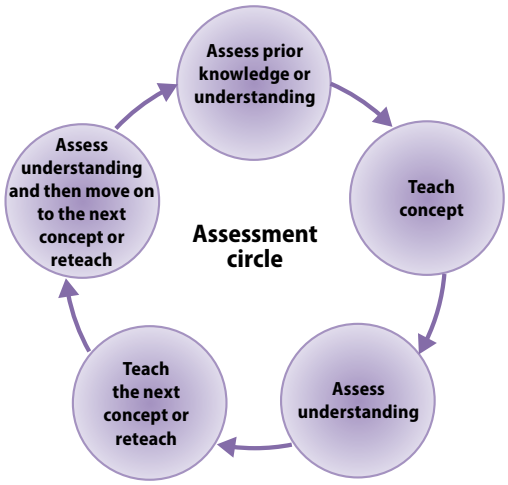

teachers, and/or by their students, which provide information to be used as feedback to modify the teaching and learning activities in which they are engaged" (p. 7).

Important in this approach to formative assessment is ongoing engagement with the learners to monitor understanding and—of equal importance—to use that information to immediately adjust instruction as needed to ensure that all learners are keeping pace with the lessons and to repeat or remediate as needed (August & Shanahan, 2006; Garcia, 2000; International Literacy Association, 2010). These assessments can be formal or informal (Culatta & Hall-Kenyon, 2012) and can take a variety of forms. In all cases, however, the objectives of the assessment are to use real-time data to inform teaching, to involve learners in their own learning, and to provide effective feedback to learners. RTI recommends that teachers be trained on the importance and use of formative assessment to guide instruction. RTI is also embedding explicit guidance on when and how to conduct formative assessments in its teacher's guides to further encourage its use.

At the most embedded level, RTI encourages teachers to regularly engage learners in the lesson by asking them questions as each skill is being taught. In the ToTAL project implemented in Haiti, for example, RTI included in the teacher's guide explicit strategies for asking questions of learners during a lesson to monitor understanding and to provide constructive feedback (Figure 20).

Figure 20. Strategy for questioning: Haiti

ToTAL Project—Haiti

Strategy for Questioning

1. Ask a question.
2. Wait 3 seconds for reflection.
3. Ask learners to give their response (question two girls and two boys; two students who do not have their hands raised; two shy or timid students). Ask the student, if needed, to mime or gesture to give the response. Assist the learner in giving a response if s/he has difficulty responding.
4. Give the response in a phrase or in a contextual example.
5. Repeat the response one more time.

In Liberia, RTI used a different approach, embedding a 2-minute assessment into each day's lesson. In a lesson teaching the letter m, for example, the teacher is instructed to "Ask individual students to name something that starts with the sound /m/." At the end of a lesson teaching the sight words this and is, the teacher is instructed to "Hold up the teacher sight word cards this and is, and call on students to read them quickly." Systematically embedding these brief formative assessment opportunities at the end of each lesson gives the teacher insight into how effective his/her instruction was and whether further reinforcement of that day's content is needed.

More formal formative assessment opportunities can also occur at the end of a week or a unit of lessons. Again, using Liberia as an example, time is allocated during each Friday's lesson for a spelling and/or comprehension assessment (Annex 2), with teachers guided to note which learners make errors to inform subsequent reteaching, reinforcement, or review. In the materials developed for implementation in Haiti, in addition to embedded formative assessments within each lesson, at the end of each unit, teachers administered more formal assessments of learner mastery to guide remediation and additional review.

Of course any strategy, including formative assessment, is only effective when it is implemented routinely and as intended. RTI continues to look for ways to draw on strategies that teachers already use, adapt them to become more formative, and then, help teachers to identify strategies that they can use to reteach (using alternate approaches) and remediate as needed.

Tongue

Oral language is the foundation of literacy (Storch & Whitehurst, 2002). Language is meaning encoded systematically in speech sounds, and text is a secondary encoding of those speech sounds into written format. Text cannot be understood apart from knowledge of the specific language that it represents. Learners come to school with extensive (albeit subconscious) knowledge of their home language, including its phonological and syntactic systems, and with thousands of vocabulary

words already known. This knowledge of a language and existing lexicon of oral vocabulary can serve as a solid foundation for learning to read when the language used to teach reading is the same as the child's first or home language or another language the child can speak and understand well.[4]

When the language used to teach reading is not learners' home language or a language they understand well, learning to read becomes more difficult. Not knowing the underlying structure of a language and not already having a robust lexicon of oral vocabulary puts a learner at a stark disadvantage. Many education experts agree that, assuming the presence of quality instruction, learners learn to read more efficiently when they learn to read first in a familiar language (Nation, 2006; Nation & Wang, 1999). An analysis of data from 49 countries participating in the 2011 Progress in International Reading Literacy Study (PIRLS) demonstrated a clear relationship between reading outcomes and language: learners had higher average achievement scores when their L1 was the language of the assessment (Mullis, Martin, Foy, & Drucker, 2012). Similarly, in Kenya, a randomized controlled trial found that learners performed twice as well on measures of early grade reading when learning to read in their L1 compared with learning to read in one of the national languages, Kiswahili, which was not a familiar language to all students (Piper, 2015).

