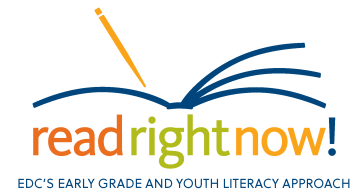


Annex 1: Read Right Now Jumpstart

The first year of RRN in many settings is dedicated largely to the development of standards and preparing new teaching and learning materials for the local context. However, it is essential (and often required by the funder) to also begin to engage directly with teachers while this development work is ongoing. RRN Jumpstart activities ensure that stakeholders are engaged and prepared for full classroom implementation and that enthusiasm and understanding about the vision and goals of the work are maintained.



RRN Jumpstart is a flexible and customizable list of reading and writing interventions in the RRN! Toolkit that develop early grade literacy skills within authentic (culturally and socially appropriate) contexts. Based on RRN project experience, these evidence-based reading and writing intervention strategies provide project staff, literacy coaches, and teachers with student-friendly activities that facilitate the teaching and practice of key reading and writing skills with limited materials, costs, and training. The experience of using these activities in the classroom will quickly demonstrate to teachers that changes in their instructional practice will result in improvements in student achievement, and encourage them to commit to and welcome broader and deeper RRN interventions with that goal.

Jumpstart activities are likely the first contact the project will have with many of its beneficiaries and stakeholders. They are designed to be easily applied while taking into consideration long-term project goals and indicators; initial data on student achievement scores; teachers' knowledge, beliefs and practices about teaching reading; and evidence-based practices on effective reading and writing instruction. The critical thread running through each activity is building relationships and gaining support for project initiatives. Early engagement will help solidify partnerships with beneficiaries and ensure that their concerns and inputs are reflected in the design and core project deliverables.

Jumpstart activities should be viewed as a series of "building blocks" that are purposefully designed and sequenced around RRN's Guiding Principles, to support the teaching of early-grade literacy:

- Ensuring teacher understanding of component skills
- Clarifying teachers' visions of effective practices
- Helping teachers improve their foundational skills
- Supporting direct, explicit instruction
- Emphasizing meaning-making

Jumpstart activities can be quickly and easily introduced to teachers through short, low-cost sessions designed to raise awareness of the program, or through longer, more structured trainings as time and budget permits. Jumpstart activities are general enough to map onto fully-developed curricula and materials as the program matures, and specific enough to provide anchors for later training and curricular implementation. The activities are grouped into seven sections: alphabetic knowledge,

concepts of print, phonological awareness, phonemic awareness, fluency, vocabulary, and comprehension.

Jumpstart activities should be selected based on a rapid assessment of the current status of literacy teaching and learning materials, standards and benchmarks for reading, extent and nature of reading and writing in the country's curriculum, teacher beliefs about and knowledge of reading and writing instruction, teacher classroom practices related to literacy, and current data on student reading achievement. If data on these issues do not exist or have not yet been collected at scale by the project, the RRN team can conduct a quick questionnaire and scan of reading materials with ministry counterparts. Observing classrooms in a small sample of schools will provide a snapshot of how teachers regard reading and writing instruction and how students perform, and interviewing a small group of teachers about their experience teaching reading and writing will provide insights into their beliefs and practices. The goal of this quick assessment is to provide high-level inputs for launching Jumpstart activities, not to establish an evaluation baseline. It should be conducted by the project's reading technical team, with support from MERL if possible.

Jumpstart Activities

Jumpstart activities suggested here complement the RRN Guide to Low-Cost and No-Cost Instructional Materials and the Critical Thinking in Read Right Now annex. Additional tools and resources for rapid engagement with stakeholders are available on the BELT library (beltlibrary.edc.org).

1. Alphabetic Knowledge

Children whose alphabetic knowledge is not well-developed when they start school need sensibly organized and meaningful instruction that will help them identify, name, and write letters. **Letters do not need to be taught in alphabetical order**, but rather in a sequence that helps learners to start reading as soon as possible. An optimal sequence for letter study is as follows:

- Letters that frequently occur in simple words (in English, for example, the letters a, m, and t) should be taught first.
- Letters that look similar and have similar sounds (in English, letters such as b and d) should be separated in the instructional sequence to avoid confusion.
- Short vowels should be taught before long vowels.

The following Jumpstart activities show how to organize, plan, and teach alphabet knowledge in the context of reading, writing, and conversation sparked by learners' interests, experiences, and investigations. These activities are designed to be brief and explicit, and require little training and few resources. They highlight the letter's name, sound, and written form, and teach both the uppercase and lowercase form of the letter. They help learners to:

- recognize and name upper and lowercase letters of the alphabet
- associate letter names and symbols with their sounds

- understand that letter symbols are grouped together in a particular order to form words
- experiment with writing letters of the alphabet in the context of writing for a purpose.

Display of Text

Display the alphabet and other text labels at the learners' eye level. Write the names of the learners in the class near the first letters of their names. Use large, clear print on the chalkboard and in teaching and learning materials.

Shared Reading

Read alphabet books, adding them to the class library if possible. Talk about the letters, their shapes, and the names of objects that begin with the letter.



Identifying and Naming Uppercase and Lowercase Letters

Using alphabet flashcards, learners can match uppercase and lowercase letter cards (in languages with both forms) and practice letter recognition automaticity. Divide the class into two groups and form two lines, one on each side of the class. Choose a flashcard at random and show it to the two groups. Give the flashcard to the first group to say the correct letter name. The game is over when the teacher has no more flashcards. Ask the group to show their flashcards, and say the name of the letters. Collect the flashcards. This game can also be adapted to practice letter sounds.

Letter Identification and Formation Practice

Slates can be particularly effective resources in large classrooms with lots of learners. When a new letter is introduced, learners can practice writing and forming the letters on slates before writing them on paper. In the "Show me" game; the teacher calls out the name of a letter and the learners write the upper and lowercase letter pair and then hold the slate in the air. Teachers can quickly check the learners' work. Teachers can also say the letter sound and have the learners write the upper and lowercase letter pair that makes the sound. Teachers can encourage learners to compare their letters and sometimes get help from their peers. If slates are not available learners can practice the formation of letters using sand, pebbles, etc.

Games, Songs, and Other Activities That Help Learners Learn to Name Letters Quickly Children learn letter names by singing songs such as the "Alphabet Song," in order. The teacher should point to the letters while the learners sing the alphabet or recite rhymes. Teacher should sing the alphabet song to help learners become familiar with letter names and alphabetical order. They should sing slowly, pronouncing the letter names separately and sometimes pausing in different places so that learners do not slur groups of letters (in English, for example, so that l, m, n, o, are not pronounced as "elemeno"). Teachers can check that the learners are not memorizing a rhyme by pointing to the letters of the alphabet in random order, reading the alphabet from right to left as well as from left to right, asking

learners to point to the letters and say the alphabet, and calling out the name of a letter with learners pointing to the letter on the board as fast as they can.

What's Next?

Using the alphabet chart, the teacher says a series of four or five letters and the learners have to say which letter comes next. For example, D, E, F, G? (H)

Letter–Picture Match

The teacher chooses a key word that begins with a specific letter, and the learners match pictures or objects/words they know that begin with that letter.

Interactive Writing

Using the names of the learners in the class, establish a sentence pattern similar to those found in alphabet books; for example, “Aa, My name is Amina, and I have an avocado.” Interactively write the sentence pattern on the board. Direct the learners to write their names on pieces of paper. Collect the pieces of paper. Choose one learner’s name card. Ask the class to name the first letter of that learner’s name. Help the learners to choose an object that begins with the same letter to complete the student’s sentence. Draw attention to the use of lowercase and uppercase letters in the sentence. Read each sentence as it is **completed**. For example, “My name is Tiana, and I have a tomato.”



2. Concepts of Print (print awareness)

Print awareness is a child's understanding that print has a function. As children develop print awareness, they begin to understand the connection between oral and written language, that print carries meaning and is organized in a specific way, and that there are rules for how you read and write. Children can demonstrate print awareness in many ways; for example, when a child holds a book the right way, distinguishes between letters and words, and when a child writes scribbles on paper and asks you to read what they “wrote.”

Print awareness is important because it is a prerequisite for learning to read. It is developed through daily adult/child interactions with print in the child's environment and shared reading experiences. Explicit print referencing is a particularly powerful strategy for increasing children's early literacy skills because it requires few resources and can be easily embedded in existing instruction. With little formal training, teachers, parents or caregivers can increase children’s print awareness by engaging in shared reading activities that include print referencing.

Provide many opportunities for children to hear good books and to participate in read-aloud activities.

Using read-aloud story books and other texts, teach and reinforce book awareness and book handling and print conventions. Make sure learners know how books are organized. They should be taught the basics about books; i.e. that they are read from left to right and top to bottom, that print may be accompanied by pictures or graphics, that the pages are numbered, and that the purpose of reading is to



gain meaning from the text and understand ideas that words convey. Discuss print directionality (print is written and read from left to right), word boundaries, capital letters, and end punctuation. Teachers can read to the class and talk about the print, for example; “This is the first word on this page. I am going to start reading here, at the top of this page.” Promote word awareness by helping children identify word boundaries and compare words, draw attention to words and letters. Help children notice and learn to recognize words that frequently occur, such as *a*, *the*, *is*, *was*, and *you*. Draw attention to letters and punctuation marks within the story. **Encourage children to practice what they are learning.** Ask them to listen to and participate in the reading of predictable and patterned books.

Label Objects in the Classroom

Label objects within the classroom with words and pictures. Draw learners' attention to these words when showing them the objects.

Encourage Children to Play with Print

They can pretend to write a shopping list, write a letter, make a birthday card, etc. Help children understand the relationship between spoken and written language

Encourage learners to find letters that are in their

names: "Look at this word, 'big.' It begins with the same letter as the name of someone in this room, 'Ben.'"



Play with Letters of the Alphabet

Read the alphabet. Place several copies of each letter of the alphabet in a bowl and ask learners to withdraw one letter. When everyone has a letter, ask each student to say the letter's name and, if the letter is in his or her name, have the child keep the letter. Continue until the first child to spell his or her name wins.

Reinforce the Forms and Functions of Print

Point out print in the child's environment. "Look at this sign. It says 'Welcome.'" Point out print in classroom signs, labels, posters, and calendars.

Discussing the Form and Function of Letter and Words

"This is an uppercase S. How is it different from this lowercase s?" "This is the word 'to.' We read the word 'to' all of the time. Can you help me find the word 'to' in this book?"

Use Predictable and Patterned Books for Shared Writing Experiences

Go through each page, asking the learners to tell the story from the pictures. Write their narration on the chalkboard or a large piece of paper and display it in the classroom.

3. Phonological Awareness

Phonological awareness is the ability to hear, distinguish, produce, and work with the sounds in words. It is a completely oral language skill that learners need to master in order to learn to read and spell.

Phonological awareness is broken down into four developmental levels: word, syllable, onset-rime, and phoneme. Phonological awareness instruction in rhyming, clapping syllables, identifying onset and rimes of words, and blending, segmenting, and manipulating individual phonemes builds a strong foundation for phonemic awareness (Blachman, Ball, Black, & Tangel, 2000). The following section describes proven strategies for teaching phonological awareness.

Nursery Rhymes

Children listen to and say nursery rhymes. Have learners identify the rhyming words they hear.

Matching Rhyming Pictures

Children identify pictures with rhyming names; for example, cat and bat, boat and goat, etc.

How Many Words Do You Hear?

Learners say how many words there are in the sentence by clapping for each word they hear.

Clapping Game

Learners clap the syllables (sounds) they hear in the following words: cat, dog, table, tomato, shop, car, elephant, and hippopotamus.

Syllable Hoops

Draw five circles (hoops) on the ground. Select one participant, say a word (for example, "elephant,") and ask the participant to jump in the circle for every word they hear.



Blending Syllables

Break words into syllables, pausing for one second between syllables. Learners figure out the word; for example, dus-ter, black-board, pa-per, pen-cil.

Segmenting Syllables

As above, except that learners segment the words themselves. Show the learners the pictures or real objects.

Kinesthetic Reinforcement

Participants say their names and surnames, touching their head for their first syllable, shoulder for the second, hips for the third, knees for the fourth, and toes for the fifth.

Pass It On

Supply a set of real objects. A participant picks one, keeping it while saying the first syllable and then passing it on to the next child for the next syllable.

Counting Syllables

Learners put up one finger for each syllable (starting with the thumb for the first syllable), leaving the fingers displayed until the counting is complete.

Rhyme Completion

“I have a shoe. Its color is ... “

Rhyme Box

Children pick out an object, name it, and supply three rhyming words.

Odd One Out

Learners pick identify the “odd one out” (a picture that doesn’t “rhyme”) from a set of pictures.

4. Phonemic Awareness

Phonemic awareness—awareness of the individual sounds in words—is the highest level of phonological awareness. Reading aloud, using big books and predictable books, developing language experience charts, and using other language-oriented practices gives children valuable reading experiences. However, by supplementing these experiences with related phoneme awareness activities, teachers can draw children's attention to a critical aspect of their language: its phonemic base. It takes only a few minutes a day to integrate activities that emphasize the sounds of language to create rich oral-language classroom environments. The following activities are intended to be incorporated into classrooms as part of a language-rich environment.

Same or Different Exercises

Present pairs of words. Let some pairs differ by one phoneme. Let children say if they are the same or different. Identify words which begin with the same initial sounds; for example, I went shopping, and I bought something beginning with

Phoneme Isolation

Learners are guided to recognize individual sounds in a word. Teacher: "What is the first sound in van?" Learners: "The first sound in van is /v/."

Phoneme Identity

Learners are guided to recognize the same sounds in different words. Teacher: "What sound is the same in fix, fall, and fun?" Learners: "The first sound, /f/, is the same."

Phoneme Categorization

Learners recognize the word in a set of three or four words that has the "odd" sound. Teacher: "Which word doesn't belong? Bus, bun, rug." Learners: "Rug does not belong. It doesn't begin with /b/."

Phoneme Blending

Learners listen to a sequence of separately spoken phonemes and then combine the phonemes to form a word. Then they write and read the word. Teacher: "What word is /b/ /i/ /g/?" Learners: "/b/ /i/ /g/ is big." Teacher: "Now let's write the sounds in big: /b/, write b; /i/, write i; /g/, write g." Teacher: (Writes "big" on the board.) "Now we're going to read the word 'big.'"

Phoneme Segmentation

Learners break a word into its separate sounds, saying each sound as they tap out or count it. Then they write and read the word. Teacher: "How many sounds are in 'grab'?" Learners: "/g/ /r/ /a/ /b/. Four sounds." Teacher: "Now let's write the sounds in 'grab': /g/, write g; /r/, write r; /a/, write a; /b/."

Word Families Charts

The exposure to rhymes leads naturally to the use of phonograms (a letter or combination of letters that represent a sound) and the creation of word family charts. Charts can contain words from one story or a brainstormed list from the children. The children can dictate to the teacher words that can be placed on a word family chart. As they begin to develop letter/sound knowledge, children can copy or write the words themselves. These charts can be used as reference charts (or the children can make their own word families reference book) for spelling and creative writing activities. Once the children are demonstrating knowledge of the alphabet, the teacher can point to the letters of the alphabet in random order, read the alphabet from right to left as well as from left to right, and ask children to point to the letters and say the alphabet.

5. Fluency

Fluency is the ability to read a text accurately and quickly. When fluent readers read silently, they recognize words automatically. They group words quickly to gain meaning from what they read. Fluent

readers read aloud effortlessly and with expression. Their reading sounds natural, as if they are speaking. Readers who have not yet developed fluency read slowly, word by word. Their oral reading is choppy and plodding. Fluency is important because it provides a bridge between word recognition and comprehension. Because fluent readers do not have to concentrate on decoding the words, they can focus their attention on what the text means. They can make connections among the ideas in the text and between the text and their background knowledge. In other words, fluent readers recognize words and comprehend at the same time. Less fluent readers, however, must focus their attention on decoding the words, leaving them little attention for understanding the text. Teachers can help their learners become fluent readers by introducing the following Jumpstart activities:

- **Teacher modeling the reading of the story**
- **Choral reading of the story with the teacher** (teacher reads along with all students)
- **Choral reading of the story without the teacher** (students read all together out loud)
- **Echo reading of the story with the teacher** (teacher reads a section of the story, then students repeat it together)
- **Reading in pairs**, where each student takes a turn reading a sentence
- **Silent reading** (students read silently or whisper the text to themselves) and timed silent reading.

5. Vocabulary

Vocabulary—the words we use to communicate—incorporates both oral vocabulary (words we use in speaking or recognize in listening) and reading vocabulary (words we recognize or use in print). Vocabulary plays an important part in learning to read. As beginning readers, children use the words they have heard to make sense of the words they see in print. As children learn to read more advanced texts, they must learn the meaning of new words that are not yet part of their oral vocabulary. Explicit vocabulary instruction can have a significant impact on children’s vocabulary knowledge and help children to improve their reading (National Reading Panel, 2000; Stahl, 1998). The following /Jumpstart activities are easily applied in early grade reading classrooms and can be used to enhance vocabulary instruction.

Word Wall

One technique that can assist with vocabulary instruction is a “word wall” of frequently used words, either on small pieces of paper glued to the wall, or on the chalk board. The wall features words found in the students’ daily reader, the read-aloud stories, or audio programs. Teachers can also use words from other subjects, such as mathematics and science. Select words that are critical for understanding the text or material as a pre-reading step.

Read Alouds

Reading aloud to children helps them learn new words. Read-aloud books enhance vocabulary, as do magazines or environmental print that have some, but not too many, words that are new to children. Reading aloud of storybooks is important, but teachers should also try to expose children to other types of text, such as informational books. Reading aloud is particularly helpful when the teacher pauses during reading to define an unfamiliar word and, after reading, engages the child in a conversation about the book. Conversations about books help children to learn new words and concepts and to relate them to their prior knowledge and experience.



Independent Reading

Children learn many new words by reading extensively on their own. The more children read on their own, the more words they encounter and the more word meanings they learn.

Teaching Important Words

It is important to select words for teaching very carefully. Factors to consider include how important and useful knowing the word would be, how easily relatable the word is to other words the children know, and how much knowing the word will help with the unit, text, or situation at hand. Helping children relate new words to previously learned words is very important. It often makes sense to teach words not individually but in conceptually-related sets; for example, words related to farms, words related to families, or names of different animals. These should be taught through rich oral language experiences and shared reading, and not through memorizing long lists of vocabulary.

Show and Ask

Help children learn to listen and to ask questions by having “Show and Ask” rather than “Show and Tell.” Encourage children to bring in items or objects to talk about, and have the class think of questions to ask the speaker about the items. This helps children become better listeners as well as learn how to ask questions.

Today’s News Report

This activity can be done every day or at least twice a week. Pair up learners and do a think-pair-share on what is new in their life (home or family). Choose one or two learners to share their news. Ask questions to help learners develop their news. Reformulate the “news” in plain language and simple, short sentences. Ask learners to “help” you write the sentence on the board. Take this time to review the sounds/words or spellings studied, and even ask a few learners to come to the board to write a letter or words. Once written on the board, read the sentence with the pupils.

6. Comprehension Strategies

Activating Prior Knowledge

Teachers encourage learners to think about what they already know and use that to predict or to hypothesize what will happen next in the text.

Questioning

The teacher reads a story. The teacher asks *who, what, why, how, when* questions after every story told. Teachers can also use the Bloom's Taxonomy chart and activities in the Critical Thinking in Read Right Now annex to develop questions that foster higher order thinking skills.

Visualizing

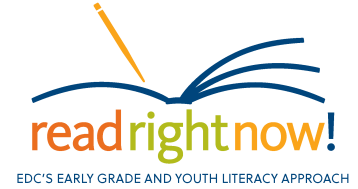
The teacher asks the learners to develop a mental image of what is described in the text and describe it in their own words. The teacher asks the pupils to draw a picture of the story and describe what is happening in the story.

Summarizing/Retelling

The learners briefly describe, orally or in writing, the main points of what they read.

Annex 2: Critical Thinking and Read Right Now

Automaticity of reading and writing is one desired outcome of a literacy program. Equally important is the application of reading and writing to help students become critical thinkers who use literacy effectively in their daily lives. RRN aims not only to teach students to learn to read but also to help them read to learn.



In order for students to fully understand what they read and effectively convey their ideas in print, they need opportunities to engage in rich language and reading experiences that foster reading comprehension and critical thinking. Critical thinking has been defined in multiple ways, but one straightforward definition is the ability to engage in reflective and independent thinking: to reason. Reasoning requires a student to become an active learner rather than a passive recipient of information. (Skills You Need, n.d.)

By design, RRN nurtures key critical thinking competencies that have been articulated in the pedagogical and research literature. These include:

- Making connections between and among important ideas in the text
- Determining and summarizing important ideas and supportive details
- Integrating new ideas with existing background knowledge
- Self-questioning
- Sequencing events and ideas
- Offering interpretations of and responses to the text
- Checking understanding by paraphrasing or restating important and/or difficult sentences and paragraphs
- Visualizing characters, settings, or events in a text.

