Ethiopia Teach English for Life Learning (TELL) Program

Field Study Report

Literacy Policy and Practice in Ethiopia: Building on the TELL Program and EGRA Results



Produced by: American Institutes for Research (AIR under the USAID EQUIP1 TELL Program

By: Cristine Smith, Rebecca Stone, and John Comings Center for International Education University of Massachusetts Amherst, MA

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List of Acronyms

AAMUAlabama A&M University
AIR American Institutes for Research
CETTCenters of Excellence for Teacher Training
CPD Continuous Professional Development
CTECollege of Teacher Education
EGRAEarly Grade Reading Assessment
ELIP/ELIC English Language Improvement Programs or Centers
EQuALLS2Education Quality and Access for Learning and Livelihood Skills 2
ESAA Education Statistics Annual Abstract
GEQIPGeneral Education Quality Improvement Program
ICTInformation and Communication Technologies
IRIInteractive Radio Instruction
MLCMinimum Learning Competencies
MOEMinistry of Education

MT Master Trainer
NGONon-governmental Organization
PCRW Predict, Respond, Confirm, Write
PSSP Primary School Support Program
PSTA Parent Student Teacher Association
PTA Parent Teacher Association
PTRPupil Teacher Ratio
REB Regional Education Bureau
SIP School Improvement Plan
TELDD Teacher and Educational Leaders Development Directorate
TELL Teach English for Life Learning
TLMP Textbook and Learning Materials Program
TOT Trainer of Teachers
USAIDUnited States Agency for International Development
WPMWords Per Minute



Executive Summary

The purpose of this study on early grade reading and English language learning in primary education in Ethiopia was to explore current policies and practice and make evidencebased recommendations for short-, medium-, and long-term steps that can be taken by the Ministry of Education (MOE) to improve early grade reading and English language learning in Ethiopia.

American Institutes for Research (AIR) contracted three international researchers (the authors of this report) with professional experience in literacy and language education to conduct this investigation of policies, practices, attitudes, and beliefs about reading and English language instruction. One national researcher, Almaz Debru, an English instructor at the Kotebe College of Education, was also contracted to support the efforts of one of these international researchers during her 3-week field visit.

Over a three-week period, the research team visited areas in and around Addis Ababa, Oromia, and Amhara. The team conducted semi-structured interviews and/or focus group discussions with stakeholders including Ministry of Education and Regional Education Bureau (REB) officials; College of Teacher Education (CTE) deans, instructors, and teacher trainees; Parent Teacher Association (PTA) members and other parents; primary school directors and department heads; school teachers; cluster supervisors; and students. Over 65 education officials, teacher trainers, teachers, parents, and students were interviewed during the research. Using Lewin's (1951) Force Field Analysis method, interviewees were questioned about the existing supports and barriers to English language instruction and mother tongue literacy education as well as any strategies they suggested to improve the teaching and learning of both English and mother tongue literacy. Stakeholders were also questioned about their attitudes and beliefs regarding reading and English. The field research team carried out approximately 10 classroom observations in both urban and rural primary schools as well as several observations at the teacher training colleges. Finally, the team conducted a desk review of relevant documents from Ethiopia and drew on the international literature and research about medium of instruction, mother tongue education, early grade reading, and teacher professional development, including research in sub-Saharan Africa and other international contexts.

Findings from this study indicate that children are not learning to read well before completing primary school. Factors include the lack of clear, attainable goals for reading and English acquisition for each of the four primary grades; lack of textbooks for all children; teachers are not taught the basic components of reading and how to teach them; learning materials are not being permanently posted on the walls of classrooms; not all schools have grade zero (kindergarten) classes; parents lack materials in their homes for children to read and do not feel that they can assist their children with homework; supervisors visiting the school from outside lack the time as well as the knowledge of how to teach reading to give teachers feedback on how to improve their practice; and schools do not have functioning libraries with appropriate supplementary reading materials for early grade children to read. There are strengths on which to build, including the model of the Teach English for Life Learning (TELL) training that many teachers have received over the past 3 years, and specific teaching techniques that could be adapted for use in mother tongue reading instruction; new and attractive USAIDfunded English textbooks for grade 1–4 English teaching that match the techniques presented to teachers in the TELL training (although grade 3 and 4 textbooks are not yet available to teachers and students); and the presence of a clear policy framework for supporting school improvement plans and actions.