Teaching reading in languages that learners and their teachers speak and understand also helps teachers deliver effective instruction. Classroom observations in 12 sub-Saharan countries showed that when teachers used a language unfamiliar to them, they used teacher-centered and less effective instructional practices compared with teachers who used a language that was familiar to them and their learners (Alidou & Brock-Utne, 2011). A study in Ghana and Tanzania (EdQual, 2010) further revealed that teachers used more diverse teaching strategies when they taught lessons in African languages spoken by the teachers and students than when they taught in English. And research in Niger found that teaching was more learner-centered and involved more effective teaching practices when teachers taught in a bilingual education program as opposed to a single (French)-language comparison group (Hovens, 2002).

RTI views a learner's L1 abilities as assets that can be used to build additional language skills (Abu-Rabia & Siegel, 2002; Lindsey, Manis, and Bailey, 2003). Programs that develop oral, reading, and writing skills in a learner's L1 can use those skills to promote language and ongoing cognitive development in an L2 (Bender et al., 2005).

RTI recognizes, however, that decisions about what language should be introduced first and how and when both languages are introduced often depend on context and language and are always complex. Even determining the time needed to learn to read an additional language requires a close consideration of several factors, including the degree of similarity between the two languages being learned (including vocabulary, grammatical structure, and script), teacher language proficiency, and time and quality of instruction (CAL, 2006). For this reason, RTI approaches issues of language of instruction, timing of transition to an L2, and methods for introducing both L1 and L2 carefully and with full engagement of Ministry staff and other stakeholders in a country. For a fuller consideration of language issues, consult USAID's report *Planning for Language Use in Education: Best Practices and Practical Steps to Improve Learning Outcomes* (USAID, 2015b).

Conclusion

For most learners, the processes of learning to read and write require some degree of instruction and practice. For many learners—especially those who face learning challenges and/or who enter the classroom without a background of literacy-rich experiences—this instruction is most effective when it is explicit and systematic and allows ample opportunities to practice new skills. We regularly find that learners in LMI countries require this level of direct instruction, although we also encounter

[4] The language that a child first learns to speak is often referred to as the "mother tongue" or "L1," although the meanings of these terms can change in bilingual and multilingual environments. We use the terms "familiar language" and "home language" most frequently in this paper to refer to the language or languages a child speaks and understands best and that could serve as a helpful foundation in learning to read, except when other terms have been used in specific research cited.

teachers who have not been given sufficient preservice training on how to explicitly teach literacy and who lack many resources and supports they need to lead a classroom of learners to their learning goals. This is especially true when learners and possibly even teachers are not fluent in the stipulated language of instruction.

Over the past decade, RTI has supported Ministries in diverse countries in their development and implementation of research-based early grade literacy programs. Because no one-size-fits-all approach to the development and implementation of these programs exists, the local context and constraints of any implementation require adaptation and adjustments. In many cases, the fully diversified approach to early grade literacy instruction that we envision has not yet been achieved. However, we have learned—and continue to learn—the following core elements in improving early grade literacy instruction and learner outcomes.

- A balanced approach to instruction offers the best learning opportunities to the most learners. Providing explicit instruction in reading skills meets the needs of learners who need that support. Additionally, surrounding learners with holistic and diverse reading and writing experiences helps to build a culture of reading while exposing learners to different types of texts and many practice opportunities.
- Context is critical. Understanding the skills, backgrounds, and motivations of both teachers and learners is key to developing effective teaching and learning materials. Just as meeting learners where they are is important, so is meeting teachers where they are. Supports—such as guided lesson plans, targeted teacher training, and recommendations for supplemental activities in the classroom—can help teachers through all stages (initial adoption to mastery) of explicit literacy instructional programs. Working with Ministries, local experts, stakeholders, and communities can help to ensure that learner materials are relevant and engaging and that leaners are given the supports that they need, both in and out of school.
- All learners can learn, and more importantly, all learners deserve the opportunity to learn. Equality in education is not a new focus in international education, but the field currently faces unprecedented opportunities to make classrooms and instruction inclusive for all learners, including those with disabilities. Approaches used to support learners with disabilities or other learning challenges help all learners in a classroom succeed. The more these inclusive approaches, tools, and strategies are used, the better we will meet the learning goals of all learners in reading and writing.
- The 5 Ts of literacy instruction—teaching, text, time, test, and tongue—remain relevant and are a useful heuristic for reminding RTI, Ministries, teachers, and other implementers of the many complexities inherent in promoting literacy, particularly in multilingual contexts. Emphasizing each of these components of instruction will help to make literacy instruction as effective as possible.