(Texas Education Agency, 2017)

Despite its importance, it is well documented that teaching critical thinking is not easy. According to Willingham (2007), this is because, in the reading process, students must focus on constructing the “surface” meaning of the text to comprehend the plot, understand who the characters are, what the author is saying about a concept, etc.

Understanding and exploring the underlying, deeper meaning of the text at the same time is challenging. RRN therefore incorporates a variety of teaching strategies to foster critical thinking in its teaching and learning materials.



Teaching Strategies That Promote Critical Thinking

Explicit Teaching of Strategies. In strategy teaching, students learn to identify and use specific strategies such as predicting, summarizing, and questioning for solving problems (for instance, inferring the meaning of a word or text, or putting three sentences in logical order). Research demonstrates that explicit instruction using techniques such as modeling reading strategies, thinking out loud while using a strategy, and guided practice supports students' adoption of effective reading practices (Eilers & Pinkley, 2006). The goal is to draw students' attention and encourage them to practice the strategies readers and writers use when negotiating meaning from text or communicating their ideas. Strategy teaching helps all students become aware of and improve different strategies they can use to access the meaning of a text.

Support for Meta-cognitive Learning. In meta-cognitive learning, the teacher asks students to reflect on what they have learned and what questions they still have. Students learn self-monitoring techniques, in which they monitor the thinking and reasoning they do while reading and writing. In meta-cognitive learning, students become active participants in their own learning by questioning their own level of understanding and recognizing when they need more or less support, as well as what that support might be. The goal of meta-cognitive learning activities is to make students aware of what they are thinking, what they are doing, what they are learning, and what they want to learn, which ultimately leads to better reading achievement. In other words, students reading "metacognitively" *know when they understand, know when they don't understand, and know how to fix it.*

Recognizing That the Question is Not the Answer. RNN makes a distinction between questions that ask students to recall information, and those that require students to investigate and make connections between information and understanding. While questions that ask students about the details of text are necessary and important, questions that ask students to go beyond what they remember about the text support critical thinking. Using Bloom's Taxonomy as an organizing principle, the following graphic depicts the kinds of questions teachers can ask that promote thinking and understanding of the text beyond the basic level.

Bloom's Taxonomy	Examples of Questions Teachers Can Ask
1. Remembering <i>Memorizing, reciting definitions, facts, lists, etc.</i>	<i>What happened next?</i> <i>Who was ...?</i> <i>Where did the boy go?</i>
2. Understanding: Giving meaning to what one has learned	<i>How do you explain...?</i> <i>Tell in your own words...</i> <i>What kind of ... is this?</i>
3. Applying: Using what one has learned to create models, diagrams, presentations, etc.	<i>How do you solve this problem?</i> <i>What should ... have done if ... what's not there?</i> <i>What do you want to change?</i>

<i>Bloom's Taxonomy</i>	<i>Examples of Questions Teachers Can Ask</i>
<i>4. Analyzing: Subdividing material or concepts into parts; determining how the parts interrelate to one another or to an overall structure or purpose</i>	<i>Can you explain why ...? What was the problem? Would this have happened if ...? What is the difference between ... and ...?</i>
<i>5. Evaluating: Forming opinions or making judgments based on criteria and standards</i>	<i>Do you agree with ... and why? How would you feel if ...? Do you believe that ...? Do you think it is right or wrong that ... and why?</i>
<i>6. Creating: Putting elements together to form a new whole</i>	<i>Can you make a new plan for ...? What would happen if ...? What can you do to ...? Do you see a solution for ...?</i>

Asking: What is the Rule? To promote critical thinking, teachers can present students with a question or a puzzle and have them work individually or in small groups to formulate a rule that answers the question or explains the puzzle. For example, the teacher may write students' names on the board and ask students to formulate a rule to describe the pattern they see (for example: that names begin with a capital letter), or put a series of sentences on the board and ask students to come up with a rule for writing sentences (for example: that sentences begin with a capital letter and end with a period, question mark, or exclamation point). This strategy is particularly powerful when used to teach the rules and conventions of text. This is particularly true when bridging from a known language to a new language; students discover how the rules and recurring patterns are different and how they are similar in the two languages.



Modeling How to Think About Text. In teacher think-alouds, teachers verbally describe how they would use the text to think about increasing depths of meaning or to answer higher-order questions. Think-alouds have been described as “eavesdropping on someone else’s thinking.” By using think-alouds, teachers are also able to teach students how to become critical thinkers and problem solvers. Over time, teachers can begin to release responsibility to the students, who eventually will be able to take charge of their own learning.

Teachers may be unfamiliar with the concept or use of think-alouds. The following steps outline the process of conducting a think-aloud as articulated by Reading Rockets (2017).

How to use think-alouds:

1. Begin by modeling your thinking as you read. Do this at points in the text that may be confusing for students (for instance, new vocabulary or unusual sentence construction).
2. Introduce the assigned text and discuss the purpose of the Think-Aloud strategy. Develop a set of questions to support thinking aloud, such as:
 - a. What do I know about this topic?
 - b. What do I think I will learn about this topic?
 - c. Do I understand what I just read?
 - d. Do I have a clear picture in my head about this information?
 - e. What more can I do to understand this?
 - f. What were the most important points in this reading?
 - g. What new information did I learn?
 - h. How does it fit in with what I already know?
3. Give students opportunities to practice the technique, and offer structured feedback to students.
4. Read the selected passage aloud as the students read the same text silently. At certain points, stop and think aloud the answers to some of the pre-selected questions.
5. Demonstrate how good readers monitor their understanding by rereading a sentence, reading ahead to clarify, and/or looking for context clues. Students then learn to offer answers to the questions as the teacher leads the think-aloud.

Teachers require this explicit description and practice of how to conduct a think-aloud in order to develop the confidence and skill to use them as an instructional practice.

Teacher Professional Development to Foster Critical Thinking

Built into RRN's support to teachers is the emphasis on teachers' own meta-cognition through reflection. Through RRN professional development and teaching materials, teachers are encouraged to ask questions about their practice, assess the effectiveness of their instruction, and examine the impact of their instruction on student learning. This is accomplished through small group discussions, short written reflections, analysis of videos in light of their own experiences, etc.

Beyond professional development, teachers need specific language and direction on how to incorporate critical thinking into their teaching. RRN teacher guides and materials that provide detailed lesson plans build teacher capacity in infusing critical thinking into their instruction. On-going support in the form of coaching or communities of practice further provide opportunities for teachers to continue to refine their implementation of critical thinking as they work with their students in the service of improved reading comprehension and proficiency. Field teams should work with their assigned BELT RRN technical support personnel to ensure that materials and programming incorporate these opportunities and maximize the development of teacher and student thinking skills.



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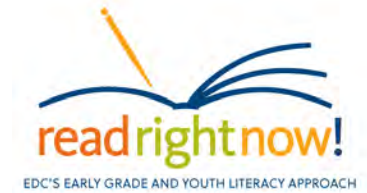
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Annex 3: Sample Low-Cost and No-Cost Materials for Read Right Now



This annex provides details about how to make and use a number of supplementary learning materials for the Read Right Now approach. These materials provide teachers and families with multiple opportunities to reinforce key reading skills through easy-to-make low-cost/no-cost learning games and activities.

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A) Alphabet Board

The alphabet board is made of a piece of plywood (or a similarly stiff board) on which as many cards as there are letters in the alphabet of the targeted language (each inscribed with an individual letter) hang on screws carefully positioned on the board. The alphabet board and the letter cards need to be big enough for all students to see the letters. A suggested size is 60cm wide by 90cm high (see Image 1). An alternative to plywood and screws is cardboard for the board and letter cards and used matchsticks broken in half for the pegs to hang the cards. Shoe glue is a great adhesive to keep the matchstick pegs in place.

Image 1. Alphabet board



Sample activities with the alphabet board

1. Point to the letters while reciting the alphabet.
2. Identify a letter (by pointing) or make the sound of the letter.
3. Put the letters in order.
4. Trace a letter.
5. Identify a letter as the beginning sound of a word.
6. Pass out letters of the alphabet and have students come to the board one by one to place them in order (reciting the alphabet up to the newest letter added).

B) Cards with Letters, Syllables, and Words

Cards can be made of cardboard, stiff paper, wood, or paper sacks. Students can use the cards to learn about letters, syllables, words, concepts of singular/ plural, and colors. Cards should be 6 to 10 cm in height and as wide as needed to accommodate a single letter, a syllable or a whole word (see Image 2). The writing needs to be big, clear, and bold. A woven palm leaf board can serve to hold the cards for classroom use.

Cards can be used in a variety of ways: by the teacher or students in a whole-class demonstration; by the teacher and students in small-group learning; or by the students in small-group, pair, or individual activities.

Sample activities with letter cards

Students can do activities similar to those mentioned for the alphabet board with cards, in addition to the following:

- Matching capital letters to lower case letters
- Putting letters together to make syllables and/or words
- Mixing the cards and identifying letters out of order
- Substituting a letter to make a new word
- Memory game: Turn the cards face down so that the students cannot see the letters. Students take turns flipping over two cards. If the letters match, they keep them; if not, they turn them back over, and another student plays. The student with the most cards at the end wins the game. (A variation for English could be to match upper with lowercase letters.)

Image 3. Cards with letters



Image 3. Putting letters together to make words



Sample activities with syllable cards

- Put syllables together to make words (see Image 4).
- Substitute a syllable to make a new word.
- Read syllables as fast as you can.
- Identify syllables that rhyme.
- Identify syllables that begin with the same sound.
- Memory game: Use the syllable cards and the same rules as described above.
- Add a letter card to the syllable to make a new word (hat, fat, cat, mat, sat).

Image 4. Combining syllable cards to make words



Sample activities with word cards

- Put words together to make sentences.
- Illustrate a word with a drawing to build vocabulary (see Image 5).
- Identify the words that begin with the same letters.
- Identify the words that end with the same letters.
- Identify words that rhyme.
- Identify words that begin with the same sound.
- Read words as fast as you can in random order.
- Put word cards on real objects: the word “window” on the window.
- Match opposites: hot/ cold
- Match singulars and plurals: child/children
- Use the word in an original sentence (orally).

Image 5. Using word cards to build vocabulary

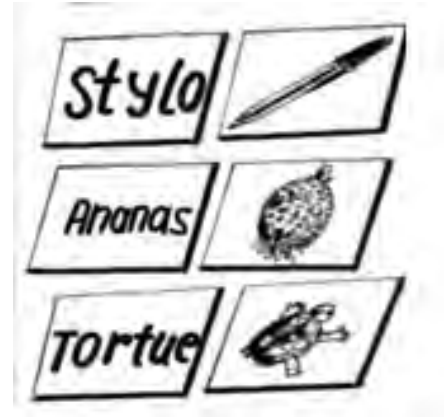


Image 6. Making letters with various materials like beans or sand and glue

C) Tactile Letters

Students can make letters with a variety of objects, and young children can make or trace letters as they learn to write.

Sample activities with tactile letters

- Make letters with various materials. With string or wool, students can make letters, or glue the string or wool onto paper. It is also possible to use or make a paste; spread it in the shape of letters, and place sand, dirt or beans on the paste, then let it dry (see image 6).
- Trace the letters with an index finger as if writing.
- Spread letters out and say the name of the letter while tracing it.
- Spread letters out and say the sound of the letter while tracing it.
- Spread letters out and make a word with some of them.
- Spread letters out and say a letter that the students have to find.



- Spread letters out and ask a student to choose a letter and then locate that letter in a text.
- Pick a letter and ask students to say words that begin with that letter.
- Have students pick a letter, trace it with their index finger, trace it in the air as big as possible, trace it in their palm as small as possible, in upper and lower case forms.

Image 7. Using matchbox kits for letter and word games



D) Matchbox Kits

Teachers can use empty matchboxes in many ways to reinforce letter/sound correspondence, letter names, syllables, vocabulary (for instance, opposites), grammar, etc. Collect matchboxes. Using both the outside and the inside surfaces, paint or glue paper on them, and then write letters, words, or syllables on and in the boxes (see Image 7).

Sample activities with match boxes

- Write the capital letter on the outside and the corresponding lowercase letter on the inside.
- Make cards with the same syllables as those on the matchboxes. Match the cards to the boxes by having students put the cards over the boxes that display the same syllables.
- Write syllables on the matchboxes and have students read them.
- Use several syllables written on matchboxes to make words.
- Write the singular of a word (such as life) on the outside and the plural (such as lives) on the inside. Students say the plural and open the box to check and self-correct. Play a similar game with irregular verbs, opposites, and so on.
- Memory game: Turn matchboxes upside down so that students cannot see the letters. Students take turns flipping over two matchboxes. If the letters match, they keep them, if not, they turn them back over, and another student plays. The student with the most matchboxes at the end wins the game (this game can also be played with syllables).

E) Bottle Cap Games

Teachers can use bottle caps in a variety of ways to reinforce letter/sound correspondence, letter names, and syllables. Begin by collecting metal or plastic bottle caps. With the metal caps, if you want to use both sides, it is better to paint the outside white (see Image 8).

Image 8. Bottle cap games



You could also write the capital letter on one side, and the corresponding lower case letter on the other.

Sample games and activities with letter bottle caps

Students can do several of the activities mentioned for the alphabet board with cards, such as

- Match capital to lowercase letters.
- Put letters together to make syllables and/or words.
- Mix the bottle caps and identify letters out of order.
- Point to a word in a storybook, recreate it with the bottle cap letters. The student can count how many times s/he finds the word in the story.
- Substitute a letter to make a new word.
- GAME: Trace a grid outside on the dirt, and place a bottle cap in each square. Each student throws a stone in a square, hops to the square, and names the letter and a word that begins with that sound (such as “s”: snake). If the student says the letter and a word correctly, she keeps the bottle cap. At the end of the game, the student with the most bottle caps wins the game.
- GAME: Each student in a pair or small group picks a bottle cap and— depending on the literacy level—names the letter, makes the sound of the letter, finds the corresponding letter, or says a word that contains that letter. For each correct response, he keeps the bottle cap. At the end of the game, the student with the most bottle caps wins the game.
- GAME: The Crocodile River: Make two teams. Trace a river with two banks in the dirt and place bottle caps in the middle. The bottle caps are stepping stones to cross the river. Each team member tries to make it across the river by stepping on the bottle caps, naming each letter she steps on. When she gets to the other side, she wins a point for her team. The team with the most points wins the game. If a student misses a letter, she becomes dinner for the crocodile.

- GAME: Memory / Match pairs: Turn bottle caps upside down so that students cannot see the letters. Students take turns flipping over two bottle caps. If the letters match, they keep them, if not, they turn them back over, and another student plays. The student with the most bottle caps at the end wins the game.
- Multi-color bottle cap game: Collect two colors of caps, use one color for vowels and the other for consonants.

Image 9. Making letters with playdough



F) Playdough Art

Playdough is a cheap, easy-to-make, nontoxic, easy-to-clean substance that teachers can use in an almost limitless number of ways. If the ingredients to make playdough aren't available, a simple soil/dung and water mixture can be easily substituted. You can make playdough without cooking using the following recipe:

Ingredients: 3 cups boiling water, 3 cups flour, 1.5 cups of salt, 1.5 tablespoons of vegetable oil, 3 teaspoons of cream of tartar, food coloring or coloring made from crushed seeds or flowers if available or desired.

Instructions: Mix all ingredients except for the flour in a large bowl. Once well mixed, add the flour. Stir until blended and knead on floured board. Add more flour if needed. Store in a plastic bag and refrigerate for about 12 hours. If different colorings are added, multiple colors of dough can be made.

Sample games and activities with playdough

- Copy or mold letter shapes with the dough. Example: "Children, please make the letter "O" with your playdough."
- Mold the letters that make certain sounds. Example: "Children, make the letter for the sound that you hear at the beginning of the word "ball." (See Image 9)
- Have children write their names with the playdough.
- Write familiar words with the dough, either all of one category (i.e., "Let's make words that begin with 't'") or freestyle ("Make as many words as you can with your dough and keep track of how many you get").
- Have students make different syllables with the dough with a partner. Then, have them try to make words by joining their syllables to the syllables made by another pair of students.

- Make the characters of a story out of playdough. Have children retell the story in their own words.
- Invent characters for a story out of playdough.
- Encourage children to create animals and/or people and have them tell a story about the characters. Ask questions that help children use new vocabulary words in meaningful ways.
- Have children make an object (simple shape or an animal, etc.) and then recreate the same object in a smaller and larger size. Practice comparison words such as “big, bigger, biggest” and “small, smaller, smallest,” and/or create sentences such as, “The pig is bigger than the cow,” or “The square is smaller than the triangle.” Write the target words on paper or the chalkboard to reinforce reading skills.

G) Spinners

You can make spinners wood, cardboard, or paper. A good size is 10cm x 10cm. You will also need a paper clip or a piece of hard plastic cut in the shape of a triangle or arrow. Divide the spinner in sections according to the numbers of letters in the alphabet (for instance, 13 sections with 2 letters per section), or make spinners with only consonants and others with just vowels. You can also make spinners with whole words (see Image 9). Make a hole in the middle and attach the paperclip (or plastic). It should spin at the flick of a finger (see Image 10).

Image 10. Spinner with whole words

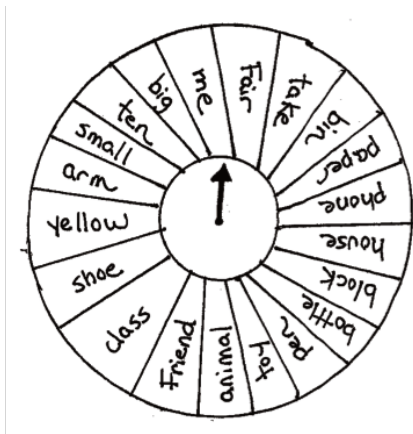


Image 11. Flick the paperclip of a spinner



Sample activities with spinners

- Flick and name the letter, make the sound of the letter, say a word with the letter.
- With a consonant and vowel spinner, flick them both to form a syllable. Read the syllable.
- Flick and recite the alphabet up to the letter flicked (or backwards from the letter flicked).

- Flick and read the word. Make a sentence with the word.
- GAME: In pairs, the students flick to get a certain number of letters. The first student to make a word wins a point. The student with the most points wins.
- GAME: Trace a path with letters in the dirt. Flick and go stand on the letter flicked.

H) Dice

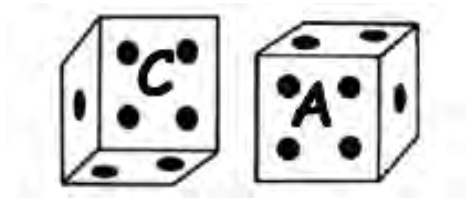
You can make dice of wood cubes (3cm x 3cm x 3cm). On each face write a letter and, if you can, write the consonants in one color and the vowels in another color. For a class set, you will need 48 dice (see Image 12).

It does not matter where you put the letters on the dice, but make sure you have enough to use the letters repeatedly. In English, this is at least 16 times the letters: A, E, I, O, U, R, S, T, L, N; 12 times the letters: B, C, D, F, G, H, M, P; and 4 times the letters: J, K, Q, V, W, X, Y, Z.

Image 12. Dice with letters on them

Sample activities with dice

- Throw 1 die, and say the letter, make the sound of the letter.
- Throw 2 to 3 dice, and try to make as many syllables as possible.
- Throw 2 to 6 dice, and try to make as many words as possible.
- Throw 5 to 6 dice, and try to make the longest word possible.



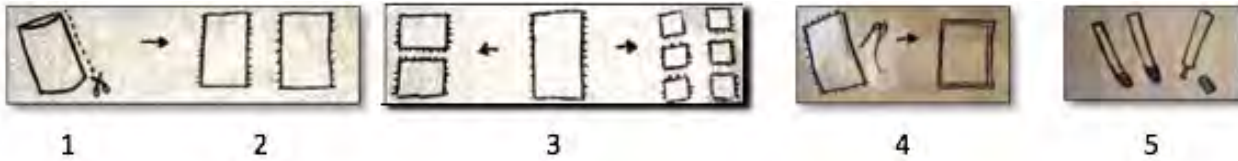
I) Charts

Teachers in the literacy classroom constantly use charts for many purposes. Rice, cement, or other sacks can be used to make charts (such as alphabet, syllable, rhyming words, poems, songs, verb tenses, grammar rules, etc.). **Here are the directions for making rice sack charts (also illustrated below).**

1. Collect rice sacks that are clean, white, and have no writing on them.
2. Cut each rice sack in half, so that it is no longer a bag.
3. Cut the rice sack the size needed: large, small, flashcards, etc.
4. With needle and thread, seal all the edges to stop the rice sack from fraying. Tie a string to the outer edge for hanging.

- Use permanent markers to draw and write on the rice sack.