The authors recommend actions that can be taken within the next 2 years to immediately improve reading instruction and that can probably be implemented with existing resources, such as prioritizing textbook printing and distribution to ensure that every child has textbooks and every teacher has teacher manuals; setting interim goals for reading and writing in mother tongue and English, based on the results of Early Grade Reading Assessments (EGRAs), for grades 1-4; drawing on the TELL model to design a simple lesson plan framework, instructional activities, and classroom materials that are linked to the textbooks to achieve these goals; adding activities to pre-service courses and in-service training that help teachers understand the theory of how children learn to read, the goals their students should achieve, and how to make small but immediate changes in the classroom using

posters or other learning materials that teachers themselves create from a model or template; creating a simple classroom observation tool that helps headmasters and supervisors monitor whether or not teachers are implementing what they learned and encourage teachers to use these new techniques; providing parents of primary school children with a picture-based poster depicting the types of activities they can do in the home to encourage their children's reading development; funding a short multi-case study research project to document the actions of successful schools and disseminate this information through pre-service and in-service training to teachers and headmasters around the country; and conducting an informal assessment of improvement at the end of 2 years of implementation. The authors also include recommendations for medium- and long-term actions to improve early grade reading and English language acquisition in grades 1–4, which will require additional investment and resources for implementing evidence-based practices and initiatives that have worked well in other countries.

Overview of the Study

Early Grade Education in Ethiopia

Formal schooling in English was introduced in Ethiopia in 1908, but the education system subsequently transitioned from English instruction to Amharic. The current language of education policy (set in 1984) promotes the use of mother tongues as the medium of instruction, particularly at the primary level. The medium of instruction at secondary (grades 9-12) and higher education institutions is English. The transition to English instruction occurs at grades 5, 7, or 9, depending upon the region. The policy also mandates the learning of Amharic as a subject by those whose mother tongue is not Amharic (beginning in grade 3) and the study of English as a subject beginning in grade 1. The policy for most students, therefore, is trilingual or bilingual: mother tongue, Amharic (if not mother tongue), and English.

The Ethiopian primary education system consists of 8 years of instruction, although recently UNICEF and the MOE have promoted a policy to establish one classroom per primary school designated as a grade zero, which would serve as a kindergarten program for children ages 4-6. Primary school students enter between ages seven to fourteen. Grades 1–4 make up cycle one and grades 5–8 make up cycle two. Grades 1–4 are generally taught in self-contained classrooms, in which teachers remain with the same group of students all day and teach all subjects. Grades 5–8 are generally taught by linear teachers who are specialized in English, Science and Math and Social Science who only teach their specific subject to all grade levels between 5 and 8. In Ethiopia, the standard pupil teacher ratio is 50 at the primary level (grades 1-8) and 40 at the secondary level. According to the 2010/2011 Education Statistics Annual Abstract (ESAA; Education Management Information Systems [EMIS], 2011), a little more than one quarter (26.5%) of primary schools run on a double-shift system. The same abstract states the grade 5 survival rate as 55%, which means that 45% of grade 1 entrants do not enter grade 5, and the dropout rate is highest at grade 1 and declines in each subsequent year.

This report focuses on the first cycle during which children should learn how to read before they move on to using reading to learn. The first cycle of primary education currently teaches literacy in multiple mother tongue languages as well as English. Mother tongue languages employ either the Ge'ez (also referred to as Fidal) orthography or a modified form of the Latin orthography. Both orthographies link consonants or consonant clusters to vowels to make phonemes (the smallest unit of meaningful sound in each language), though Ge'ez does this with diacritical marks (a shorthand version of the vowel letter) while Latin uses full vowel letters. Both orthographies lend themselves to instruction that is based on the extensive reading research done with English and other European languages.

The MOE and the REBs produce and distribute literacy textbooks in multiple mother tongue languages, English, and Amharic. The English textbooks are currently being replaced by new textbooks developed under USAID/Africa Education Initiative Textbook and Learning Materials Program (TLMP). The new English textbooks for grades 1, 2, 6, 7 and 8 have been printed and are available to teachers, and the new English textbooks for grades 3 and 4 are currently being printed. The development, printing, and distribution of textbooks is still a challenge in Ethiopia, resulting in untimely and limited delivery in some regions. The TELL program was responsible for introducing teachers to new English textbooks developed through TLMP and training them in strategies and methods designed to improve student English learning. The TELL program worked through the MOE and the REB to implement a cascade training model that has reached over 71,000 primary school teachers throughout the country.