As noted earlier, many factors other than those highlighted here play important roles in literacy development. These contributing factors include, but are not necessarily limited to, motivation, vocabulary, linguistic knowledge, background knowledge, strategy knowledge, and cognitive capacities (Snow & the RAND Reading Study Group, 2002). In addition, no school-based implementation can succeed without the engagement of teachers, school-level staff, teacher support networks, Ministry staff at all levels, parents, and community members. Countries around the globe have succeeded at giving millions of learners access to school, but meeting these learners' needs as they strive for full literacy remains an elusive goal for some (Gove & Cvelich, 2011). Coming together as a field to meet these challenges is our best hope for global success, and we hope that this and other compilations of lessons learned will help to accomplish that goal.

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Annexes

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Annex 2: Sample Lesson Schedules 40

Annex 1: Excerpts from Sample Scope and Sequence Document for the Nigeria Reading and Access Research Activity

Term 1

Theme [Jigo] 1: Home/Family [Gida/Iyali

			Phonological awareness Songs: 3 per term; 1 movement per stanza Beat the Word: 4 words, 2–4 syllables each	Alphabetic Principle Syllables: 1 to 2 Decodable words: 3	Decoding and Fluency Sentences: 2–4 words; 1 sight word Passages: 10 words; 3–4 sentences.; 2–3 sight words; 1 explicit question
Term 1, Week 1	Home/Family: Gida/Iyali	Lessons 1 & 2	**1. Sing the Song:** Kafin darasi **Greeting Song:** Waƙar Gaisuwa (This song addresses greeting parents in the morning, afternoon, and at night.) Idan muka tashi da safe Sai mu gai da iyayen mu x 2 Mamata ina kwana Gaisuwa ce da safe Ina wuni Babana Gaisuwa ce da rana Mamata sai da safe Gaisuwa ce da dare. The actions associated with this song are curtsying and placing both hands on one cheek to indicate sleeping, waving to say goodnight, etc.	**3. Introduce the Letters:** Sunayen Haruffa da Sautukansu Movement for the letter sound /a/: Motsin jikin da aka danganta da furta sautin a Introduce the letters **N n** and **A a** **Movement for the letter sound /a/:** Motsin jikin da aka danganta da furta sautin a "Ah": as if surprised, the teacher raises both hands and says "Ah! Ah!" Malami/malama ya/ta daga hannuwansa/ta sama cikin mamaki yana/tana furta sautin ah! ah! **Movement for the letter sound /n/:** Motsin jikin da aka danganta da furta sautin n Noma (To farm): The teacher demonstrates how to use a hoe to farm and says "n, n, noma". Malami/malama ya/ta kwatanta yadda ake noma yana/tana furta sautin 'n''n''noma'	**6. Decode the Sentence:** Karatun Jimla Nana is home. Nana na gida.
			2. Beat the Words: Amon Sautin GaƁa Nana (a female name) Nafisa (a female name) nama (meat) noma (to farm)	**4. Decode the Syllables:** Gano GaƁar Kalma na, an, nan	**7. Passage Reading:** Karatun labari Nana is here. Nana is home. Nana is playing hopscotch. Nana na nan. Nana na gida. Nana na wasan gala-gala.