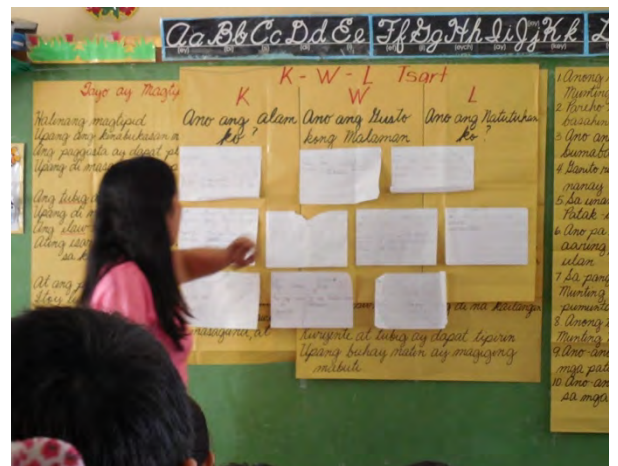
Image 13. Visual guide of how to make a chart from a rice sack or piece of material



Sample activities with charts

- Follow the process described on a chart. Example: “Our story-writing chart asks you to think of who will be in a story, what he or she will be doing, and when, how, and why he or she will be doing it. Can you work with a partner to begin to develop a story by talking about answers you might have to those questions?”
- Ask students to contribute information to a chart that you write together. Example: “We are going to use this rice bag to make a chart of words that rhyme with ‘rat’” Who can suggest a word that rhymes with ‘rat’?”

Image 14. A chart in a classroom



J) Pocket Charts

A pocket chart is a wall chart with pockets that can be used to hold cards/paper or small objects. Pocket charts can be used for sequencing activities, sorting activities, phonics, and word and sentence study, to name a few. **Here’s how to make a pocket chart:**

- Option 1: Attach additional pieces of rice sacking to the chart (see Item I) backing use needle and thread.
- Option 2: Use clear plastic bags (such as empty water bags) by carefully cutting them open and taping them on a chart to create a clear pocket (see Image 15).
- Write the contents label on the chart above where the bag is taped. For example, a bag where students place word strips with words containing the letter “a” should have the letter “A” written above it on the chart. The pockets can be as wide as needed. For sentence-building activities, pocket strips measuring as long as 60 cm might be created. For activities using letter and word cards, pockets 10 to 15 cm wide might be more appropriate.

Sample activities with pocket charts

- Matching activities: numerals with number words, color cards with color words,
- Matching word cards and picture cards (nouns, verbs, adjectives)
- Ordering activities: days of the week cards, months of the year cards, number cards, alphabet cards, word cards in alphabetical order, sequence events in a story (first, next, then, last),
- Cloze activities: sentence strips with blanks – students choose correct words to fill in the blanks and place them correctly in the chart.
- Sorting Activities: sort words that rhyme, sort words that begin with the same letter or have the same number of syllables, as a vocabulary builder sort words by category such as hot or cold, wet or dry, on the farm or in the house, etc.
- Write the lines of a poem or song on sentence strips. Have students put them in order.
- Display random words (assorted nouns, verbs, adjectives, and articles). Have students create original sentences on the chart. Rearrange or the word cards to create new sentences. Say a sentence and have the student find and create that sentence with the word cards.
- Use predictable/patterned text. Have students fill in the blank using categories of words (color words, size words, or shape words, etc). (see Image 15) For example:

I see a ___red___ book.

I see a ___blue___ book.

I see a ___green___ book.

Image 15. Pocket charts made from empty clear plastic bags



K) Word Makers

Word makers are classroom aids where syllables, prefixes, suffixes, and whole words are placed up on a wall for children to combine and make words, either real or invented. Often, they consist of columns of words or word “parts” hung up side by side (see Image 16). Teachers can make word makers using cut up rice or cement sacks as described in the chart section.

Image 16. Word maker



Sample activities with word makers

- Assist the teacher in coming up with and classifying the elements for the word maker. Example: “Class, what could we put on our list of words that contains the sound ‘ot’?”
- Mix and match words or parts of words on the wall to make nonsense words.
- Pretend that one or more consonants are “out sick” and find out how that would change the words on the word maker.
- Combine words or letters from the word maker with other words or letters and figure out which results yield real words and which “don’t work.”
- Find words on the word maker that have the same beginning letter, the same ending letter, or both.
- See for which category in the word maker students can find the most real words.
- Read all the words in the word maker backwards and see which one sounds the funniest.
- Put all the words in the word maker together to make one really BIG word, and then try to read that word, both backwards and forwards.

L) Make Small Books

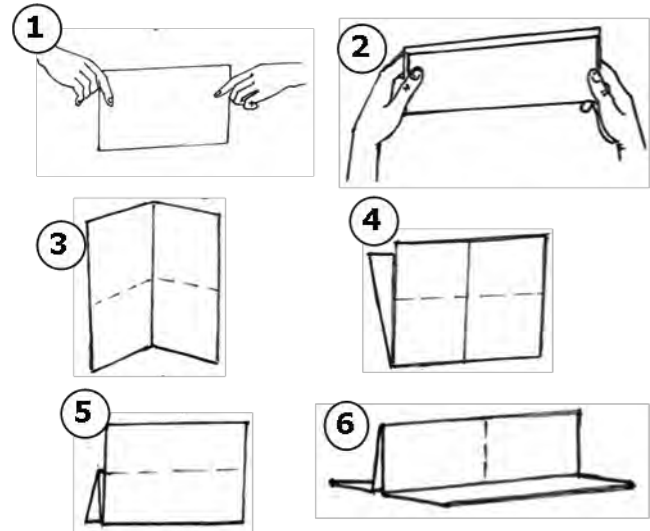
Making small books in class can be a fun activity and promotes the sharing of stories and other forms of text.

How to Make a Small Book:

(see Image 17):

1. Hold the paper in the direction usually used for writing (with the longest sides pointing top to bottom).
2. Fold the paper in half, bringing the top edge even with the bottom. Leave it folded and continue.
3. Repeat, folding the “new” top edge even with the “new” bottom edge. Leave it folded and continue.
4. Now fold the paper in half in the other direction, bringing the left side even with the right. Bear down on all the creases in all directions.
5. Partially unfold the paper, into halves, as it would have been after you completed step 2. You should see creases showing four small squares on each half of the paper.
6. Cut through the paper on the bottom of the four creases you can see with the crease reaching from the center of the paper to the bottom of the page. If you do not have scissors, wet the crease with your tongue repeatedly until the paper weakens and then separate the paper, as you would have with your scissors.
7. Push the outside sides of the paper together. A diamond should begin to form where you placed the cut, and you should be able to fold your book into a mini-book.

Image 17. How to make a small book



Sample activities with small books

- All reading and responding to reading activities can be done with small books.
- Students can use small books for publishing short texts they produce.
- Students can take their short books home to read to a family member.
- Students can trade and read each other’s books.
- Students from higher grades can produce easy-to-read texts for lower grades.

M) Make a Big Book

Making a big book in class is a collaborative writing activity that guides students in the production of a text they can read.

Choose a story or a topic that the students know well (for example, the alphabet or numbers). Assign one page to each student and assist students in writing their section, in rough copy first; then revised and corrected. When the text is final, have students copy it onto a big sheet of paper. Assemble the pages in order to make a big book.

Sample activities with big books

- Students can read and respond to all reading activities with big books.
- Students can use big books for publishing texts they produce
- Students can read big books in small groups.
- Students from higher grades can produce easy-to-read text for lower grades.

N) Story Cards

Story cards are easy to make and can be used for a variety of purposes. Story cards are stories that are displayed on a card instead of book and require only a single piece of paper. The title and a large illustration are on one side and the story, in 6 to 8 frames, is on the other. Another set of story cards might include a sentence on each card. The cards must be put into order to make a story (see Image 18).

Image 18. Story cards



Sample activities with story cards

- Students and read and respond to all reading activities using story cards.
- Students can read story cards in small groups or individually and can take them home to read to a family member.

O) Puppets

Puppets are useful for developing oral language. Students can use puppets to tell or re-tell a story or to invent dialogue between characters and create stories.

Puppets come in all shape and sizes. Finger puppets are small cloth puppets that fit on just one finger. A paper bag or old sock that fits over the hand can form a hand puppet; you use the thumb as the lower jaw and the four fingers as the upper jaw to work the puppet’s “mouth” (see Image 19.) Other objects can be made into puppets that students manipulate: spoons, sticks—virtually anything that a student can put eyes on and make the pretend voice for. The image at the right shows some puppets made from paper bags.

Image 19. Puppets made from paper bags



Sample activities with puppets

- In pairs, students use puppets to create a dialogue, which they can write down (with help from the instructor, if necessary).
- Students make puppets to represent the characters in a story and retell the story in dialogue using the puppets.
- Students use puppets to invent a story.
- Students use puppets to “quiz” each other: One set of puppets can “ask” the other to find letters of the alphabet, words containing or beginning with certain sounds, or parts of speech and then the “puppets” can reverse roles (obviously, in this activity, students provide the “voice” for the puppets).

Image 20. Drawings are aids to vocabulary development



P) Use Found Photos and Drawings

Photos and drawings are marvelous aids to vocabulary development and discussion that can lead in to reading lessons on everything from letter recognition to story-

writing and fluency. Photos from magazines, advertisements, and flyers are a great resource. When working from a photo, drawing, or any other image in a second- language environment, remember that students will almost automatically respond to questions or images in their own native language. It is important to offer teachers guidance about how to respond to this natural reaction and to provide the target vocabulary in the second language to the students without punishing them in any way.

Sample activities with found photos or drawings

- Show all students the image and ask them to describe what they see and turn that description into text.
- Add vocabulary identified by looking at the image to class word walls, dictionaries, or other lists of important words.
- Displaying environmental print from advertisements, magazines, flyers, etc. is a great way to build sight vocabulary and capitalize on sight vocabulary to build phonics skills.
- Ask students to predict, either orally or in writing, what they will see in an image the teacher at first conceals.
- Ask students to predict orally, having seen the image, what will happen next.
- Ask students to work in pairs, once they have looked at the image, to write what will happen next.
- Use natural associations with the image to explore categories of vocabulary. For example, images from fashion magazine are often useful for exploring color vocabulary.
- Make up entirely new, nonsense words for items in the pictures and then figure out how to write down those words using the phonetic rules of the class's usual target language. With enough nonsense words, students can generate an entire story in a "fictitious" language only they know.
- Present a "pre-fab" description of a photo or drawing that is not even vaguely related to it or that includes obvious errors (for instance, "the lady is wearing an elephant") and ask the class to find and correct those errors or inconsistencies, either all together or in pairs.

Q) Use Concrete Objects

Any concrete object that presents some aspect of mystery is potentially useful in the literacy classroom. Concrete objects can include everything from small wooden boxes to necklaces or chains or ropes, to plastic water or oil containers, to suitcases or large bags. Teachers using concrete objects may need assistance imagining how to "leap" from the object to a reading and writing lesson.

Sample activities with concrete objects

- Ask students to guess what the object is, what it has inside, or what it is actually used for. Keep track of these ideas in a chart or word web that can become the basis for writing work.
- Show all students the object and asking them to describe exactly what they see. Use vocabulary from that description to add to class dictionaries or word walls.
- Show students the object and ask them to develop a riddle for the next class about what the object is.
- Figure out how many categories the object could belong to (color, size, shape, utility, etc.) and then list other words that belong to one of those categories.
- Tell the students that to your surprise you found the object on the way to school. Ask students to work in pairs to answer questions about the object and its history: Who might have owned it? What was it used for? How might the object have ended up where you found it? Again, use the various answers as the basis for additional writing work.
- Ask the students to propose uses for the object that go above and beyond its normal use. For example, people often use rope in rural areas to restrain animals, but what if rope were actually used to communicate with beings from other planets? Based on the uses proposed, develop a story about the object.

Image 21. Activity center with concrete objects



Sample “activity centers” with concrete objects

- Create various themed activity centers with found objects and empty boxes, cans, and containers still in good condition. For example, old egg cartons, cereal boxes, yogurt containers, chip bags, juice bottles, milk cartons, and clean paper plates and cups can all be used to create a kitchen center, a store, or a restaurant center. Children can gather dirt and mix with water to pretend bake. They can use bottle caps and/or paper strips as play money, and a box as a cash register. Children can create signs and labels appropriate for the “center.” Children use boxes and lids from jars to create vehicles. They could make a mechanic center or repair shop. The possibilities are endless with a little imagination.

R) Trace in the Dirt and Play Games Outside

Going outside is free and the ground can provide a free workspace for all students. Using a stick, trace game areas and letters.

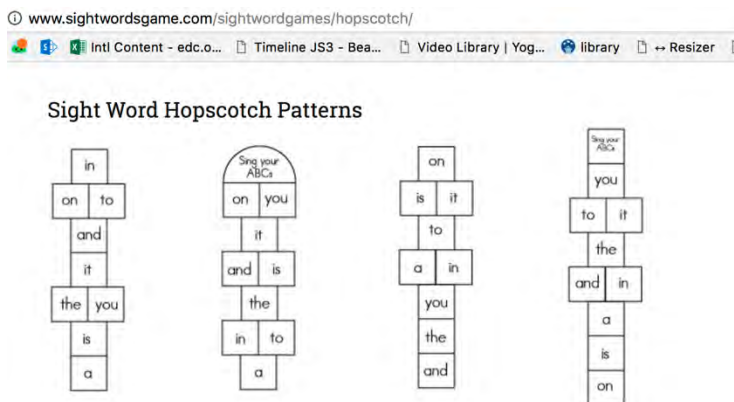
Sample activities tracing in the dirt

- Trace a path or ladder with letters. Students walk on the path and say the name of the letter, or make the sound of the letter, or say a word with the letter (see Image 22).
- GAME: Trace a hopscotch game and write letters in each square. Student throw a stone, hop to the square, say the name of the letter, or make the sound of the letter, or say a word with the letter. If they are correct, they score a point (see Image 23).

Image 22. Trace a path or ladder with letters along it. Students name or make the sound of the letter as they move down.



Image 23. Sight word hopscotch patterns



**Permission pending.*

- GAME: Play Crocodile River (see section on bottle caps).
- Students use sticks to trace letters, syllables, and words in the dirt.
- Students arrange pebbles, shells, or small rocks in the shape of letters.
- GAME: Alphabet Soup. Assign some students as vowels and others as consonants (for example, boys are consonants and girls are vowels). The students move around (mingling) in a play area. When the teacher says a word, the students must quickly group themselves according to the

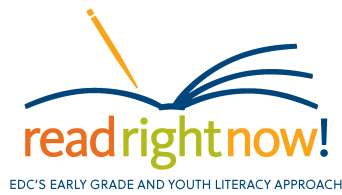
letters in the word. Example: *board*. Each group of students should have 3 boys (3 consonants) and 2 girls (2 vowels).

- GAME: Statues: Students move around in a play area. When the teacher says “Freeze!” all students stop moving and freeze in the shape of a letter. While students are “frozen,” the teacher walks around and asks students to name their letter and make its sound.

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Annex 4: Family, Community, and Read Right Now



Faithful implementation of Read Right Now (RRN) in the classroom produces successful readers. Research has also documented the positive contribution that family and community play in preparing and supporting children’s literacy development. With this in mind, RRN provides guidance for how to effectively engage families and communities as critical and active stakeholders in their children’s learning. This section describes the various activities designed for family and community members to support the instructional approach of RRN. They explicitly strengthen children’s reading skills as well as create a culture of reading within the family and the community that motivates and nurtures early-grade learners, as they become proficient readers.

Defining Family

RRN uses the “*family*” rather than the “*parent*” as the unit of adult influence on children’s early-grade reading readiness and development to reflect a number of norms prevalent in many countries in which EDC works. The extended family is the family unit rather than simply parents and children. Grandparents, aunts, uncles, and non-familial caregivers are often part of a child’s daily life and may have more time to listen to a child read than actual parents do. It is likely that older siblings or older cousins may be the only literate people in a child’s family and would therefore be appropriate sources of academic support for children, especially as they move into and beyond third grade. In addition, in many of the countries in which EDC works, children live in non-traditional situations such as with relatives beyond the immediate family, with neighbors or in orphanages or refugee camps. RRN understands and appreciates the diverse nature of family and home. As such, our use of “family” and “parent” assumes all of the above relationships, and the use of “home” encompasses the wide array of living situations children in the countries we serve may encounter.

School–Home Activities

The RRN school - home reading component underscores the importance of promoting a culture of reading within the home and community, supporting oral language development as a foundation for early grade reading success, and encouraging children to read for academic purposes, as well as a social activity. Toward this



end, RRN outlines the following activities as a foundation for realizing these goals.

Teachers engaged in RRN incorporate a contextualized Literacy Passport into their curriculum to foster the link between school and home. Through the literacy passport which travels between school and home each week, parents are guided in how to better engage in rich conversation with their children to build vocabulary, practice appropriate linguistic patterns, expand knowledge about the world around them, and use the environment to help their children make the connection between speech and print. The Passport incorporates illustrated activities to reinforce reading skills in a fun, easy to implement way in both resource-poor conditions and where parents may not have strong literacy skills themselves. And the illustrated checklist upon completion of daily activities provides parents and children with a sense of accomplishment while providing feedback to teachers for accountability.

Some specific activities families can do with children are centered around storytelling and books. Simply spending time with children and telling oral stories, chanting poems, and singing songs in an animated way can be entertaining, build vocabulary, and help children learn about linguistic patterns such as rhyming.



With books brought home from school or the library, families can read together. Listening to children read, asking questions about the pictures or story helps build interest, vocabulary and comprehension. Even before opening a book, check out the cover, read the title, and ask what the book might be about. Simple gestures that build book knowledge such as pointing to the words as you read, asking your child where to read next when you get to the end of a sentence, and searching for words that begin with a certain letter or rhyme with a certain word all help develop important skills.

Even if you don't have a lot (or any) books at home, your family can engage in literacy activities. Print is everywhere! Look on your packaged food and household product labels. Make a list of items you buy regularly. When you go to the market with your child, check off the items as you put them in your basket. List the items in alphabetical order or group them by category. When you are cooking together or working in the garden or field, talk about the recipe or steps you are taking to plant/weed the garden. Have your child draw each step in the process and label the pictures. S/he can even write out the steps using such sequencing

words as *first*, *next*, *then*, and *last*. Make everyday activities learning activities. On your walk to school, the market, or your place of worship, notice the street signs, billboards, and shop signs. Play a game to see who can find a sign that begins with a certain letter or sound. See how many signs your child can find that begin with a certain letter/sound. When you get home, see how many words you both remember and make a list.

This is just a small sample of activities families can engage in to support their child's literacy development and build a print rich culture of reading. Use your imagination and let the context you are working in guide the development of even more activities.

Additional Family Support

Families can also engage in many other simple actions that will have a positive effect on their children's reading achievement beyond the specific activities that RRN encourages them to do. Families actually do many of these actions to some degree or another, and by becoming aware of the value they provide to their children's education, they may make more of an effort to engage in these supportive and healthy habits. For example, they may be surprised to learn that ensuring that children have the following will help them succeed in learning to read:

- Good nutrition
- Adequate rest
- Good attendance at school
- Enthusiasm for learning
- A sense that reading is valued
- Appreciation of stories
- Appreciation of books
- School supplies: pencils, erasers, whatever is requested
- Adequate time to practice reading and writing and to do homework
- A place to do homework that is conducive to learning – good lighting, free from distractions
- Time spent with family members engaged in speaking, listening, reading, and writing (and other literacy) activities on a regular basis

Transmitting these Concepts

While teachers can and do engage and educate families about the many ways they can support their children’s reading development, the most effective way to do so is to enlist the community as an advocate in this endeavor. RRN conceives of community as the group of people that live in the district served by the school and who have some connection to the school, usually through a child, but sometimes because of their role in the



community, such as religious leaders or business people who see the value of an educated population. Community engagement is usually more successful if anchored to a pre-existing group. Many of the countries in which EDC works promotes the establishment of parent associations or similar groups that support the school at the same time as they represent the interests of the community to the school. These groups become good anchors for school-community activities, but if they do not exist or are not well established, another civic or religious group could also be a catalyst for such mobilization and advocacy. Working together, the school and community can build a culture of reading and become a “*reading community*”—one that embraces reading and models it as a value that children and young people aspire to adopt.

Conditions and Activities

Not all anchor groups—particularly those that are new or those in fragile states—are mature enough to provide leadership to community-school activities. To be able to take **action**, the anchor group and the individuals most active within it need the skills and ability necessary to mobilize and engage in the kinds of activities that create a reading community and lead to increases in reading achievement. If *RRN!* is not being implemented appropriately, these anchor groups also need the wherewithal to bring pressure to bear on the school and at the local and regional levels, and to step up out-of-school activities. If a community does not have a viable anchor group, teachers or school administrators can be enlisted to educate families about the role they play in school-home activities, and work can be done to strengthen an anchor group, with school-home activities as the vehicle for learning.

The anchor group as a group, and community members as individuals, must **believe** they have a role in creating a community where the children will actually learn to read. They must understand that other communities can and do succeed in working with schools to create an environment, in school and out, that ensures that children learn to read, and that they can, too.

The anchor group must have the **confidence** of the community first and foremost. It must also have the skills and knowledge necessary to perform its responsibilities in creating a reading community. Community members must feel confident that their ideas for promoting reading will have a place in this process of creating a reading community.