Until 3 years ago, first-cycle primary school teachers (those who teach grades 1-4) must have completed grade 10 and taken a 1-year course at a CTE in order to receive a teaching certificate. These teachers could then take 3 summers of professional development to upgrade their status to a teaching diploma. Three years ago, the MOE mandated that all primary school teachers have a diploma, and the CTEs now no longer offer a certificate program (with the exception of preprimary). All present and future CTE students must complete 3 years of training before receiving their diploma. Those teachers already in the system with a certificate are now required to upgrade to a diploma through the summer program. Secondary school teachers must have completed secondary school and at least their first degree (bachelor's) at a university, and they then must complete a 1-year add-on

course, which covers teaching pedagogy and methodology.

The TELL Program

Several international organizations are currently working in Ethiopia to improve education at the primary level. As part of this effort, USAID has funded the TELL program, which is an English language instruction improvement program aimed at training teachers in reading strategies consistent with the new English language textbooks. USAID is also funding the *Improving the Quality of Primary Education in Ethiopia* program, which is aimed at enhancing the professional capacity of primary school teachers and principals through pre-service and in-service teacher training as well as improving the planning and management of primary education.

The TELL program consists of two major activities: (1) a nationwide in-service teachertraining program and (2) a baseline English language EGRA. Between 2009 and 2011, TELL trained teachers in improved instructional strategies and introduced new English textbooks and teacher guides developed through the USAID/AEI TLMP, implemented by Alabama A&M University in collaboration with the Ethiopian Ministry of Education. The TELL program used a cascade training model by working in partnership with TLMP to initially train a group of master trainers who then spread out and trained Trainers of Teachers in each of the regions. These Trainers of Teachers then trained over 71,000 primary school teachers in the new teaching methodologies during a 4-day in-service training. The training included 12 teaching techniques for grade 1 and 2 English teachers, with techniques focused on improving children's English listening, speaking, reading, writing, vocabulary, and storytelling skills. A different set of 17 English teaching techniques were introduced to grade 3 and 4 teachers, with techniques focused on reading, writing, vocabulary development, and storytelling. The training manual for this program was developed by the TLMP. During the training, teachers were shown examples of each new strategy and also given opportunities to practice the strategies with their peers before returning to their classrooms. The teacher training followed a model of demonstration, discussion, and guided practice.

Classroom observations and teacher interviews of grade 1–2 and grade 3–4 TELL-trained teachers in earlier evaluations (AIR 2010; AIR 2011) found that teachers had a high understanding and a good comfort level with the majority of strategies they were taught during the 4-day TELL training, at least in the 3-month span of time after the training. Teachers' self-reports of how often they used the TELL techniques in their classrooms indicated that they were using them but in lesser proportion than their understanding of and comfort with them.

For grade 1 and 2 teachers, the techniques they reported using most often included *rereading* (where the teacher reads short sections of text aloud and students "echo or repeat in unison the same sentence while pointing to the words in their book"; *retelling* (where students are asked to retell a passage read to them); *questioning* (where teachers ask students to think about questions about the text as they read); *drawing* (where students are asked to draw an image of text read ¹); and word walls (where teachers put up new vocabulary words so they are visible in the classroom). When observed, grade 1 and 2 teachers most often used rereading, sight words (where teachers use activities to help students learn the most frequently used English words), word wall, and retelling. Interestingly, although teachers reported using drawing fairly regularly in their classes, the teacher observations documented many fewer instances of teachers actually using it; however, when the proper implementation of each technique was rated by the observers, drawing was ranked as being the most effectively implemented of all the techniques, and *rereading* (the most utilized) was implemented less consistently well across teachers. It makes sense that teachers would feel comfortable using rereading as a technique, since it probably closely mirrors the type of "read and repeat" that they are used to doing to have students rote memorize words traditionally, and it is telling that this technique was not as well implemented, TELL-style, as noted by observers. However, the TELL techniques least understood or used included pre-reading (group discussion about a topic before the children read the text), language experience activity (students dictate a story to the teacher in English, who writes it down and the children practice reading it), and think out loud (students listen to information and talk about what they heard). These techniques require children to think and talk aloud independently (rather than repeat after the teacher) more in class, which is probably both a new experience for both teachers and children-especially children who are just learning English for the first time-and