Vocabulary & Comprehension Read aloud: 75–150 words Comprehension: 3 questions; 2 explicit	Application & Assessment Handwriting: Target upper- and lowercase letters
8. Story for Read Aloud Time: Karatun labari a Bayyane **Lesson #1: 'Yan'Yan Dangin Zuma: The Bee Family And the Rising Sun** Once upon a time, there lived a family of bees, who lived peacefully and were very helpful to each other. The parents of the bees in this family forbade the bees from staying under the sun or near anything hot. However, one of the bees was very stubborn and hard of hearing and decided he would go bask in the sun. His siblings pleaded with him not to, but he refused and waited for them to leave the house. As soon as they left, the stubborn bee went under the sun, and alas–he melted completely! When his siblings returned and saw him, they were very sad. Then, one of them had a brilliant idea. They decided to take the melted bee and place him under some shade overnight. The following day, the bee had reformed, but he looked completely different from how he looked before. He was not as handsome as he used to be, but his siblings were still happy to have him back! **Questions** 1. What were the bees never allowed to do? (L) 2. What caused the bee to melt and change his form? (I) 3. Is the sun important in nature? Why do you think so? (C) **Lesson #2: Baba Da maciji (1): Daddy and the Snake (1)** One day, Daddy was sitting by the door of the house, but he did not know that there was a snake sleeping beneath the door. When Daddy saw the snake, the snake also saw Daddy. Frightened, Daddy jumped onto the table, but the snake also jumped onto the table. Daddy quickly jumped off the table, and the snake also jumped off the table. Exasperated, Daddy left through the front door of the house, but the snake followed him. **Questions** 1. Where was the snake sleeping when Daddy saw it? (L) 2. Why do you think the snake copied everything Daddy did? (I) 3. Do you think that snakes are good to have around the house? Why do you think so? (C)	**9. Handwriting:** Rubuta haruffa Practice writing your letters: A, a, N, n

Annex 2: Sample Lesson Schedules

Malawi - Chichewa Standard 1 (Number of Minutes/Day/Week)					
	Day 1	Day 2	Day 3	Day 4	Day 5
Daily Lesson 1					
Introduction	3	3	3	3	3
Syllable Review	3	3	3	3	Review/ Enrichment Activities
Syllable Reading		8		8	
Phonological Awareness	10		10		
Letter Names	5		5		
Letter Writing	7		7		
Word Work		8		8	
Syllable Writing		5		5	
Conclusion	2	3	2	3	2
Daily Lesson 2					
Introduction	2	2	2	2	2
Story Discussion	3	3	3	3	Review/ Enrichment Activities
Concepts of Print		2		2	
Teacher Read-Aloud	6		6		
Decodable Story Reading		12		12	
Vocabulary	10		10		
Word Writing		8		8	
Listening Comprehension	5		5		
Conclusion	3	3	3	3	3

Annex 2: Sample Lesson Schedules *(continued)*

	Kenya - English Grade 1 (Minutes/Day/Week)					
	Weeks 1–6		**Weeks 7–8**		**Weeks 9–30**	
	Days 1–4	**Day 5**	**Days 1–4**	**Day 5**	**Days 1–4***	**Day 5**
Oral Language	15	15		10		
Vocabulary/Prereading	5				3	
Story Reading					4	
Comprehension						
Make a Story		15				
Phonological Awareness			2	4	3	4
Letter Knowledge			2	4	3	4
Teacher Read-Aloud	4		9			
Word Work, Grammar			5		5	8
Reading Preparation			3		4	11
Tell a Story				8		
Comprehension	6		6		5	
Writing, Vocabulary			3	4	3	3
Word Reading						

*For these weeks, there is some variation in time allotments from days 1 and 3 and days 2 and 4. These times reflect days 2 and 4.

	Nigeria RARA - Hausa Level 1*		
	Day 1	**Day 2**	
Phonological Awareness	5	5	
Alphabetic Principle	17	17	
Fluency	8	8	
Comprehension	5	5	
Application (Handwriting)	5	5	
Total Minutes/Day	**40**	**40**	
*Reading instruction in Hausa was limited to 2 days a week.			

	Liberia - English, Grade 1, Week 3 (Number of Minutes/Day)				
	Day 1	**Day 2**	**Day 3**	**Day 4**	**Day 5**
Phonological Awareness	3	3	3	3	3
Alphabet Recognition	2	2	2	2	2
Phonics	10	10	10	10	8
Spelling	5	5	5	5	
Fluency	10				5
Sight Words	7	7	7	7	10
Reading/Comprehension		16	16	16	
Daily Assessment	2	2	2	2	
Comprehension Assessment					
Spelling Assessment					15
Total Minutes	**39**	**45**	**45**	**45**	**43**

Annex 2: Sample Lesson Schedules *(continued)*

	Liberia - English Grade 1, Week 30 (Number of Minutes/Day)				
	Day 1	**Day 2**	**Day 3**	**Day 4**	**Day 5**
Phonological Awareness	3	3	3	3	5
Alphabet Recognition					
Phonics	10	10	10	10	5
Spelling	5	5	5	5	
Fluency	10				
Sight Words	7	7	7	7	5
Reading/Comprehension		16	16	16	
Daily Assessment	2	2	2	2	
Comprehension Assessment					15
Spelling Assessment					15
Total Minutes	**37**	**43**	**43**	**43**	**45**

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