If the anchor group is capable of action, it can play numerous roles.

As RRN is being implemented, the anchor group can be both a transmission vehicle and a source of **knowledge**.

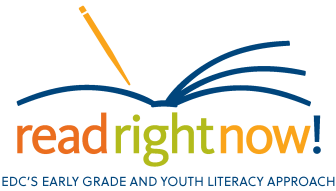


- The anchor group can share information about what changes are being made in the school via *RRN!* and why they are being made.
- The anchor group needs to explain and reiterate to families the roles they are expected to play in conducting school–home activities and supporting the development of reading and writing skills and why they are important. The anchor group can transmit messages such as, families have a key role in improving children’s reading achievement; all children can learn to read; children need adequate rest and nutrition to learn; education in general, and reading in particular, is valued.
- The anchor group is best suited to articulate and model what a reading community looks like and what community organizations and individuals do in a reading community.
- The anchor group can coordinate with school and other community members to organize events (such as reading or storytelling contests and book fairs) that promote reading and an exchange of knowledge about reading practices.

The anchor group can be the vehicle through which the community can access accurate **data** on the developing reading skills of its children and guidance on how to make sense of the data. Other indicators can provide feedback on a community’s movement toward being a “reading community.” The anchor group can sponsor forms in which this information is shared widely and evaluated.

The anchor group represents the community as a critical partner with teachers, school leaders, and school administrators to support the instructional changes the school is attempting to make as well as the school-home activities the school is seeking to implement as part of RRN. All parties – as groups and as individuals, locally, regionally, and nationally – must be willing to look critically at children’s reading outcomes and share responsibility for improving them.

Annex 5: Using Read Right Now with Older Learners and Out-of-School Youth



RRN can be used either with early grade learners in formal primary schools or with youth who have not had the opportunity to go to school or who are returning to school having only completed a few years of education. The *principles* that form the foundation of RRN for both early grade children and for youth are the same; however, *implementation* differs, as youth who are early grade readers are at a different developmental stage than children in the early grades of primary school.¹ Reading programs for out-of-school youth (OSY) are often a subset of programs designed to equip youth with the ability to earn livelihoods and are usually considered non-formal educational and/or accelerated education programs.

The core activities of RRN OSY are the same: the teaching of component reading skills, facilitated oral language development activities and opportunities for students to read and write, with the goal of helping students become autonomous readers and writers whose literacy skills serve meaningful and useful purposes. To support this goal, students are taught literacy skills within the content and context of the larger OSY program in which RRN OSY is often embedded. Most frequently, the focus of the OSY program is work readiness, entrepreneurship, and/or life skills, but may also include health, civic participation, or other topics pertinent to the lives of young people. Reading and writing skills and content are conveyed via a variety of instructional activities that provide students with practice in

RRN for Out-of-School Youth

- Incorporates an evidence-based design to teach reading and writing that is based on proven instructional practices
- Is custom-built, from a proven model, for each context with personnel from the country
- Teaches both reading and writing from the beginning of instruction
- Leverages the power of writing to build the component skills of reading and provides daily instruction in the basic skills
- Makes learning to read purposeful for out-of-school youth by integrating meaningful content into lessons while building reading skills
- Provides youth with multiple opportunities to read and to produce texts for others to read
- Is designed for teachers with little or no training in reading who work in resource-lean environments
- Engages youth in learning activities that build skills needed in daily life
- Relies on locally-generated materials

¹ Note: Instruction and related elements are necessary but not sufficient for an effective OSY educational program. An additional reference for EDC's approach to program design for literacy training for out-of-school youth is *Literacy for Out-of-School Youth: A Program Guide*, which can be found in the BELT Library at beltlibrary.edc.org

skills valued in the lives of adults: working in groups, problem-solving, and presenting information. Strengthened literacy skills enhance youth's ability to attain skills and information in the target areas of livelihoods, entrepreneurship, life skills, or specific vocational skills as well as to succeed in those areas. For that reason, the RRN OSY program's reading texts and writing opportunities offer content that highlights work readiness, entrepreneurship, and life-skills information. In addition to following the guidance given in the Toolkit, we recommend that the development of basic literacy programs for out-of-school youth incorporate the following additional guidance:

Oral Language Development

As described in the Toolkit, students participating in literacy learning in a second language more often experience problems than those students who receive instruction in their first language. Making some accommodations—such as oral language promotion in a student's maternal language or adapting instruction to take into account a student's cultural background—can facilitate literacy instruction. A number of types of instructional activities used by RRN OSY to foster oral language development take into account these challenges as well as link literacy learning to relevant, everyday issues and opportunities.

Students build their vocabularies and ability to recognize, analyze, and synthesize the sounds of spoken language by participating in a number of activities that engage them in doing so. In **small group discussions**, students discuss the issues they face. The teacher reads aloud or presents issues via pictures, stories, or scenarios and asks students to use critical thinking skills to solve problems (called a **problem-posing approach**). What is the problem? Have you seen, heard about, or experienced problems like this? How would you handle it? **Presenting** the discussion conclusions, as well as representing small group work to a larger group in other activities, gives youth the opportunity to speak in front of a group. This opportunity is especially valuable to young women, who often do not have much opportunity to speak in front of others.



As in early grade primary programs, **read alouds** engage students in listening to and thinking about age-appropriate stories and texts. The teacher reads aloud to the class, providing a link between oral language and print while modeling authentic use of printed materials to communicate ideas, questions, and concepts.

Word games give students the opportunity to attend to the sounds in words— an important skill that is highly correlated with reading success. Effective instruction that promotes oral language development is explicit, active, and incorporates singing, chanting, listening to text read aloud, and playing games that manipulate sounds—activities that youth still enjoy (Yopp & Yopp, 2009; Adams, 2001).

Technologies extend learning outside the classroom and during seasons when classes are not in session, helping students prevent a loss of skills between class sessions. Mobile learning (MLearning) uses cell phones—highly popular with youth—to deliver instruction that promotes phonological awareness as well as letter and word recognition.

Explicit Instruction in the Component Skills

As noted in the Toolkit, explicit, systematic instruction of the component skills of reading and writing is a critical component of any effective literacy program (Archer & Hughes, 2011), and research suggests that it is particularly beneficial for children from low- resource environments that lack a reading culture (Ryder, Tunmer & Greaney, 2008). Unfortunately, many teachers in developing countries, which are typically low-resource environments, have never been trained in reading and writing instruction and, therefore, are not familiar with the breadth of skills required to teach them explicitly. And in many OSY programs, teachers are novices, without prior preparation or experience in teaching anything, let alone reading.

The RRN OSY program fills that gap by providing teachers with an instructional program that provides the specifics of the systematic teaching of reading and writing. In each country, development begins with a description of the scope and sequence for each grade level: 1) the component skills to be taught, 2) the sequence in which they should be introduced, and 3) the types of tasks students should be able to complete at specific points along the sequence, if they have mastered the skills in question.

The scope and sequence analysis of a country’s national curriculum for out-of-school youth, if it exists, serves as the blueprint for the development of all materials—print and, when possible, audio— designed to support teachers’ ability to deliver direct instruction. Materials are developed to ensure that they fit together in a complete and systematic package including a teachers’ manual of scripted lessons; accompanying student-leveled, decodable texts; a bank of assessment tasks and reinforcement



activities keyed to the specific set of skills covered in the scripted lessons; and some technological support such as MLearning or Interactive Audio Instruction (IAI) where possible.

Purposeful Reading

Time and texts for scheduled, structured independent reading are just as important for older learners, if not more so. Older learners know *what* they want to be able to read and for what purpose. Built into the teaching and learning materials are high-interest, context-specific and leveled reading texts that provide opportunities for youth to apply and practice new reading skills.

Example: From Alternative Basic Education Level 1 Literacy course, lesson on the soft and hard /c/ (Ministry of Education, Liberia).

Read aloud with a partner. Circle all soft c sounds and underline the hard c sounds:

I use my cell phone to call my friend.

My friend is in the city. He lives in the center of the city.

My friend's cell phone rings.

He answers the call. He says the city is cold.

I say it is cold everywhere in the country.

I say it is very cold when I ride my bicycle.

We agree it is cold in the city and cold in the country.

We say goodbye and end the cell phone call.

Example: From Guyana Skye literacy curriculum for Pre-WRN, for participants who read at approximately a grade 3 level or below.

Story 1

Bertie needs a job.

Bertie cannot write.

He cannot fill out the job form.

What can Bertie do?

Questions:

1. What does Bertie need? _____
2. What can Bertie not do? _____
3. What should Bertie do? _____

Phonics

Sort these words in the table below: knob, sat, bun, ten, dab, cob, cot, cab, men, nun

job	tab	not	cat	den	fun

Authentic Writing

RRN OSY students are encouraged to begin writing from the first days of instruction to enhance reading skills development and to give them the experience of communicating in writing. One way in which RRN OSY introduces students to the world of writing—if teachers are comfortable with the method—is through language experience activities: the teacher acts as a scribe, writing the words students dictate, while drawing their attention to the different components of language (letter–sound combinations, grammar, punctuation, or other written conventions).

In resource-lean environments, where there are few, if any, developmentally and contextually appropriate texts for students to read, language experience activities can fill the resource gap. All that is required is a chalkboard and chalk or a pen and paper. OSY students understand that writing is a way of communicating. They can quickly begin engaging in authentic writing, producing images and accompanying words or sentences to convey their thoughts. Youth in the countries in which EDC works tend not to be overly concerned with the correctness of their writing. Instead, they see literacy as a tool, and they use it as they see fit. They often use unconventional spellings that are based on how the words sound. Students’ ability to use their knowledge of letter–sound relationships to write words is encouraged, even if the result is not conventional spelling. When encouraged to use what they know about letter–sound relationships, students feel free to express themselves fully and to use all the language resources available to them in an attempt to write. This “inventive spelling” process solidifies both students’ ability to decode (read) and to encode (write) words, while producing more developmentally appropriate texts to read.



As students move through a RRN OSY program they are gradually introduced to the conventions of written texts (conventional spelling, punctuation, and grammar) and their importance in conveying

thoughts clearly and accurately. Student writing continually improves to reflect a growing understanding of how written language works. Students are introduced to principles of the **writing process**: 1) how to generate and organize ideas prior to writing, and 2) how to review one’s work (or that of a classmate) to improve how the ideas are expressed and organized, to enrich the vocabulary, or to ensure that language norms (grammar, spelling) are respected. Students write in a variety of formats, such as letters and text messages, action plans, calendars, advertisements, instructions, dialogue, informative text, and narratives.

Examples of writing activities can be found in curriculum materials the BELT library and on the Youth Team SharePoint site.

Integrating the Four Instructional Activities

The following examples from RRN programs for older learners illustrate the ways in which the four core instructional activities may be pulled together, using problem-posing pictures or stories:

Example: From the Mali PAJE curriculum that integrates literacy with work readiness skills development

The work readiness learning objective *know yourself* falls under the section on Personal Development. The key word is “teri,” which means friend, and the learning objective for reading is to be able to decode, identify when heard, and write the consonants “r” and “t.” The letters “e” and “i” were covered earlier in the materials. In the lesson, students view the image together (more advanced students can jot down ideas when looking at the picture, and starting at Lesson 30, *all* students jot down ideas first), discuss what they see, and ask questions. The teacher may interject new vocabulary.

Students break into small groups to discuss the picture, using a set of questions that are the same for each lesson:

- What is the problem?
- What might have caused the problem?
- What might be the impact of the problem?
- Has this problem happened to you?
- What could be done to solve the problem?



Each group presents their analysis and compares answers to these 5 questions.

Depending on the literacy level of the students, this activity is extended with a variety of reading and writing activities (individually, in pairs, or in small groups) with a scribe (particularly when students have a range of abilities). Exchanging completed writing assignments among students is an inexpensive way to produce materials for reading practice. Beginning level learners start with “telling” and “acting out,” but writing is introduced in Lesson 1, and students engage in the following activities as soon as they can:

- Take individual notes on the picture
- Write out or tell the story shown in the picture
- Write about or tell what happens next
- Write or act out a dialogue between characters in the picture
- Write or tell what happened before the action in the picture
- The key word discussion is followed by explicit instruction.



Example: From the Liberian Ministry of Education’s Alternative Basic Education curriculum, developed by the EDC-managed USAID Liberia Advancing Youth Project (2011-17) in partnership with the MOE

Sonie’s Story, a multi-chapter story that runs throughout the 108 Level 1 literacy lessons, incorporates problem-posing situations that are relevant to the daily lives of Liberian youth. The first chapter, below, is read aloud in the first literacy lesson:

Life in Voinjama

Once there was a girl in Voinjama named Sonie. She was about 16, tall and dark, with short hair plaited in cornrows. Together with Mama and Papa she lived in a mud hut with thatch roof.

Sonie had a younger brother named Sarkor. He was 15 but taller than she was. Sarkor was a quiet boy who liked to help Mama and Papa.

Sonie was obedient and hardworking. Each day she went along with her parents and her brother to their farm in the forest. She helped them plant rice, cassava, eddoes, and yam.

Sometimes she stayed home, cleaning the house and washing her parents' clothes. She cooked and kept the pots and pans clean, too.

One day Sonie was sitting with Mama and Papa. Suddenly Mama said:

"Sonie, the chief would like to marry you. He sees that you're hardworking and says you would make a good wife."

"I don't want to marry him," Sonie said, suddenly angry.

"Why wouldn't you marry him?" Papa asked, frowning at her.

"The chief is 65, and I'm only 16," she told Papa. "And he has got three wives and many children."

"That is so," Papa said, "but it is tradition. You must marry the chief at all cost."

Before the story is read aloud, the teacher engages students in pre-reading activities, such as discussing what the title of the story might indicate about its content. Following the read aloud, the teacher/facilitator leads students through a series of activities designed to help students:

- Learn a comprehension strategy that the teacher models while reading the story
- Review new vocabulary, before and after the reading
- Answer comprehension questions that let the teacher verify that students have understood the text
- Discuss critical questions about the story, just as they might discuss and analyze a problem-posing picture

Eventually, students can read this version of the chapter:

Sonie's Story

Sonie lives in a village in Voinjama
She lives with her Mama and Papa.
She has a brother.
His name is Sarkor.

Implementing RRN with Older Learners

RRN OSY programs are usually, but not always, subcomponents of OSY programs with livelihood-development and life-skills goals. Increasingly, RRN programs for OSY are developed to help the host country ministry of education provide accelerated basic education for youth and young adults who were not able to access primary education at the appropriate age. In both situations, RRN OSY works closely with appropriate government ministries to develop the program so that it best meets the needs of the youth in the country.

The following steps for design and implementation mirror those found in regular RRN programs for young children. The OSY guidance notes are meant to supplement the information found in the Toolkit.

Train program staff on Read Right Now and ensure that they have the capacity to support the evolving reading program.

OSY Guidance: Program staff of youth development-focused projects may not have any background in literacy instruction for older youth or in youth/adult education. Additional background and resources (beyond the RRN Toolkit) are found in the BELT Library in **RRN OSY File 1 Background Resources**.



Collect evidence from the field to confirm the country's "literacy profile," as articulated in the proposal research. These baseline assessments provide data to RRN staff on the quality of teaching practices and the level of proficiency of students' reading and writing skills. They may also include a survey of the beliefs teachers bring to the reading and writing process; student, teacher, and community literacy practices; and the available resources to support reading and writing instruction.

OSY Guidance:

- Useful information about the literacy skills of OSY is usually not readily available. Depending on the language of instruction, it may be advisable to develop a quick snapshot of literacy skills before investing in an adaptation of EDC's eOLA (see below). Administering several sub tests of the OLA (letter recognition and word recognition for example), the FLAT (Functional Literacy Assessment Tool) or an adapted ASER to a small sample will yield information that is useful for developing the initial scope and sequence.
- Once the program has started, collect a baseline sample of the literacy skills of out-of-school youth, administer EDC's electronic Out-of-school youth Literacy Assessment (eOLA). For full information, see <http://eola.edc.org/>.

Analyze policies, standards and curriculum and set the parameters for instruction. Based on findings from the initial assessment, RRN staff are able to identify gaps between the existing reading and writing practices and achievement and the desired outcomes. Document analysis of the country's

curriculum also provides direction for the collective revision of reading and writing standards and curriculum.

OSY Guidance:

- Most countries do not have strong policies or separate literacy (or any other) curriculum content standards for use in basic literacy or accelerated education programs. Content standards for the primary grades provide information on what the host country Ministry of Education values. If reflective of international best practices, these standards may provide the basis for curriculum content standards for programs for out-of-school youth.
- An example of a cross-walk, or alignment, with a country's primary education curriculum is found in the BELT Library: **RRN OSY File 3 Liberia ABE Level 3 – Grade 6 Equivalency Crosswalk (2011)**.

Revise content standards, develop the scope and sequence and determine draft performance standards/assessment benchmarks. The situational analysis provides evidence from the field that informs the revision of standards and curriculum. Through an agreed-upon process, RRN and the host country Ministry of Education negotiate a shared understanding of the skills and abilities students should be able to demonstrate at each grade level (or equivalent), as well as the types of literacy instructional practices teachers should use in the classroom.

OSY Guidance:

- The 2017 Technical Guide to the ABE Curriculum (Government of Liberia and USAID Advancing Youth) provides an example of one country's curriculum content standards for three levels of basic education for out-of-school youth.
(<https://educationdevelopmentcenter.sharepoint.com/teams/idd/projects/LiberiaAYP/Final%20Products/Final%20products/Technical%20Guide>)
- The level descriptors for each standard are the draft performance standards or assessment benchmarks. Formative and summative assessments should be developed with these performance standards in mind. See #6 below.
- For more information about developing or adapting curriculum content standards and preparing the curriculum scope and sequence, see **RRN OSY File 4**.

Design and specify the program details of RRN. Through joint planning sessions between EDC staff and the country’s Ministry of Education, the specifics of a country’s RRN program are agreed upon. Daily and weekly instructional schedules are designed, incorporating RRN’s core instructional framework of four activities and four strategies. Design of RRN within a particular country’s context also depends on the language policies and practices of that country and its timetable for educational innovation. The language of instruction and role the mother tongue plays in instruction heavily influence how the key activities of oral language, explicit instruction in the component skills, authentic reading, and authentic writing play out in a particular implementation.

OSY Guidance:

- RRN OSY programs operate in environments that provide opportunities and impose constraints that affect the design of instruction, and understanding these parameters provide options for customizing RRN to a new environment. See **RRN OSY File 5A Setting Parameters for Instruction in the BELT Library** for a check list of considerations for finalizing program design.
- Develop a predictable pattern of instructional activities that fit the needs of the youth enrolled in the program. The following file in the BELT library provides examples: **RRN OSY File 5B Patterns and Sequences for OSY Lessons**

Develop instructional support resources. Through collaboration between RRN and ministry officials, initial instructional materials required to support the implementation of the program are developed—a most important activity. Teachers’ manuals are a critical component of development as well as student materials, such as decodable texts, read-aloud books, letter and word games, and audio programs.

OSY Guidance:

- For assistance in developing instructional support resources, including scaffolded, scripted lessons and learner workbooks that integrate content with literacy instruction, and for examples of RRN OSY teaching and learning materials, see the following files in the BELT Library: **RRN OSY File 6A Developing Instructional Resources.**

Content and Lessons

- Develop formative assessment guidelines and assessment templates that are aligned with the level descriptors (or performance standards) that form the curriculum framework. See **RRN OSY File 6B Instructional Resources.** Assessment

Create professional development resources. To increase teacher pedagogical content knowledge and quality of instruction, professional development resources and activities are designed and developed. Through collaborative development, RRN program staff and ministry officials put in place resources and structures that support quality instruction to implement the program.

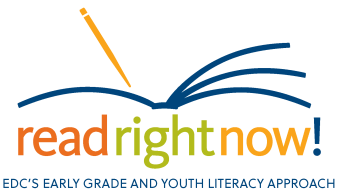
OSY Guidance: For additional resources, see **RRN OSY File 7 Educator Professional Development**.

Create community literacy resources and support activities. Resources to help families and community members engage with schools and support literacy efforts are designed and developed. These materials and activities complement and intersect with the in-school curriculum and with data collection and sharing activities, to motivate and facilitate community engagement with literacy reforms.

OSY Guidance: Engaging OSY youth in literacy activities within communities can provide an incentive for them to pursue further learning opportunities as well as increasing their civic engagement and activity. Materials targeting OSY should be designed to speak to their background competencies and experiences, as discussed above.

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Annex 6: Teaching and Learning for Literacy in Multiple Languages

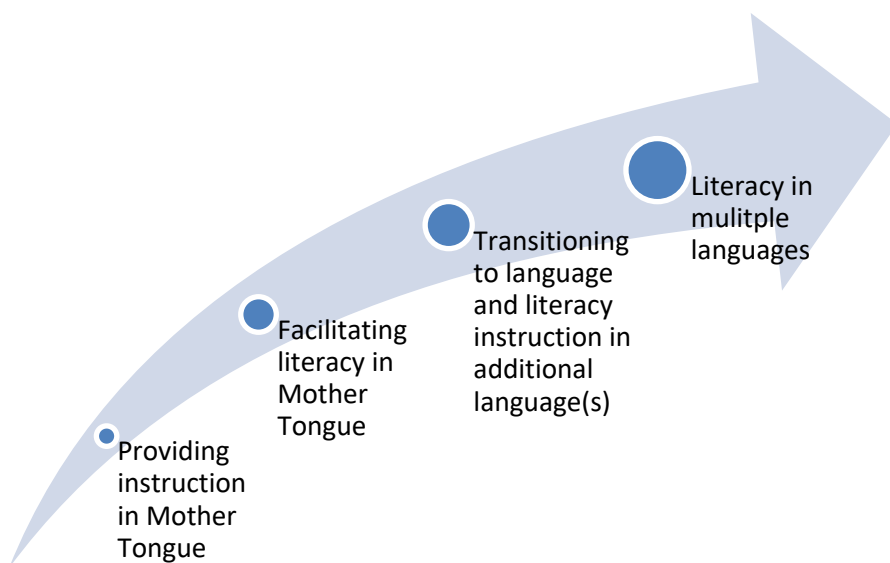


Mother Tongue-based, Multi-lingual Education (MTB-MLE) is a critical dimension of RRN in many contexts. While it is supported by the research on best practice in beginning reading, however, implementing Mother Tongue instruction for new readers may be challenging. In most countries where RRN is used there is a great deal of ethnic, cultural and linguistic diversity, and identifying the appropriate Mother Tongue for instruction may not be easy. The more diverse the linguistic context of the country, the more complex the implementation of MTB-MLE becomes. This annex provides support for RRN Mother Tongue and multilingual programming, including:

- An analysis of the landscape of MTB-MLE and its research base.
- Guidelines for effective MTB-MLE instruction
- Examples of RRN adaptations that have successfully included MTB-MLE.

Figure 1 depicts the MTB-MLE pathway that promotes student literacy achievement in multiple languages. The research-based theory of change is that instruction in a student's first language supports their literacy development in that language. The proficiency in one's first language then transfers to learning to speak and read in other regional, national, or international languages.

Figure 1. MTB-MLE Pathway to Literacy Success



Mother Tongue, Local Language, Vernacular, and National Languages

Terms such as Mother Tongue, local language, vernacular, and national language are used in discussions of MTB-MLE, often interchangeably. However, these terms have functional definitions that are important to consider in literacy programming.

- *Mother Tongue*: Refers to one’s first language, or the language of the home.
- *Local Language*: Refers to the language spoken in the overall milieu of the child (also referred to as language of the playground). A child may speak one language in the home as the Mother Tongue, but be schooled where a different mother tongue is spoken – one which is officially recognized as a local language of instruction.
- *Vernacular*: Also known as *familiar language* or *colloquial language*. Usually refers to a simplified vocabulary and a simple or familiar grammatical form which may or may not be used in the classroom.
- *National Language*: An official language in a particular country, typically recognized and adopted by government or in legislature and taught in schools. In RRN contexts, there may be several national languages, and they may include international languages such as English and French.

These multiple layers of language have implications for policy and for RRN program implementation. Usually, designating a local language or Mother Tongue as the language of instruction carries an implicit assumption that children will be most familiar with that language. However, this is not necessarily the case. For example, in Zambia, instruction occurs in seven different “local languages” (out of the 72 recognized languages in the country). Thus,



the local language may be the child’s Mother Tongue only if they live in the home area of that language group or have parents who speak it as their most common means of communicating. In the Philippines, thirteen Mother Tongues are identified -- one for each of the Department of Education Regions. However, while there is some degree of homogeneity within each Region, there are also dialects and variants, and mobility may mean that children are not schooled in their actual Mother Tongue. RRN implementers must be cognizant of the landscape of languages spoken in a given context as well as the language policy impacting their use in schools.

Another MTB-MLE complication relates to language match between teachers and the designated language of instruction. Even though teachers may speak the Mother Tongue or local language of

instruction, they may not have proficiency in the national language. Other teachers feel more comfortable speaking the national language, as they have less proficiency in the Mother Tongue being used. In fact, studies conducted on teacher language capabilities in some RRN contexts have shown that teachers sometimes do not speak either the national language or the mother tongue of their students. For example, in Mali, a national sociolinguistic study identified 38% of schools as heterogeneous schools where multiple languages were spoken in one classroom. RRN addresses these complexities and supports teachers in learning strategies for ways to address their own linguistic challenges.

Additional challenges arise when a language historically has been solely oral, without a standard written orthography. Materials development can be complicated when there is no endorsed standard for written production of the language, and even when a government has determined standards, they may be questioned by teachers, publishers, or other stakeholders. RRN strategies for materials development take these issues into consideration and promote reaching a fully-endorsed orthography for instructional purposes.

Research Evidence for MTB-MLE

It is important for RRN implementers to understand the research evidence for MTB-MLE in order to plan effective curriculum, deliver professional development, develop teaching and learning materials, and provide advocacy for educational policy.

Much of the research on majority and minority language instruction has been done in North America and Europe, where the emphasis is on helping children to ultimately become fluent users of the dominant or national language. In the United States, for example, minority language speakers, such as Spanish speakers, are expected to transition to speaking, reading, and writing English in school as soon as possible. Students who are in the process in transitioning to English are commonly referred to by one of the terms in Box 1. In

the US context, first language refers to the language of the home or the language the child first learns, and they are transitioned to second or other languages at school. However, in contexts in which RRN is being implemented, the ultimate goal is often to produce students who speak, read, and write in multiple languages.

Box 1.

ESL: English as a Second Language

ELL: English Language Learner

ESOL: English as a Second or Other Language

EFL: English as a Foreign Language

Literacy and Second Language Learners

A close look at the research conducted on second language learning supports the position that second or other language learning is most effective when the first language continues to be supported (Thomas & Collier, Bialystock, 2002¹; August & Shanahan, 2006²). In fact, it has been shown that students who have the strongest skills in reading in their first language demonstrate highest achievement in English (Ramirez, Yuen, Ramey, Pasta and Billings, 1991). Moreover, Cummins (1989) has posited that the most effective way to facilitate the transfer from first to second language is to maintain instruction in the first language over an extended period of time.

It may sound counter-intuitive (a bit like ‘turn left to go right’) that students would not begin reading in the national language, when it is the ultimate language of instruction in the upper elementary grades. However, research shows that while young learners are in the midst of developing language in their first language, learning to read in that language ultimately supports reading in other languages. Learning new vocabulary, understanding structures, and understanding cultural nuances to language (such as phrasing and double meaning) are critical competencies young learners are still developing in their first language. RRN’s response to this reality is contextually dependent and is designed to support teachers and pupils in learning to read in their first language and in the transition to other languages.



Transfer of Oral Language, Reading, and Writing Competencies Between Languages

Oral Language. The evidence is overwhelmingly clear: for the youngest learners who are still in the process of learning their first language, bilingual and dual language instruction gets better results over learning to read only in English.³ Moreover, it has been found that students use the first language to develop competency in the second language. Cummins (1989), for instance, talks about common underlying language competencies developed in one’s first language (L1) that supports transition to a second language (L2), and these principles have been well documented in more recent research. He

¹ Thomas, W.P. and Collier, V.P. (2002). A national study of school effectiveness for language minority students’ long-term academic achievement: Final report. Washington, DC: Center for Research on CMMR/ CollierThomasComplete.pdf Accessed May 5, 2016.

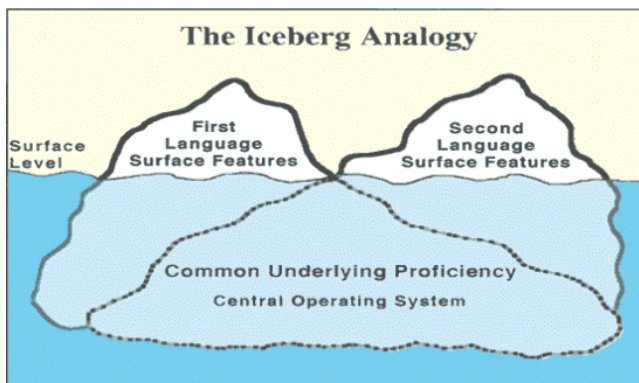
² August, D., and Shanahan, T. (2006). Developing literacy in second-language learners: Report of the National Literacy Panel on Language-Minority Children and Youth. Mahwah, NJ: Lawrence Erlbaum.

³ Oller and Eilers (2000). The researchers compared 952 students in Dade County, Florida, enrolled in bilingual and English immersion programs. It reported that bilingual children scored higher in English literacy by 2nd grade – a gap that widened significantly by 5th grade.

argues that there is a base of knowledge about speaking and reading that one learns in L1 that is tapped in learning to speak and read in a new language.⁴

RRN embraces Cummins' image of the "iceberg" to depict the transferability of language competencies between languages (Figure 2). What one sees of the iceberg above the water does not truly represent the breadth and density of the ice mass under water. Translated into implications for language and literacy, while there are differences between languages that we see on the surface level, there are competencies acquired in a student's first language that transfer to a second language. These transferable competencies are often not seen. The goal of RRN programs is to build on what students know about their Mother Tongue and help them apply it to learning a new language. RRN also recognizes that those features of languages that are different and not as easily transferable (e.g., vocabulary) need to be explicitly taught.

Figure 2. Cummins' Common Underlying Competencies



⁴ Cummins, J. (1994) *The Acquisition of English as a Second Language*, in Spangenberg-Urbschat, K. and Pritchard, R. (eds) *Reading Instruction for ESL Students Delaware: International Reading Association*.

⁵ Bialystok, E., Luk, G., & Kwan, E. (2005). Bilingualism, Biliteracy, and Learning to Read. *Interactions among Languages and Writing Systems. Scientific Studies of Reading*, 9, 43-61.

<http://dx.doi.org/10.1207/s1532799xsr09014>.

⁶ Hornberger, N.H. (2016). Continua of biliteracy, *Review of Educational Research*, 59, 271-296.

⁷ Odlin, T. (1989). *Language transfer: Cross-linguistic influence in language learning*. Cambridge: Cambridge Press.

⁸ Cisero & Royer (1995). The development and cross-transfer of phonological awareness. *Contemporary Educational Psychology*, 20, 257-303.

⁹ Durgunoglu, A.Y., Nagy, N.E., & Hancin-Bhatt, B.J. (1993). Cross-language transfer of phonological awareness. *Journal of Educational Psychology*, 85, 453-465.

¹⁰ Leafstedt, J. M., & Gerber, M. M. (2005). Crossover of phonological processing skills: A study of Spanish-speaking students in two instructional settings. *Remedial and Special Education*, 26, 226–235.

¹¹ Ziegler, J. C. and Goswami, U. (2006), *Becoming literate in different languages: similar problems, different solutions*. *Developmental Science*, 9: 429–436. doi:10.1111/j.1467-7687.2006.0050.9

¹² Calero-Breckheimer, A. and Goetz, E.T., (1993). Reading strategies of biliterate children for children for English and Spanish texts. *Reading Psychology* 14, 177-204.

Reading and Writing. Research has also shown that many aspects of learning to read and write are transferable between a first and second language, as shown in Box 2.

Box 2. What Research Says About Cross-Linguistic Transfer and Biliteracy Development in Reading and Writing

- The extent to which two languages share features, facilitates or hinders transfer. Transfer is facilitated when languages share written systems (Bialystok, Luk, Kwan, 2005⁵; Hornberger, 2016⁶; Odlin, 1989⁷).
- Phonological awareness is essential across languages but differences in the grain size of lexical representations vary by language. That difference will have an effect on the decoding strategies needed (Cisero & Royer, 1995⁸; Durgunoglu et al., 1993⁹; Leafstedt & Gerber, 2005¹⁰; Ziegler and Goswami, 2006¹¹).
- Alphabetic knowledge and word reading are found to transfer well especially when the two languages are orthographically comparable.
- Transfer of vocabulary/oral language is more variable and limited.
- Comprehension strategies transfer across languages (Calero-Breckheimer & Goetz, 1993¹²).

Based on this research, RRN includes a visual representation of the transferability of the domains of reading and writing to help ministries, school leaders, and teachers underscore the “good news” that not every component needs to be retaught in a second language (Figure 3). Domains such as oral language, phonics and word recognition are specific to each language and require explicit instruction.

On the other hand, alphabet knowledge and grammar awareness and often share similarities, provided that both languages use a Latin alphabet. For these domains, teachers will need to introduce any differences between languages. An important “aha” moment for many teachers and leaders is the number of domains that transfer with little to no explicit instruction. These domains include: book and print knowledge, reading comprehension, and listening comprehension. Once students have gained competence in their Mother Tongue, the transfer to a second language generally occurs very easily. For example, once children learn how to make a prediction before listening to or reading a story in their Mother Tongue, they can do the same in a new language. The same is true for book and print knowledge. Students learn that marks on the page have meaning and that words consist of letters or characters. A close examination of Figure 3 reveals the sizable number of domains that transfer from language to language.

Figure 3. Framework for Transfer of Reading and Writing

Domain		
Oral language	*	« Transfers from L1 to L2 easily
Phonological awareness	«	< Transfers from L1 to L2 with some new instruction
Book and print knowledge	«	
Alphabet knowledge	<	
Phonics and Word Recognition	*	* Requires new, explicit instruction
Fluency	<	
Spelling	*	
Writing and composition	*	
Grammar awareness and structure	<	
Vocabulary development	*	
Reading comprehension	«	
Listening comprehension	«	
Attitude towards language, literacy, and literature	«	
Study skills	«	

Quality MTB-MLE Reading Instruction in Read Right Now Programs

While instruction in a student's first language is a best practice, it is not a guarantee of learning to read. The quality of school curriculum, instructional time, programming specific to multiple language learners, and classroom environment supportive of MTB-MLE need to be guaranteed.¹³ Teachers need to be present in the classroom, engaging directly with students for at least a minimum number of hours of instruction, using broad and well-constructed curricula. Moreover, the teaching and learning environment needs to be supportive and inclusive of all students, with teaching and learning materials that play an important role in supporting curricular objectives. These are dimensions of quality MTB-MLE that are incorporated into the RRN approach to early grade reading instruction.

Instruction

RRN recognizes that there may be challenges in implementing Mother Tongue instruction. Without the right professional development or knowledge of policy changes and the pedagogic rationale behind those changes, teachers are left to call upon the methodologies that have served them in the past. However, RRN provides an opportunity for teachers to enhance their practice and learn how to bridge from Mother Tongue to a second, or multiple languages. Professional development sessions are rich opportunities for talking directly to teachers and accessing school-based practices that support bridging from a first language to other languages. Using these sessions to introduce teaching strategies to

¹³ Thomas, W.P. and Collier, V.P. (2002). A national study of school effectiveness for language minority students' long-term academic achievement: Final report. Washington, DC: Center for Research on CMMR/CollierThomasComplete.pdf Accessed May 5, 2016.

teachers and explain how they impact daily classroom practices is a key component of RRN professional development.

For example, in the Philippines, Grade 1 reading instruction is delivered in the Mother Tongue identified for that region of the country. In Grade 2, Filipino and English reading instruction begins. The expectation is that students will develop competence in speaking and reading three languages: Mother Tongue, Filipino, and English. In order to facilitate cross-linguistic transfer in literacy development, the RRN Basa Pilipinas project developed explicit guidance on how to orchestrate language and literacy instruction across the three target languages. This guidance is embodied in teachers' guides, teacher professional development and monitoring and mentoring. Specifically, Basa trained early grade teachers on how to balance and bridge between Mother Tongue, Filipino, and English. Prior to Basa, teachers were teaching the same content in three languages rather than building on students' acquired skills in one language and explicitly showing them how to transfer these skills to reading another language.



Basa drew on the work of Beeman and Urow (2013)¹⁴ to identify effective practices for bridging.⁵ These practices were incorporated into teacher professional development training sessions, on-going support, and teacher learning materials such as videos. Basa strategies included:

- **Total Physical Response**
 - Teacher models oral language accompanied by a visual or concrete support
 - Key vocabulary and concepts are represented by a gesture or pantomime
 - For example, “grasshopper”—show a photo or actual grasshopper; teacher and students can hop like a grasshopper
- **Is it an Example or Non-example?**
 - Teacher presents examples and non-examples of the key concept—pupils can come up with a deeper definition of the concept and its underlying meaning.
 - For example, the concept of “living.” Examples: plants, animals (including insects) Non-examples: cars (even though they move), water

¹⁴ Adapted from: Beeman, K. & Urow, C. (2013). *Teaching for Biliteracy: Strengthening Bridges between Languages*. Philadelphia, PA: Caslon Publishing.

- **Field Trips, Direct Experiences, or Movies**
 - Going out in a park or field and looking for grasshoppers, watching a grasshopper in a vivarium, watching a movie about grasshoppers
- **Word, Picture, Object Sorts and Sentence Prompts**
 - Pupils sort the words, pictures, or objects into categories and then use a sentence prompt to explain their sort. Teachers can provide the categories (closed sort) or allow the pupils to make their own categories. In a closed sort the categories may be given in both L1 and L2.
 - For example, sort these words:

Paglalakbay sa Lupa			Paglalakbay sa Himpapawid	
Travel on Land			Travel by Air	
bus	car	helicopter	Bicycle	fire engine
airplane	ambulance	motorcycle	Jet	rocket

A resulting sentence prompt could be: I put _____ and _____ together because they are both _____.

- **Model and Redirect**
 - Teacher accepts the pupils' use of any language or dialect.
 - Teacher models the target formal language and redirects the pupils to use it.
 - Redirection is carried out best with sentence prompts, word banks or graphic images for younger pupils.
- **Anchor Charts**
 - Teachers post anchor charts as a visual reminder of the lesson and what they have learned.
 - Example: T-Chart of Possessives in Filipino and English

What is Special?	
Filipino	English
Silya ni Maria	Maria's chair
Pusa ni Alvin	Alvin's cat
Bola ni Eric	Eric's ball
Sapatos ni Michelle	Michelle's shoes
Lapis ni Rey	Rey's pencil
Kaibigan ni Maricel	Maricel's friend

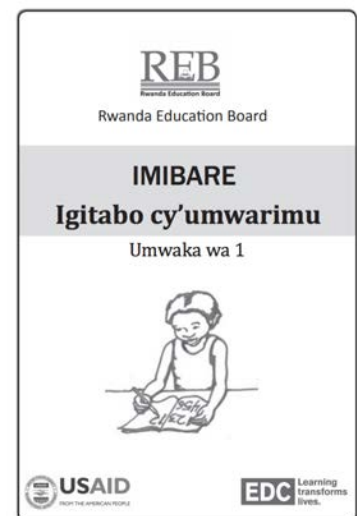
- **Instructional Guidelines for Teachers**

- Use the same teaching methods in L1, L2, and L3
- Reduce mechanical repetitions and use them effectively
- Consistently use the target language for instruction
- Allow students to use MT or Filipino if they find the target language difficult, then reframe their speech in the target language
- Enable students to develop reading/writing strategies that apply to all languages
- Focus on language concept development, not just mechanics
- Encourage student sharing of strategies for language transfer

Materials

Materials are critical to the effective implementation of national MTB-MLE language policies (Comings, 2014)¹⁵. However, in many cases existing materials are often in the country's national language. While materials development is resource-intensive, developing materials in Mother Tongue is an important activity for EDC's RRN language and literacy projects.

In Rwanda, student texts were developed in Kinyarwanda (P1-P3) and English (P1-P4) with accompanying teacher guides. Interactive Audio Instruction (IAI) for Kinyarwanda and English at the same grade levels was also produced and incorporated into the teacher guides and instruction. The teacher guides included scripted lessons and biweekly assessments. Read aloud collections in Kinyarwanda (P1-P3) and English (3-4) complemented the other materials. In addition to reading materials, teacher guides and IAI were developed and implemented for early grade mathematics. The link between reading and mathematics was emphasized. Mindful of the transition to English as the LOI in P4, all materials were designed to minimize extensive re-teaching of concepts that could easily transfer from Kinyarwanda to English, especially in mathematics.



Teachers also need materials to support science and social studies,¹⁶ which they usually teach separately as subjects. Without Mother Tongue materials in these content areas, effective instruction is not possible. Children encounter barriers to learning due to inadequate language knowledge and teachers are not able to capitalize on the effective instructional reading practices they are learning through professional development and on-going support. In BASA Pilipinas, DepED evaluations of teacher practice showed that teachers were unlikely to practice reading and writing methods during other subject periods. Therefore, Basa incorporated science and civics topics into leveled readers to

¹⁵ Comings, J.P. *Prospects* (2015) 45: 167. doi:10.1007/s11125-014-9335-9.

¹⁶ "Social studies" encompasses the range of terms used locally, such as civics, social science, geography and culture.

encourage reading in content areas. Providing teachers with content-based reading materials inherently asks the teacher to think about the connection between reading and content. By investing in creating grade level, mother tongue material in math, science and social studies, governments reinforce the message that learners must develop skills in their first language before learning a new language.

Examples of RRN MTB-MLE Literacy Programs

RRN MTB-MLE programs have been robustly implemented in contexts including Rwanda, Philippines, Mali, Zambia, DRC, and Nigeria. For more information on these projects and access to the resources developed through them, please see the BELT library (www.beltlibrary.edc.org).

In Summary ...

RRN is designed to adapt to the local language policies in the contexts in which we work. We collaborate with our host country educational officials to enact those policies through our training and materials. RRN embraces learning to read in a child's first language and at the same time acknowledges the potential challenges associated with that effort. A critical element of RRN is to educate teachers about language transfer and build materials that bridge between L1 and L2. Making

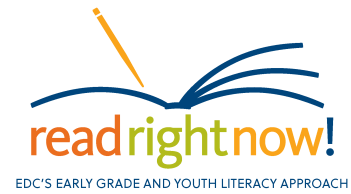


explicit to teachers and pupils how languages and reading in those languages are similar and how they are different supports the transfer of skills. We reinforce that the transition to a new language does not require starting over again, at square one. Specific bridging strategies support the transition and support pupils to become successful multi-lingual readers and writers.

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Annex 7: Gender Equality and Social Inclusion in RRN

This annex explores the Read Right Now! (RRN) approach to promoting gender equality and social inclusion and shares research and lessons drawn from our experience to address these issues.



Education is a basic human right. Children from low-income families, those in remote rural communities, girls, children infected with or affected by HIV, working children, children with disabilities, children from ethnic or other minority groups, and those in countries affected by conflict or natural disaster are particularly at risk of not attending or completing school. Gender inequality further cuts across every type of educational disadvantage (Unesco, 2005).

According to the World Health Organization (WHO), people with disabilities constitute the world's largest minority. Over one billion people, or approximately 15 percent of the global population, live with some form of disability (Elwood, 2005). Eighty percent of men, women, and children with disabilities live in developing countries and do not have equitable access to services or support.

Surveys in 55 developing countries reveal that girls are more likely than boys to leave school, and to do so at a lower age, regardless of the wealth or location of the household. Even when such children attend school, they may not complete the full cycle of primary education and may not experience or achieve quality. The results of this inequality are significant: in tertiary education, women are significantly under-represented in the vital growth areas of engineering, science, and technology (Karam, 2014), and of the world's 775 million illiterate adults, almost two-thirds are female.

Gender equality and social inclusion are vital considerations across the life cycle of the RRN approach, from initial design and assessments to curriculum alignment, materials development, training, implementation, and evaluation. The active engagement and achievement of males and females of all abilities is part of an ongoing attempt to strengthen the quality of programming while promoting equality.



This annex was informed by multiple projects implemented by EDC and by the considerable evidence concerning inequalities in education. It provides guidance on how to develop a bias-free RRN program that promotes equality and inclusion.

Planning and Design for Gender and Social Inclusion

Gender and social inclusion are part of the initial planning, analysis, and design process of RRN. Valuable input about common beliefs and practices must be collected from teachers, students, parents, community members, and other stakeholders. The assessment outcomes will inform strategy development based on evidence, including the setting of objectives and the selection of appropriate interventions.

Customizable RRN measurement tools facilitate the gathering and analysis of data. These tools can identify underlying perceptions and differential expectations of males and females and people with disabilities, environmental factors that may prohibit or enable access to education, and the availability of resources for males, females, and people with disabilities. Understanding how the availability of materials, the time allocated to engage with teaching and learning resources, and gender and ability-influenced responsibilities and expectations impact learners' experiences will assist the identification of effective strategies for addressing gender and inclusion gaps. The existing curriculum should also be examined.

Key questions for investigating the status of inequity and exclusion include:

- How is the curriculum intended to support equity and inclusion at school?
- Is the curriculum being implemented as intended?
- Is the curriculum sensitive to gender, cultural identity, and diversity?
- How does the curriculum promote tolerance and human rights?
- Is the content of the curriculum relevant to the needs and future of all children?
- How are special education needs¹ addressed?
- Is the curriculum sufficiently inclusive? Are any groups under-represented or omitted?
- Is there a policy statement regarding language of instruction?

Available data on enrollment, retention, and completion should also be examined. Key sources of data include Education Management Information System (EMIS), and household surveys.

Analysis of data could identify children currently excluded from school; attrition and dropout rates; children most at risk of not enrolling, attending or completing; student flow rates; and key trends and patterns in attendance and enrolment (UNGEI, 2010).

¹ Challenges (such as a physical, emotional, behavioral, or learning disability or impairment) that cause an individual to require additional or specialized services or accommodations.

Questions to consider in design include:

- How many children are currently out of school (disaggregated by gender)?
- Are data on attendance available?
- What are the main patterns of attendance?
- Which groups of children are excluded from enrolling, attending, and completing primary education? (Factors such as gender, ethnicity, disability, migration, HIV status, urban or rural locations, child labor or poverty will need to be considered.)
- What are the enrollment and completion rates for children with disabilities and special education needs?
- How many are served by general schools and how many by special schools²?
- In which regions of the country are enrollment and completion rates comparatively low?

When and where possible, the assessment of equity and inclusion should include the participation of civil society organizations working in the areas of gender and inclusion and of marginalized and disadvantaged groups. Consultation workshops with stakeholders can also help identify what local knowledge and existing community practices can strengthen participation, as well as assess the current status of parental and community involvement in schools (UNGEI, 2010).

Stakeholder questions may include:

- How are parents and communities involved in Parent Teacher Associations (PTAs) and School Management Committees (SMCs)?
- Do parents take an active part in running schools?
- Has there been any systematic community awareness-raising about equity and inclusion?
- Are parents and communities made aware of education issues, such as children with disabilities, HIV, child labor, health, nutrition, and so on?
- Do SMCs include children and adults from marginalized communities?

When the initial assessment and analysis have been completed, the findings can be reported and the areas needing particular attention highlighted. RRN interventions should draw on these data to enhance equity and inclusion, keeping in mind the need for system-wide approaches designed to address the needs of all children. Appropriate interventions may include adapting the curriculum, revising the textbooks, developing supplementary materials, and/or adopting

² A special school is a school catering for students who have special educational needs due to severe learning difficulties or physical disabilities. Special schools may be specifically designed, staffed, and resourced to provide appropriate special education for children with additional needs

standards for equity and inclusion. These interventions are a powerful means of addressing long-standing disparities.

Adapting the Curriculum for Gender and Social Inclusion

While the curriculum is being adapted, stakeholders can change and modify the content, incorporating structures and strategies that contribute to positive and responsible attitudes and values, which are integral elements of the RRN approach. Embedding cross-cutting issues (such as health and nutrition education, HIV prevention, peace education, life skills education, human rights education, gender and relationships education, visions/goals for economic and social development, and sustainable development) in the literacy curriculum helps students develop a positive and responsible attitude toward their own well-being, as well as a respect for the rights of others. Well-designed RRN programs can help students learn to display care and concern for others and for the environment, as well as tolerance and non-discrimination (Levin, Smith & Strickland, 2003). Addressing these issues through the curriculum reform process can also inform national policies and priorities focused on gender and inclusion; for example, establishing minimum standards for quality, learning materials, methods of instruction, school health and safety, and professional requirements for teachers can be powerful means of addressing long-standing disparities.

Materials Development for Gender and Social Inclusion

Gender and social inclusion should be addressed while RRN materials are being developed. Ensuring that schools have—and use—gender-sensitive and socially inclusive materials is an important way to change negative beliefs and attitudes. It also presents an opportunity to invest in and build the capacity of curriculum developers, writers, illustrators, and editors to better understand and address gender and socially-inclusive practices in their work. RRN teaching and learning materials comprise audio and visual resources and texts, including stories and descriptions of situations and information, as well as pictures and illustrations.

Case Study: The Mali ERSA program's gender assessment enabled partners to make key decisions about locations for schools, and about curriculum content and teaching strategies.

Insensitive approaches to inclusion and diversity can result in teaching materials that reinforce prejudice and stereotyping. Lack of diversity in children's books prevents children from learning about and respecting the cultures and behaviors of people different from themselves. Materials

that reinforce cultural stereotypes³ about the roles of girls and boys, men and women, and people with disabilities can be destructive, because such stereotyping appears legitimate when packaged and distributed through the schools. Gender bias and discrimination against people with disabilities through text, illustrations, and teacher delivery can marginalize some students while advantaging others. Therefore, developing quality children's literature can promote positive attitudes and help students learn about individual differences (Salend, 2001).

Appropriate literature should challenge stereotypes, help children to recognize unfairness, and provide models for challenging inequality (Morrison, 2007). Illustrations and depictions of the characters in the text should be authentic and realistic. The stories should be relevant to children and aim to inspire them, help them develop a greater understanding of one another by learning that all people share so much in common.

The language, print, messaging, and imaging of RRN audio-visual and print materials should promote equity and address disparities. A conscious effort to show a positive view of all people will promote and encourage a positive attitude to people who may experience discrimination. Characters in materials should reflect society's diversity and distribution. Gender-sensitive materials give students a progressive view of how men and women can relate in contemporary society. Providing and promoting high-quality, inclusive texts sends a clear message of inclusion, and encourages both teachers and children to learn and understand more about the day-to-day lives of disabled people and to develop positive attitudes towards disability. The RRN *Checklist for Evaluating Teaching and Learning Materials*, available in the BELT library (beltlibrary.edc.org), provides strategies for representing members of all subgroups in equitable and non-stereotypical ways and helps to ensure that materials promote equality and actively integrate gender equality and social inclusion into the program. Highlights from the checklist are summarized below.

Representation of Characters from Different Subgroups in Society

Development of RRN materials should include clear and equitable representation of all groups. Children or adults with a physical or cognitive disability should appear in proportion to their distribution in the population (worldwide, an average of 15%; local representation may vary). Female and male characters should appear with equal frequency. Although a particular story may focus on a male or female character, both genders should be represented equally across all stories and text in materials. If characters are not identified and do not have names, those characters should be equally representative of each sex. The majority of unnamed characters should not be predominately one sex. Because all societies include individuals with various physical, cognitive, and sensory disabilities, characters facing these issues in books should reflect

³A stereotype is an oversimplified generalization of a particular identity group (e.g. gender, race, ethnicity, class, sexual orientation, ability/disability), which usually carries derogatory, inaccurate messages and applies them to all people in the group.

these differences in positive and inclusive ways without making the depiction feel contrived or tokenistic. Characters should have “real” personalities and should not be stereotyped (Booktrust, 2009). It is important to portray a true and rounded representation of children with disabilities, and to correctly describe their day-to-day lives, experiences, and aspirations.

Gender Equitable and Inclusive Illustrations

Illustrations of characters representing all social subgroups should be the same size and should appear with approximately equal frequency. The characters should also appear in similar roles. More specifically, female and male characters should appear in open and enclosed places with approximately equal frequency (e.g. both in the house or classroom, or both outside in the village or field). Illustrations should proportionally represent characters with disabilities, ideally portraying a range of disabilities (i.e. individuals with mild to severe physical disabilities). Illustrations and terminology should also be accurate. Illustrations should be reviewed to see if the illustrations depict a broad range of human diversity, such as age, gender and people with disabilities. Which characters are doing what in the illustrations? Females and people with disabilities should not be depicted in subservient or passive roles. Neither should the status of the female characters be based on their relationship to male characters in the story.

Use of Gender Equitable and Inclusive Language

The language used to refer to characters in teaching and learning materials can have a subtle but nevertheless strong impact on children. Gender-exclusive language limits the view girls and women have of themselves and defines what opportunities are open to them. It is important to note that the use of gender in nouns or pronouns is language specific, depending on the language’s pronoun system and the way gender is encoded in that system. When speaking about a non-specific character, the use of “he” or “she” or “him” and “her” should be alternated, and the consistent use of male pronouns avoided. The neutral form of a title and function should be used when possible (e.g. chairperson, rather than chairman).

Negative stereotypes or language can direct children’s attention primarily to a person’s disability, and RRN materials should work consciously against this trend. Using “People First” language is an objective way of acknowledging, communicating, and reporting on disabilities. It eliminates generalizations, assumptions, and stereotypes by focusing on the person rather than on the disability. As the term implies, People First Language refers to the individual first and the disability second; for example, “a child with autism” instead of “the autistic child.” Referring to individuals with disabilities as “disabled” before anything else (e.g. “a disabled child” instead of “a child with disabilities”) labels a person generically, causing readers to view those with disabilities as a homogeneous group. Focusing on the disability ahead of the person brings to light a person’s limitations, rather than capabilities.

Representation of Gender Equitable and Transformational Roles

In some countries, girls and women are represented almost exclusively in teaching and learning materials in home-based or reproductive roles, and rarely represented as members of the paid workforce or leaders and contributors to their societies. In contrast, boys and men are usually represented in more socially productive roles (e.g. doctors, farmers, policemen, community leaders) and as participating more in outdoor and physical activities and engaging more in the broader community. When these stereotypes are perpetuated in teaching and learning materials, girls are deprived of valuable role models; they are subtly discouraged from envisioning themselves in more powerful or valued roles. Similarly, if boys and members of privileged groups see themselves depicted only in specific occupations or narrow roles, such as "fathers," then this also limits their aspirations and future opportunities.



In RRN teaching and learning materials, the relationships between girls and boys and women and men, as well as those with and without disabilities, should be presented as equal and mutually respectful, with all characters participating in decision-making and activities, and exercising both traditional and non-traditional roles, to promote collaboration and cooperation. These activities include education, leisure, and chores or responsibilities, leading and supporting roles (e.g. observing, participating, leading, watching, and assisting). Strength and caring should be qualities displayed by both males and females, and characters with disabilities should be portrayed as having a wide range of personal traits, interests, and occupations. Characters with disabilities should be portrayed as ordinary and complex. They should not be required to have superhuman qualities to gain acceptance or approval, and should be able to solve their own problems without needing to be rescued by characters without disabilities. Female characters should be portrayed in leadership positions and as problem solvers, and there should be representation of male characters who are supportive of strong positive women. In contexts in which ethnic, language, or other cultural tensions may exist, illustrations should portray members from each social group interacting in harmonious and mutually beneficial ways. At the same time, materials should not be unrealistically optimistic and should avoid clichéd happy-ever-after endings.

Training and Professional Development for Gender and Social Inclusion

The RRN approach recognizes that providing sound, high-quality training and support to teachers and educators is an integral component of a successful literacy program. For literacy instruction, RRN offers a multitude of professional development resources, and teams should work within those resources to incorporate gender sensitive and socially inclusive approaches. Inclusive

teaching strategies refer to any approaches that address the needs of students with a variety of backgrounds, learning styles, and abilities. These strategies contribute to an overall inclusive learning environment in which students feel equally valued. Flexible approaches to learning and teaching and designing the learning environment in such a way that students can apply their learning to their own experiences and interests are central to the promotion of gender sensitivity and inclusiveness in RRN. RRN assessment and monitoring tools can also provide important insights into the areas of training that teachers need in a given context, and help identify existing gender biases and norms that any equity strategies will need to address.

Building from that base, RRN programs should provide intensive and customized workshops and trainings to teachers, teacher trainers/mentors, and other educators to provide a concrete understanding of the RRN approach, imparting agreed-upon professional teaching standards for improved literacy instruction, and doing so in a gender-equitable, socially inclusive way. Customized training manuals, video modules, and interactive audio-instruction resources can supplement and scaffold the trainings offered by giving teachers a comprehensive set of resources that help them to carry out lesson plans while employing approaches to promote inclusion.

Teaching practices and instructional strategies promoting inclusive education

All learners have both needs that are common and needs that are unique to them as individuals. The assumption that children with disabilities need specific teaching methodologies can lead teachers to think they are not capable of, or responsible for, teaching all children in their classrooms. Because RRN is typically implemented in low-resource contexts, it is particularly important to empower teachers to address the needs of all students to the best of their ability, using learner-centered methods whenever possible.

- ***Using participatory approaches to engage all students equitably.*** The learner-centered approach encourages learners to share information, learn from each other, and work together to solve common problems, including through group work. To ensure that group work is effective in inclusive classes, it is best to avoid making groups based solely on ability levels. Placing all children with disabilities in one group can be very stigmatizing and offers children little opportunity for collaboration and learning. Creating groups of children with a variety of backgrounds provides multiple ways of engagement. All students should be given opportunities to take leadership positions and participate in class. Where culturally appropriate, seating arrangements can be changed to promote heterogeneous grouping.
- ***Providing multiple means of representation.*** Children differ in the way they perceive and comprehend information. Children with sensory disabilities, learning disabilities or those

from a different cultural background will approach content differently. Using a variety of means of representation allows all students to make connections within and between concepts.

- ***Providing multiple means of action and expression.*** Children differ in how they express what they know. For example, children with speech impairments may prefer to express themselves through written texts. Teachers should encourage all children to explore different ways of communicating, and allow them to express what they learned in different ways at different times. RRN technologies should be used to decrease rather than increase disparities (IAI, for instance, is particularly effective in coaching teachers and students to increase female participation in learning activities).
- ***Teacher modeling of inclusion.*** It is especially important that teachers demonstrate their own appreciation of differences and remain open to teachable moments that unite the class as a community. Peers should be taught to respect and support the students with disabilities. This happens first through modeling. Modeling by a teacher who “shows instead of tells” sets a standard that students want to emulate. Teachers also need to ensure that domestic, volunteer, and community roles (such as cleaning communal areas and helping younger children) are shared equally.
- ***Ensuring all students have access to materials and using those materials as talking points to address and openly discuss gender equality and social inclusion.***
- ***Using formative assessment to support student growth over time and improve achievement outcomes.***

A comprehensive RRN program also recognizes that teachers need ongoing support through mentorships and peer-to-peer engagement to help internalize the knowledge, skills, and resources gained through trainings. Such mentoring mechanisms must promote gender integration and social inclusion, including having strong female role models and disabled educators serving as coaches, mentors and master trainers; ensuring women and people with disabilities are involved in leadership positions; providing opportunities for professional advancement for teachers who demonstrate leadership skills; and enabling male, female and disabled teachers to identify new ways to support each other and be positive advocates and role models for gender equality and social inclusion.



Assessment and Evaluation of RRN Equity Strategies

RRN programs should track project outcomes and progress by sex and regularly collect and analyze information about gender integration efforts. Background surveys should also include questions related to gender (such as maternal literacy) to provide a better, more nuanced understanding of the role gender differences may play in results. Differential impacts and observations based on sex should also be captured and analyzed. Analysis should consider both intended and unintended results as they relate to gender, to re-direct and refine gender and social inclusion strategies. Qualitative feedback is encouraged to understand better and contextualize quantitative results and to identify opportunities for further progress. The Gender Integration Tool developed by EDC's International Gender Taskforce can also be used to carry out an internal analysis of the strategies and inputs addressing gender and to identify strategies for improved integration and quality.

Strategies designed specifically to support social inclusion should have appropriate tools for measuring their success. Protocols for screening children with hearing, and vision impairment are available on the BELT Library, and the MERL team member assigned to each RRN program can assist in the development of appropriate research and evaluation protocols for capturing change in inclusion of persons with disabilities as a result of program efforts.

Key questions for investigating the effectiveness of current interventions should include:

- How effective are current strategies in increasing equity and inclusion?
- Which strategies are working?
- Which strategies are not working well and need to be revised?

Glossary

Disability. Long-term physical, mental, intellectual, and sensory impairments, which, in interaction with various barriers, may hinder full and effective participation in society on an equal basis with others.

Gender. The socially defined set of roles, rights, responsibilities, entitlements, and obligations of girls and women and boys and men in societies. The social definitions of what it means to be girls and women or boys and men vary among cultures and change over time.

Gender Equality. Involves working with men and boys and with women and girls to bring about changes in attitudes, behaviors, and roles and responsibilities at home, in the workplace, and in the community. Genuine equality means more than parity in numbers or laws on the books; it means expanding freedoms and improving the overall quality of life so that equality is achieved without sacrificing gains for either boys and men or girls and women.

Inclusion. A process of addressing and responding to the diversity of needs of all learners through increasing participation in learning, cultures, and communities and reducing exclusion within and from education. Inclusion involves changes and modifications in content, approaches, structures, and strategies, with a common vision and a conviction that it is the responsibility of the education system to educate all children.

Inclusive Education. A process of strengthening the capacity of the education system to reach out to all learners -- a key strategy to achieve education for all. Inclusive education should guide all education policies and practices, because education is a basic human right and the foundation for a more just and equal society.

Sex. The classification of people as boys or men or as girls or women. At birth, infants are assigned a sex based on a combination of bodily characteristics, including chromosomes, hormones, internal reproductive organs, and genitalia.

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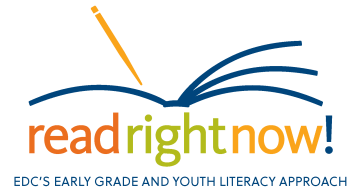
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Annex 8: Monitoring, Evaluation, Research, and Learning in Read Right Now



Introduction

Read Right Now (RRN) programs include a continuous learning function through the Monitoring, Evaluation, Research, and Learning (MERL) cycle. While each RRN application requires a monitoring and evaluation plan that is specific to its structure and goals, and may to some extent tailor its measurement tools, the general framework for RRN MERL remains the same across projects.

Resources

The primary home office structures supporting RRN MERL activities are the Monitoring, Evaluation, Research and Learning team, the Basic Education and Literacy team, and the Institutional Review Board.

The MERL Team

EDC's International Monitoring, Evaluation, Research and Learning Team (MERL Team) provides projects with guidance and oversight on M&E and research planning, implementation and reporting, and ensures that MERL deliverables are of high standards. An assigned MERL Team member will provide expert technical support for RRN efforts and should be engaged from the outset, including in proposal development. The MERL Team member assigned to the project will work with the RRN technical team to develop an evaluation design that is rigorous, responsive to donor requirements, and feasible to implement. The MERL team member will also provide MERL support from data collection to reporting.

The BELT Team

EDC's Basic Education and Literacy team is the technical home for RRN strategy and implementation. The BELT team provides technical support to projects through designated TA, and works with the MERL team to define the overall RRN learning agenda, refine monitoring and evaluation strategies, and ensure that each individual project is contributing data and lessons to the overall RRN initiative.

The Institutional Review Board

EDC's internal Institutional Review Board (IRB) is an ethics review committee that oversees all research activities involving human subjects. All research and evaluation activities conducted and/or overseen by EDC employees must be reviewed by the IRB if the activity meets the regulatory definition of research involving human subjects. Not all RRN programs include

research, but all programs must coordinate with the MERL team to ensure that their learning activities are approved or exempted from Human Subjects review. Before collecting any data from project participants/beneficiaries, projects must [consult](#) EDC's [Human Protections Program](#) (HPP) to get either an exemption or approval of the study's methods and protocols. The review process for each category may vary from one week to one month depending on the complexity of the study, associated risks, and the need for revisions. During the course of the research, the program must report any complaints from subjects, protocol deviations, adverse events, and significant new information or findings in the study. The assigned MER technical expert will work with the program to complete the IRB review and approval process through the [EDC IRB Manager](#).

Start-up MERL Planning

During RRN program start-up, the program-specific conceptual frameworks including the theory of change, program logframe and results narrative of activities, outputs, and outcomes (many of which will have already been articulated during the proposal process) will be refined. Each RRN program will work with their assigned MER team member and BELT TA to devise the program MERL Plan in conjunction with or subsequent to the program Work Plan detailing the program implementation approach.

Considerations for the Program MERL Plan

Development of the MERL plan should involve the assigned MERL team member, the BELT TA, the program's technical team and program directors, program partners and key stakeholders. A participatory MERL process will help in identifying threats, challenges, or risks to the program as well as gain interest, support and commitment for the program. Indicators will be selected for each level of the program (outputs, outcomes, and goals) and when possible, standard indicators commonly used for RRN programs will be utilized.

Once indicators are selected, the MERL team member will work with the RRN program to define how the indicators will be measured, with the appropriate definition including exactly how the indicator is calculated, disaggregated, and collected using a Performance Indicator Reference Sheets (PIRS). While defining the indicators, each RRN program will also need to consider the tools that will be used for data collection, such as questionnaires,

SMART Indicators:

- **Specific:** measure the outcome(s) required as precisely as possible
- **Measurable:** ensure that the information can be readily obtained
- **Attributable:** ensure that the outcomes can be linked to the project's efforts
- **Realistic:** ensure that data can be obtained in a timely fashion at a reasonable cost
- **Targeted** to the specific population of the intervention and not to the comparison group

surveys, observations, participatory data collection and analysis tools. Wherever possible RRN programs should use or adapt existing RRN tools. The MERL team member will work with the program MERL specialist to develop/adapt tools and decide how and who will be responsible for each step of the data management process from collection to reporting. The MERL Team member assigned will also provide assistance with setting up the process for Data Quality Assurance (DQA) to assure data quality and reliable reporting, as well as assist with quantitative and qualitative data analysis, as needed. This will ensure that each initiative generates data that are accurate and useful, both to the project and its stakeholders and to the overall RRN initiative.

The MERL plan will also set the expectations, routines, and procedures for conducting reliable assessment for fidelity tracking. Fidelity tracking is the process of identifying what is expected and planned by the RRN program and the degree to which it is implemented as intended. Fidelity tracking creates links between the intervention's application and the outcome and impact evaluation results, and allow the program to tell the full story of its lifecycle and effects. Fidelity data on RRN programs inform the broader development of EDC's literacy work across countries, and contribute to the continuous improvement of the RRN approach.



Tools and Approaches for Initial Assessment

During start-up, a RRN program is expected to conduct formative needs assessments to gather comprehensive information to inform the program design process and improve the quality of interventions. The methodology utilized for these studies should combine both quantitative and qualitative methods. The assigned MER member will work with the RRN program's technical team in devising and conducting all formative studies and assessments. This includes providing support for the necessary IRB review and approval. Needs assessments may include:

- **Rapid Education and Risk Analysis (RERA).** Provides guidance for a national level mapping, and seeks to capture general information about how education systems, learners and their communities interact with a dynamic, multiple-risk environment, and how those risks interact. The RERA may include elements and analyses related to disability, bullying, and use of corporal punishment and school-related gender-based violence depending on the context of the implementation.
- **Conflict Sensitivity Analysis (CSA).** Provides RRN staff and stakeholders with a greater understanding of the country context from a conflict sensitivity perspective and raises

awareness of potential challenges they may encounter in implementing a RRN program activities in conflict-affected areas.

- **Gender Analysis and Implementation Strategy.** Identifies gaps where data indicate gender inequities or issues that exacerbate gender equity efforts.
- **Situational Analysis/Community Diagnostic/Community Needs Studies.** Collect stakeholder points of view on the state of reading and writing and of literacy teaching and learning.
- **Initial Policy Analysis.** Considers the differences between what particular policies say and how they are enacted.

Depending on the context, the program may utilize a combination of the following instruments:

- **Literacy Environment Scan (LENS)** - designed to provide a clear picture of the nature of the literacy environment at the local level, including the available literacy materials and existing literacy habits and practices. LENS data enable decision makers to identify specific interventions to improve the literacy environment.
- **Beliefs and Instructional Practices Inventory (BIPI)** - provides decision makers with an overview of the types of evidence-based instructional practices that teachers in a particular context say they use daily, and those they say they use rarely or consider inappropriate for their students.
- **Qualitative interview or focus group on beliefs**—A companion set of qualitative interviews or focus group discussion questions, focusing on the specific instructional strategies promoted in RRN, can also be used to obtain information on how teachers perceive these kinds of approaches to reading and writing instruction and to highlight concerns that will be particularly crucial to successful RRN implementation.
- **Test of teachers' reading and writing proficiency**—This assessment identifies the challenges teachers themselves face related to literacy, and helps the program team anticipate levels of linguistic difficulty that will be appropriate in teacher manual and materials development and in professional development.



- **Inclusive instruction study** - research on incidence of apparent visual processing, auditory processing, or cognitive impairments that could impede the development of strong reading skills (Inclusive instruction for reading policy/guidelines).
- **Knowledge, Attitude and Practices (KAP)** - a quantitative method that provides access to quantitative and qualitative information on misconceptions or misunderstandings that may represent obstacles to the activities that a RRN program will implement to change literacy-related behaviors and potential barriers to behavior change.
- **Organizational Capacity Assessment (OCA)**—A capacity building assessment for program institutional and local implementing partners (from country ministries to local NGOs) used to measure competencies in organizational areas supporting the implementation of the RRN program. The OCA helps partners create milestones during program implementation and aid the RRN program to understand areas that need support.
- **Additional tools to measure social and emotional learning** – RRN programs should consider the impact of children’s social and emotional development on their learning. Instruments such as the DESSA and the Image-based Empathy and Resilience Assessment (IBERA) are being tested in RRN programs in Mali and can be used to identify links between SEL and literacy gains to support SEL-focused design and implementation.



Baseline/Endline Evaluations

RRN programs are expected to conduct baseline studies that will set the stage for measuring the program’s ultimate impact on beneficiaries. Instruments for baseline use may include:

- **Snapshot of School Management Effectiveness (SSME)**—SSME is designed to understand the quality of school management and performance in elementary schools and classrooms. Management data include: pedagogical approach; time on task; interactions among students, teachers, administrators, district officials, and parents; record keeping; discipline; school infrastructure; pedagogical materials; and safety.
- **Early Grade Reading Assessment (EGRA)** - This assessment is administered individually in either paper format or electronically, and is used to evaluate students’ foundational literacy skills, such as phonemic awareness, letter recognition, and fluency, which have been shown to predict later reading achievement. Depending on the language(s) of

instruction and students' mother tongue, the EGRA can be adapted or translated before its use to take language and context into account.

- **Annual Status of Education Report (ASER)** - This assessment is an annual household-based survey that collects information on children's schooling status and basic learning outcomes. ASER can capture information on all children—from those in schools, to those who have never been to school or have dropped out in addition to information on household size, parental education, and household assets.
- **Fluency assessment/Running record**—Other tools developed for older grades and more advanced readers (transitional readers) have been designed and piloted in countries like Senegal to assess student' reading performance with regard to fluency and comprehension. These tools resemble running records and include both literal and comprehension questions for individual administration.
- **Kindergarten and pre-school level reading assessments—*Developmental screening tests*** measure a child's attainment of motor, communication, sensory, or cognitive skills. Results provide an objective description of the child's abilities and deficit. ***Readiness tests*** determine a child's relative preparedness to participate in the classroom. When used with all students, readiness-screening measures can be used to identify children who require further evaluation to determine their need for additional support or early intervention.¹

Midterm Evaluations/Reviews

Midterm formative evaluations assess progress on a RRN program's key indicators and provide an opportunity for results-based learning to improve the quality and effectiveness of the program.

For all data collection activities, the program is expected to devise a comprehensive study protocol. Protocols must establish the sampling frames, the tools, a risk assessment, data collection procedures including consent and assent practices. Projects should work with their home office TA to ensure that data collectors are effectively trained.



¹ USAID. Screening of school readiness skills: a review of the literature. 2014

Implementation Monitoring

During implementation, RRN Programs will conduct research to inform the learning agenda, Data Quality Assessments, and fidelity of implementation assessments.

Research and Learning Agenda

RRN programs should prioritize topics for research during implementation. The learning agenda creates opportunities for testing models, assessing impact, and identifying variation in performance among counties, districts and schools. Data collected will be used to identify key areas of learning, both for the project and for the Read Right Now initiative more broadly. In developing a research agenda, the RRN program is expected to capitalize on prior research related to literacy, and other current and future research initiatives. MERL and BELT team technical experts will work with the RRN program technical teams to fully develop and validate the annual research agenda.

Data Quality Assessments (DQA)

Data Quality Assessment (DQA) is a routine process to check the quality of the program data and is central component of RRN MERL systems. DQAs ensure confidence in the data reported and identify issues early on to help inform/improve monitoring and implementation. A DQA should be conducted in regards to: 1) data collection, 2) data transfer, 3) data processing, 4) data analysis, 5) data reporting, and 6) data utilization. During the DQA process, the program should focus on six data quality standards:

- **Validity** - Does the indicator measure what we think it measures?
- **Reliability** - Is the data collected consistently from time to time?
- **Precision** - Is the data specific enough to provide the picture you need?
- **Integrity** - Has there been or was there potential for any manipulation of the data?
- **Timeliness** - Is the data current and available frequently?
- **Completeness** - Is the data collected from everyone from whom it should be and is the dataset complete?

Fidelity of Implementation

Expectations for fidelity of implementation (FOI) monitoring are developed during startup to mirror the RRN program intervention objectives and activities. Procedures for regular collection of these data should be integrated into the Monitoring and Evaluation Plan and the technical work plans, and guidelines developed to ensure that they are being collected and reported consistently and efficiently. FOI assessments ensure that the quality and extent of implementation are being measured and that data provide an accurate picture of the program

implementation at the levels of the learner, the school, and the ecosystem level. Illustrative questions for FOI include:

- **Learner level** - Are students present? How engaged and involved are students? How often does a student receive program-reading intervention? How long does an intervention last? Are classroom approaches responsive to students' needs? Do students have access to reading material (both in school and out of school)?
- **School/classroom level** - Are teachers/administrators present? How well do teachers/administrators stick to the program instructional routine, curriculum and assessments? Are teachers using program-teaching practices, including time on task? Are materials present and used in the classroom?
- **Ecosystem level** - Are teachers receiving the appropriate training and coaching? How well is the program, assessment or instruction delivered to schools? How consistent is the program implemented across diversity including gender, disability, conflict areas? Are parental and family member involved in supporting and monitoring children's reading and writing abilities? Are community awareness of, and engagement in reading initiatives changing?

Fidelity monitoring design should involve BELT TA as well as MERL staff, to ensure that technical programming can benefit from the data collection in the fidelity efforts. Projects should build fidelity monitoring into their coaching interventions, if possible, using tools like the **SCOPE-Literacy** or simplified checklists of performance against expectations. Whether or not the project includes a coaching component, MoE staff should be supported to conduct fidelity monitoring. Overall, the project's sample-based outcome data collection and fidelity monitoring should be cross-referenced and aligned to the same expectations and technical plans.

Final Evaluations

The purpose of outcome and impact evaluations is to establish a cause-and-effect relationship between key interventions and their outcomes of interest. The assigned MERL technical expert will work with RRN program staff to support the development of the evaluation criteria, evaluation design, IRB review of the study protocol as well as data analysis and reporting.



Outcome Evaluations

Outcome evaluations for RRN programs emphasize the implementation process and the changes resulting from that process. They measure to what extent objectives have been achieved and document concrete changes that have resulted from RRN inputs and processes. Outcome evaluations may focus on understanding changes in aptitude, attitudes, and behavior of students, school staff, community members, and education system officials. Outcome assessments can also cover:

- Effectiveness (comparing the actual results against the targets)
- Cost-effectiveness (determined by the cost required for a package designed to produce a set of agreed-upon outcomes in one school or the cost per student, as defined in USAID's emerging cost-effectiveness guidance for literacy programs).
- Equity (determined by non-discriminatory access and outcomes for children regardless of their sex, ethnic group, caste, religion, socioeconomic status, geographical location or risk group.²)

Impact Evaluations

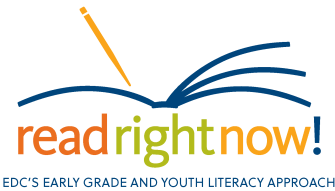
Impact evaluation is the systematic identification of effects, positive or negative, on beneficiaries reached by the project (individual learners, teachers/schools, community, and institutions). Impact evaluations typically collect baseline, midline, and endline data (at a minimum), which can be either cross-sectional or longitudinal to help determine the extent of program reach, quality, and effectiveness. As the RRN program draws to a close the final impact evaluation measures the overall program outcomes along all of the program's intended target indicators set at baseline. These can range from large-scale sample EGRA/SSME/ASER comparing a treatment to a control group; to small-scale rapid assessment and participatory appraisals such as the OCAs.

For more information on and support with RRN monitoring, evaluation, research and learning, projects should consult their assigned MERL team and BELT team TAs and refer to the MER team website

(<https://educationdevelopmentcenter.sharepoint.com/teams/idd/mer/SitePages/Home.aspx>) and BELT library (beltlibrary.edc.org) for additional resources.

² UNICEF. Child Friendly Schools Manual. 2009

Annex 9: Technology-Based Support for Read Right Now



Introduction

EDC has implemented an array of technology-based interventions around the world, and a number of them can be used to support RRN programs. This annex provides an overview of each application and offer some suggestions about how it can be modified to serve the needs of the project.

The annex also clarifies the principles of sound design for any technology-based literacy intervention. A skilled teacher lies at the heart of every successful reading program. Therefore, technology must never be designed to replace the teacher, but rather to augment and support the teacher's work.

Designing a Technology-based Intervention

Before designing any tech-based intervention it is useful to question a key assumption: Will the use of technology (or technologies) allow you to make the program more effective or to reach a goal you couldn't have reached otherwise? If the educational goal can be accomplished efficiently without the tech, it is advisable to choose the simplest, tech-free approach. Do not invest in technology simply because the hardware is appealing or competitors have a similar approach!

If using a tech-based solution will help accomplish an educational task, then it is paramount to begin by clearly defining and understanding what that task is. What, *exactly*, is the problem that needs solving? Thus, the critical first step is selecting the educational purpose. Four different *categories of educational purpose* to choose from include:

Category 1: Technology used to provide teacher training.

Category 2: Technology used to foster student learning, either through direct instruction or through opportunities to practice new skills.

Category 3: Technology used as an intermediate medium through which learners and teachers can interact. In the best cases this category allows for a hybrid of the first two categories, where the medium provides both training opportunities for teachers and learning opportunities for students.

Category 4: Technology used for assessment.



After identifying the exact educational purpose (or purposes), design the content that will satisfy that purpose. Integrated in that content design are two critical subtexts: the chosen pedagogy and considerations given to the users' context. In many ways, these subtexts are more important than the content itself, because if they are poorly addressed the audience will find the content inaccessible, irrespective of its value.



Designing a pedagogical approach, simply put, means defining the opportunities you provide for your learners to interact with and apply the new content. Accommodating their context is more complicated, because it requires much more knowledge about them (what do they already know? what do they believe? what can they reasonably be expected to do?) and their environment (what policies influence their response? what cultural views steer their development? what resources can they draw upon?).

Choosing the best pedagogy and accurately assessing and accommodating the context are not limited to designing a tech application. They are the hallmark of every effective 'non tech' initiative. But they have amplified relevance in a more nuanced, technology-driven equation.

Disregarding the pedagogy (the interactivity with the user, and the metrics gathered to evolve that interactivity) means disregarding the greatest advantage the technology provides. Using technology to deliver a static learning experience means you have taken on the costs and fragility of a new tool without deploying its greatest strength.

Disregarding context means ignoring trends that may ensure or endanger your design: what technology are people already using? What can they afford? What can they repair? What in life are they really interested in? These answers will influence what they do with the technology you provide.

As important as content, pedagogy and context are, they must be considered in conjunction with, and in isolation from, choosing the device. While choosing the device should be the lowest priority, it is an oversimplification to think of it as the last step. The context sets parameters for the choice of device, and the device attributes determine the interactive parameters possible, and thus the pedagogy -- which in turn shapes the content. Content, pedagogy, context and the actual technology tool must therefore be considered in consort, where each responds to the demands of the other, and where each introduces its own opportunities and constraints.

Understanding this interplay, and reaching creatively for both new and established technologies that best fit this equation, is the heart of designing an effective technology-based intervention for literacy.

Questioning a Device's Attributes

When selecting a device to support a RRN program, the following questions should be considered:

1. What are all the costs associated with the proposed technology?
 - a. Purchasing and delivery costs
 - b. Training costs
 - c. Maintenance costs¹
 - d. Repair costs
 - e. Replacement costs
 - f. Distraction Tax²
 - g. Opportunity Cost³
 - h. Which costs are one-time/some-time/recurring?
2. What technology is suitable for the anticipated environmental conditions?
 - a. Infrastructure conditions (e.g., power and connectivity requirements)
 - b. Temperature/moisture/dust conditions
3. What technology is suitable for the anticipated usage conditions?
 - a. Simplicity of use/function
 - b. Tough construction to withstand neglect and abuse
 - c. Simplicity of field repairs
 - d. Local availability of replacement parts
4. What prerequisite skills must a user possess to use the technology?
 - a. Technical skills (to make it work)
 - b. Cognitive skills (to make use of the opportunities it provides)
 - c. Pedagogical skills (to integrate it into classroom discourse)

¹ Maintenance costs are often overlooked, with serious consequences. No tech-based intervention can be considered sustainable without a maintenance plan. The best option may be to create a renewal cycle so that the host government dedicates a percentage of future budgets to equipment replacement.

² Distraction Tax means that, inevitably, the technology will take center stage for both the user and the funder. It will likely distract from the more critical work of the development of the content or the interactive process the device enables. It will also distract from other more noteworthy project accomplishments, such as the number of books printed or teachers trained.

³ Opportunity Cost means that the technology will have unintended consequences. It may alienate some beneficiaries (older users, or users outside the broadcast zone) or it may require extensive procurement and support time that distract from other tasks.

Identifying the pedagogical purpose first, followed by the necessary attributes of the device, will ensure that the tech-based intervention both delivers the relevant educational services and is appropriate for the project environment.

The following section presents details of different technology-based interventions and some suggestions about how they may support RRN.

Table 1. Summary of Technology-based Interventions for RRN

Category	Pedagogical Design	Tech Device	Case Studies
1. Teacher Training	Group Video Study	Projector, tablet, RAN10	Tanzania, Malawi, DRC
	Individual Video Study	Video player	Zambia
	Blended Learning Modules	DVD/USB, Online	Pakistan
	Distance Ed/Mentoring	Laptop	Indonesia
2. Student Instruction	eBooks	eReaders	Mali
	One-Computer Classroom	Laptop	India
	Instructional Applets	Computer lab	Yemen
	Instructional Gaming	Tablet	Malawi, Zambia
3. Hybrid	IRI/IAI	Radio, Mp3 player, Mobile phone with external plug-in speakers	Tanzania, Rwanda, South Sudan, DRC
	Stepping Stone/Vernacular	Mobile phone	Mali, Zambia
	Visual IRI	Pico projector	Malawi
4. Assessment	eEGRA	Netbook	Philippines
	eEGRA Instruct	Netbook	Zambia
	EGRA and any assessment/evaluation tool	Tablet with Survey To Go	DRC, Philippines, Rwanda

Group Video Study

Pedagogical Service	Teacher Training
Tech Device	Pico Projector, RAN10 or Tablet
Overview	Instructional video can trigger group study and analysis of new content knowledge and classroom footage
Key Tech Features	Battery-powered devices with internal memory (to hold preloaded content) are easy to operate and don't require grid power
Tech Requirements	Dimly lit projection service, solar power
Skill Requirements	Analysis and self-reflection
Shortcomings	Limited screen size restricts audience size
Case Studies	Tanzania, Malawi, DRC
Costs	Relatively low <ul style="list-style-type: none"> • Video production is cheap and can be done locally • STTA is required to script the videos and edit classroom footage

Using Group Video Study with Read Right Now

Video can be used to deliver teacher training in different ways, depending on the exact needs of the audience. Videos should feature as elements in a larger, human-driven training program and not as a stand-alone product, since teachers don't always have the analysis skills to benefit from them without meaningful group discussion. A RRN project may use different formats at different points in a teacher's experience (pre-service vs. in-service) or at different points in the project's lifespan (introducing new concepts, consolidating or reviewing concepts).

- **Example 1** (Tanzania): Video was used to present content knowledge and pedagogy, as well as "how to" illustrations. This is an excellent way to introduce RRN materials.
- **Example 2** (Malawi): Video was used to analyze authentic classroom footage of average teaching (showing both good and bad behaviors). This is most helpful to trained teachers who are working to apply their training.
- **Example 3:** (DRC) Video was used to analyze authentic classroom footage of good practices showing teachers how to make and effectively low-cost/no cost instructional materials for their teaching, how to orchestrate continuous evaluation and how to organize their classroom for meaningful interaction between students and teacher to student. Videos were used within a facilitator-led cluster setting where teachers were encouraged to exchange ideas and experiences in response to the videos and questions posed in print guides.

Individual Video Study

Pedagogical	Teacher Training
Tech Device	Personal Media Player or feature phone
Overview	Instructional video/audio/slide shows can inform under- trained teachers of new content knowledge and illustrate novel new classroom activities.
Key Tech Features	Cheap media players have low power requirements and high internal memory. They can store both student materials (IAI) and teacher training materials linked directly to each individual IAI lesson.
Tech Requirements	Solar power
Skill Requirements	Analysis and self-reflection
Shortcomings	Limited to individual viewing
Case Studies	Zambia
Costs	Relatively low <ul style="list-style-type: none"> • Video production is cheap and can be done locally • Audio/slide show production is even cheaper • STTA required to script the videos and edit media • Saves the travel and allowance costs associated with gathering teachers for in-service training

Using Individual Video Study with Read Right Now

RRN establishes clear expectations of the types of activities teachers will be implementing in their classrooms. While individual video study may not be the best primary delivery system for training, it is an excellent auxiliary means of giving “just-in-time reminders” to teachers, such as these:

- Fresh ideas on novel classroom activities or home-made teaching aides
- Illustrations of the type of activity they ought to be doing today
- Simple explanations of elusive concepts already covered in regular training
- Reminders about how to introduce a component reading skill, or how to organize a group task
- Direct instruction on pronouncing the various sounds that vowels and diphthongs can make in the local language or in a second language.

Blended Learning Modules

Pedagogical Service	Teacher Training
Tech Device	USB/DVD and Online
Overview	Instructional video footage from classrooms across Pakistan, animations for difficult to understand concepts, additional reading materials, sample lessons plans, assessments, and detailed facilitator guides with step-by-step instructions and worksheets
Key Tech Features	Any device that plays USB or DVD (Tablet, mobile phone, laptop, DVD player) to hold preloaded content that are easy to operate and don't require grid power
Tech Requirements	Dependent on technology used (DVD, projector, or TV vs. laptop, solar power or grid power will be needed)
Skill Requirements	Analysis and self-reflection
Shortcomings	Dependent on technology and use case (faculty for instructional purposes vs. by individuals for self-learning vs. use in clusters for PD). For some cases (laptops), limited screen size can restrict audience size.
Case Studies	Pakistan
Costs	Medium to high cost; low if adapted <ul style="list-style-type: none"> • Video production and animation can be done locally, but is difficult to find quality production houses. • STTA is required to script the videos and animations, edit classroom footage, and host the content on additional hardware.

Using Blended Learning with Read Right Now

Blended Learning Modules (BLMs) are designed to include several types of technological and print support for pre-service or in-service teacher training. BLMs may include video, animation of difficult to understand concepts, detailed facilitator and user guides, additional reading content, sample lesson plans, assessments, and worksheets. They can be used in groups, individually as a self-learning tool, or as a training tool by teacher trainers for pre-service or in-service or for coaches and mentors.

Example from Pakistan: Blended Learning Modules were created for the professional development of faculty at teacher training colleges and universities served by the project and to faculty teaching Pakistan's new Bachelors' of Education Degree courses, to provide them with a rich blend of resources that can be applied in their classrooms with pre-service teacher trainees. The contents can also be used by pre-service or in-service teachers to augment their understanding of specific topics/concepts. There are 8 BLM packages, spanning areas including Collaborative Learning, Math, Science, Literacy and Assessment.

Distance Education and Mentoring

Pedagogical	Teacher Training
Tech Device	Laptop/Moodle/Cell phone
Overview	Teacher professional development is most successful when teachers are given ongoing support through, for instance, either distance education, delivering theory and content knowledge, or distance mentoring.
Key Tech Features	Distance-learning platforms and increasing rural connectivity make it possible to reach teachers in their classrooms, either on laptops or on phones. Programs can rely fully on online education, fully on phone-based mentoring, or on a blended approach.
Tech Requirements	Electricity, Internet connection
Skill Requirements	Self-pacing, analysis and self-reflection
Shortcomings	Limited interaction in an artificial environment
Case Studies	Indonesia, Mali
Costs	High <ul style="list-style-type: none"> • Rural internet connectivity is expensive • Course design is labor intensive • Requires ongoing staffing to support and mentor teachers

Using Distance Education and Mentoring with Read Right Now

Distance education or mentoring services may be a large contributing factor to a successful implementation of RRN, especially in locations that have particularly low teacher-skill levels. Even if teachers have been fully trained in RRN approaches, it takes an energetic and conscientious teacher to apply her newly acquired understanding and permanently alter her teaching practices. Constant reminders of expectations are constructive during this period of professional transition. While a body of teachers may be too large to reach even with a distance education program, a distance mentoring program for their supervisors is easier to coordinate. This approach proved successful in Indonesia.



eBooks

Pedagogical	Student Practice
Tech Device	eReader/tablet
Overview	eReaders/ Android tablets can hold thousands of books. Some models can play audio files and allow children to write with a stylus. eBooks can be easily written and added, but the whole approach offers little more utility than a large set of books.
Key Tech Features	eReaders and many Android tablets require very little electricity to charge and can run for weeks before their batteries die. They are inexpensive enough to buy in class sets.
Tech Requirements	Solar power
Skill Requirements	Supervising group work
Shortcomings	eReaders/ Android tablets are only cost effective when you are loading them with a high number of titles. They require electricity. Only one child can read them at a time, despite their holding many titles.
Case Studies	Mali
Costs	Moderate <ul style="list-style-type: none"> • It is cheap to create local eBooks • Individual eReaders are cheap (but not cheaper than books) • Bought at volume, with ongoing charging and maintenance costs, eReaders are expensive.

Using eReaders and Android Tablets with Read Right Now

A core ambition of RRN is to help create as text-rich an environment as possible, which translates into providing many books. eReaders or applications on Android tablets make it possible for teachers to store, manage, and move a large number of titles in a small package. It is simple and inexpensive to create eBooks out of locally developed reading resources, without printing costs. It is a significant advantage if eReaders can also play back literacy songs and provide children with a virtual slate to practice handwriting. eReaders and tablets provide a variety of mediums in which children can practice their reading, handwriting, and memorization (through singing) of phonemic patterns.

But costs must be considered carefully. Local printing expenses will dictate the tipping point at which an eReader is cheaper than a print run of titles. And when making the calculation, remember to also factor in the training costs, maintenance costs, charging costs, and security costs that are not normally associated with books. Finally, note the opportunity cost of limiting the many titles an eReader can hold to only one child reading them at a time.

One-computer Classroom

Pedagogical	Student Practice
Tech Device	One-Computer Classroom
Overview	A single computer in a classroom can provide rich learning to children if used for group activities. Teachers can design literacy games to be played by entire sets of children simultaneously. Software must be custom designed for this purpose. The software can be adapted to local language (ex. Urdu in Pakistan) and can be written to cover content across the curriculum.
Key Tech Features	The model of one computer per child can be challenged. Hardware costs do not need to be high, since single machines are sufficient for a classroom.
Tech Requirements	Electricity, secure storage. For sustainability purposes, this solution requires fitting into the available technology in the country
Skill Requirements	Supervising group work
Shortcomings	Although hardware costs are lower in this model, training and maintenance costs remain high, and software development is complicated and expensive.
Case Studies	India and Pakistan
Costs	High <ul style="list-style-type: none"> • It is expensive to train teachers and maintain machines • Infrastructure costs (grid power, internet) are high • Software may be locally or regionally developed, but it is still a labor-intensive process

Using the One-computer Classroom with Read Right Now

It is easy to envision how a teacher could rotate groups through their turns using the computer while the rest of the class is doing other things: completing silent reading, receiving remedial instruction, etc. And although the literacy game design will have to be different from those designed for a lab (to appeal to a group instead of an individual player) or from those designed for a tablet (to use a mouse instead of a touch screen), the content of the games would likely be the same—either games that address the component skills that need direct instruction, or games that provide additional variety for the four integrated activities.

Instructional Applets in a Computer Lab

Pedagogical	Student Instruction/Practice
Tech Device	Computer Lab
Overview	Despite some of its drawbacks, the computer lab model remains a favorite of funders. Computers provide great opportunities for practice time. The drill and kill model may not be ideal, but it is effective, and literacy activities designed in Flash applets can be used.
Key Tech Features	An Internet connection is not necessary. It is simplest to store the educational activities offline on the hard drive or LAN.
Tech	Electricity, secure storage
Skill	Supervising group work
Shortcomings	Computer labs are separate from regular classroom instruction and difficult to manage. Hardware, training, and maintenance costs are
Case Study	Yemen
Costs	High <ul style="list-style-type: none"> • It is expensive to install labs and maintain machines • Infrastructure costs (grid power, internet) are high • Software may be locally or regionally developed, but it is still a

Using Applets with Read Right Now

After receiving direct instruction in component skills, children can spend solo time in the lab practicing their new skills with a variety of games and learning activities written as a series of applets.

Depending on the relative sophistication of the system designed, teachers can be given access to student progress data and track their advancement over time. The best-performing students can work at pace through more challenging reading materials, while other students can slow down and get extended practice on skills they need more help with. Teachers can use the data to regroup students into ability groups for other activities and modify instructional practices accordingly.

Instructional Gaming on Tablets

Pedagogical	Student Instruction/Practice
Tech Device	Tablet
Overview	Tablets are cheap enough to buy as class sets. Interactive instructional games can be designed in Stepping Stone to teach component skills, and children can work alone, learning concepts the teacher may have difficult to teach him.
Key Tech Features	A simple touch screen is intuitive to use and doesn't require elaborate training.
Tech	Electricity, secure storage
Skill	Supervising group work
Shortcomings	In large classes, children need to share a tablet. Development costs are high.
Case Study	Malawi, Zambia
Costs	High upfront costs to develop game template Low costs customizing with local artwork and recordings

Using Gaming on Tablets with Read Right Now

Tablets offer the opportunity for rich and varied individual practice and the opportunity for the teacher to offer extra instruction of readers who may need additional assistance. An evaluation of Vernacular's impact in Zambia, combined with a study of its cost effectiveness, shows early promise for this medium.

Interactive learning games will need to be customized to each language setting, since instructional approaches need to be modified according to the characteristics of the reading language, but some game formats may include features such as these:

- Touching letters to hear their sounds
- Swiping words to hear them sounded out
- Swiping sentences to hear them read, or touching individual words to hear them within a sentence
- Selecting and dragging letters to spell the names of pictured items
- Selecting and dragging words to write sentences describing pictured scenes
- Narrated stories where the words change color in sync with the narration



Watch a video about the USAID Time to Learn project's use of technology:

<https://youtu.be/sm6KdQfMgPI?t=3m36s>.

Interactive Radio Instruction/ Interactive Audio Instruction

Pedagogical	Teacher Training/Student Instruction Hybrid
Tech Device	Radio/mp3 player
Overview	IRI refers to a carefully designed audio lesson that delivers learning content via radio or an mp3 file and requires interaction from both teacher and student. Activities include answering questions, completing board work, singing songs, playing educational games, and working in groups, all directed by the radio/mp3 player.
Key Tech Features	Radio is a mature technology: widespread, robust, and cheap.
Tech Requirements	Radio reception, solar power
Skill Requirements	Listening and following directions
Shortcomings	Lengthy production process, limited visual aides
Case Study	Tanzania (via radio), Zambia (via mp3 player), Somalia (via cellular phone), Pakistan (via DVD)
Costs	Done at scale, IRI is one of the cheapest tech interventions, but it incurs considerable production costs per episode and can require recurring broadcast

Using IRI/IAI with Read Right Now

RRN revolves around daily reading tasks that require a high level of teacher skill. IRI/IAI helps in both those areas: it provides a high-quality, easy-to-use intervention (low-skilled teachers find it easier to turn on the radio or mp3 player and follow steps than to plan and initiate their own lessons), and it in daily increments. Thus it plays a critical role in ensuring that regular reading lessons take place and guarantees that they are pedagogically sound.



Stepping Stone

Pedagogical	Student Instruction/Practice/teacher training
Tech Device	Java-enabled feature phone or Android phone
Overview	Stepping Stone is EDC's simple, multimedia development package for the phone. It creates basic interactive slides with graphics, video, text, and sound to be viewed on phones.
Key Tech Features	Java was selected as the programming language because market research indicates that it is the single most widely distributed platform used on basic phones in Africa. Android was also selected because the Smartphone market is rapidly developing in many countries across the world.
Tech Requirements	Phone-charging source (ex. car battery, solar panel)
Skill Requirements	Individual or small group study
Shortcomings	Screen size is very small, which restricts content and the number of users
Case Study	Mali, Zambia
Costs	The software is free and open source Material development can be done locally

Using Stepping Stone with Read Right Now

Stepping Stone “skill builder” activities can be adapted to supplement the component reading skills that are targeted in the RRN category of explicit instruction activities.

As a teacher training aid, Stepping Stone can be used much differently. Many teachers, for example, struggle to help learners distinguish between the name of a letter and the sound it makes. A game on the teachers' phones that could teach them to make this important distinction would have far-reaching implications for their students. It is possible to create simple assessments that give direct feedback on correct/incorrect answers. For a more traditional approach, digital textbooks can also be formatted for the phone.



Phone-based resources can be designed in conjunction with the face-to-face training of an in-service program. That way a teacher can leave the training with relevant digital materials that he or she can easily access later, just in time for direct application in the classroom. This will help the teacher bridge the elusive divide between theory and practice.

Stepping Stone can also be used as mechanism to bundle IAI programs with the teacher's guide and other materials. This is useful when teacher user data of paper guides is fairly low. Bundling guide content onto a phone along with the IAI program will make it more likely for teachers to effectively utilize the materials in the manner they were intended to be used in the classroom.

Visual IRI

Pedagogical Service	Teacher Training/Student Instruction Hybrid
Tech Device	Pico/Micro projector
Overview	Visual IRI adopts IRI pedagogy and audio content but puts it in a video format that includes visuals. Lessons can be projected on the blackboard, so learners enjoy both the interactivity of IRI and the visual enrichment of basic animations.
Key Tech Features	Cheap video projection is possible in areas without electricity
Tech Requirements	Dimly lit projection surface, solar power
Skill Requirements	Listening and following directions
Shortcomings	Complex production process
Case Study	Malawi
Costs	Visual IRI requires more expensive equipment than IRI (picos cost more than radios) but does not incur broadcast costs.

Using Visual IRI with Read Right Now

Visual IRI integrates with and supports RRN in exactly the same way as IRI does, with one additional advantage. It holds particular promise for literacy because teachers need extra help demonstrating the correlation between letters and sounds. While this is possible with IRI, it is much easier with visual IRI. Potential activities include the following:

- **Enlarged story telling:** Books can be projected on the wall so that the entire class can see the pictures and become immersed in the story.
- **Animated reading:** Books can be shown with an audio track, where the text changes color in synch with the narrator, helping children get oriented to print conventions.
- **Phonic skill building:** children watch videos about individual letter sounds, sing along with letter name songs, and follow video-led, “sounding-out-word” games. This teaches phonics with the type of nuance a low-skilled teacher finds challenging to produce.



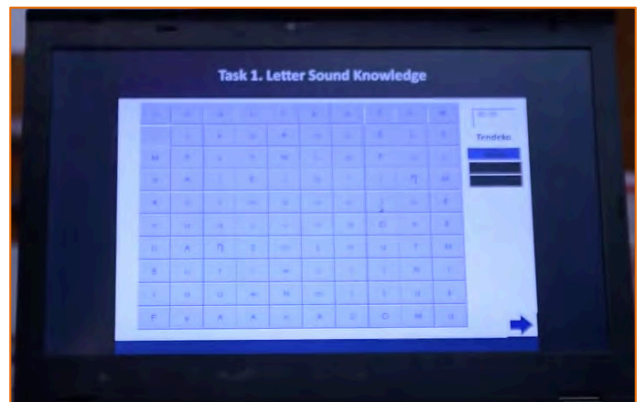
eEGRA

Pedagogical Service	Assessment
Tech Device	Netbook (with Microsoft Excel) Tablet (programmed with a survey software like Survey to Go)
Overview	eEGRA on netbooks is a simple, fast and accurate electronic reading test, which completes an instant, automated analysis of reading skill. eEGRA on tablets provides an easy to aggregate data for summative data analysis of student reading achievement.
Key Tech Features	eEGRA on netbooks runs in Excel, so it requires no software beyond that found on the average computer. EGRA on tablets is designed in a survey software like Dooblo's Survey to Go
Tech Requirements	Electricity, secure storage
Skill Requirements	Administering EGRA
Shortcomings	Requires intense EGRA training
Case Study	Philippines, Mali
Costs	Excel-based eEGRA has free software, STG is 10 US cents per survey, low hardware costs, moderate training costs

Using eEGRA with Read Right Now

Test administrators can be trained in using tablet-based eEGRA to collect data on student reading following the same protocol and training for the paper-based EGRA. The advantages of using tablets to administer eEGRA are the following:

- They are easy (and quick) to program
- They can run on netbooks, laptops or tablets
- They don't require computer literacy for entering data
- They allow you to aggregate data into a cloud and extract for easy data monitoring and collecting
- Data is fully encrypted
- They allow for capturing multimedia (including audio recordings of entire tests for quality control purposes or photos of the test site)
- They provide the ability to capture GPS coordinates



The data collected on for this type of EGRA is not formatted for immediate teacher use but rather for reporting on overall student achievement in reading.

eEGRA Instruct

Pedagogical Service	Formative Assessment
Tech Device	Netbook
Overview	In addition to the benefits offered by eEGRA, eEGRA Instruct allows the test administrator to complete an immediate analysis of results with the classroom teacher. The simplified interface allows a teacher to compare the progress of a student / class / school against themselves or against a national standard. The software also recommends supplemental activities to improve scores in component skills that need improvement. Teachers benefit most when the test administrator reviews the analysis results with them and coaches them to alter
Key Tech Features	eEGRA Instruct on netbooks runs in Excel, so it requires no software beyond that found on the average computer. EGRA on tablets is designed in a survey software like Dooblo’s Survey to Go and can be exported to SPSS or excel for analysis.
Tech Requirements	Electricity, secure storage
Skill Requirements	Administering EGRA, coaching
Shortcomings	Requires intense EGRA training
Case Study	Zambia
Costs	Excel-based eEGRA has free software, with minor costs of a few hours work to update Excel with the eEGRA test language and relevant national benchmarks.

Using eEGRA Instruct with Read Right Now

Teachers may be trained to administer eEGRA Instruct to their own classes, measuring students’ progress two or three times in the school year if time permits. It will help them identify which component skills of reading have been taught well, and which children need extra help.

However, an alternate approach of distributing eEGRA Instruct netbooks to district level may create more sustainable, and systemic change. Training district officials to administer eEGRA Instruct not only will save teachers time and limit hardware costs to district levels, it also allows officials to compare results between schools in their district and identify teachers who need more help. In addition, the eEGRA Instruct can also help inform in-service training efforts by identifying problematic areas that teachers need extra help addressing.