It is unclear whether "text read" means that the teacher or the student read it, but we assume, because the students are in grades 1 and 2, that it is the teacher reading aloud in English.

a difficult activity to organize in large classes, which most observed classes were. Teachers themselves reported that the biggest challenges to using the techniques more than they selfreported or were observed to use them included large class size, English class period too short a time to do some of the activities regularly, children being at very different levels (since some had attended grade zero and others had not), and lack of textbooks, since the new English grade 2 textbook was not yet available to teachers by the time the observation/ evaluation took place 2-3 months after the TELL training. Grade 2 teachers were thus trying to implement new TELL techniques with an old textbook that didn't match.

The evaluation of grade 3 and 4 TELL-trained teachers shows a slightly different and interesting pattern. Again, when interviewed and observed 3 months after the initial training, teachers overwhelmingly reported understanding and feeling comfortable with the techniques they had learned in the TELL training. Again, however, there was a slight difference between the techniques they felt they knew best and the techniques they reported they used regularly. For example, teachers reported a strong understanding and comfort with techniques such as scrambled sentences ("helps students practice word order and punctuation"; seems to be a technique where the teacher presents a sentence with words out of order, and students have to put them in the correct order); sketch to stretch (students quickly sketch what they understood from a reading and then share their sketch orally with others); word sorts (students classify words into different categories according to similar features), and sight words (activities that help students learn

frequently used English words). They felt slightly less knowledgeable about and comfortable with techniques such as predict, respond, confirm, write (PCRW: a reading comprehension strategy where students predict what the text will cover and then think and write about whether those predictions were correct); double entry (students talk with peers and categorize information from reading a text); and text story (also called "text impressions": before reading, students see clue words and write a paragraph about what the reading will cover, then write another paragraph after doing the reading). When reporting the degree of usage of the 17 TELL techniques, they reported using scrambled sentences and sketch to stretch often and double entry seldom, mirroring their knowledge and comfort levels. However, they reported using *PCRW* (a technique they felt less knowledgeable and comfortable with) almost as much as sketch to stretch. Then, surprisingly, in actual observations, although sketch to stretch was the technique they used most and double entry a technique they used seldom in observations, PCRW was the second most observed technique, along with scrambled sentences. Sight words (a technique that received fairly high knowledge and comfort ratings) was observed being used less than other techniques that received lower knowledge and comfort ratings. Again, the reasons teachers gave for not using particular techniques included the lack of textbooks that matched the TELL techniques (as the grade 3 and 4 textbooks were still being printed and were not available at the time of the observation/evaluation), limited time during the prescribed English class to do some of the techniques, lack of other teaching/learning materials, large class size, and students being at very different English levels. The most used

techniques—*scrambled sentences* and *sketch to stretch*—were explained by teachers as "simple" or "easy to use."

It is clear that the TELL training was quite successful at helping teachers learn new techniques for teaching English in grades 1–4, and that the teachers reported and were observed using them. It is probably not surprising that there was not a perfect correlation between knowing a technique and using it, considering the many classroom and student factors affecting the teachers' uses of certain techniques. Teachers also expressed the need for follow-up refresher training, which has not yet occurred nationwide, or support from supervisors or other teachers. The field study observation did not afford the research team the time or opportunity to talk to many TELLtrained teachers to verify which techniques might be best remembered or transferred to actual use in the classroom. Further analysis by those who know the techniques well, and by future evaluations conducted when the teachers and students actually have the new English textbooks to use in class, could determine more finely which techniques might best be transferable to mother tongue instruction. In the sections below related to recommendations for mother tongue instruction, we will suggest which of the TELL techniques, based on the limited information available, might be worth considering for adaptation to mother tongue reading instruction.

Results From EGRA

Mother Tongue EGRA

In 2010, the Research Triangle Institute implemented a mother tongue EGRA with grade 2 and 3 students in six languages (Afan Oromo, Amharic, Harari, Sidama, Somali, and Tigrigna) in eight of Ethiopia's 11 regions. EGRA found that the percentage of children studying in their mother tongue in each region ranged from 71.5% in Benishangul-Gumuz to 97.2% in Sidama. All but two of the nine regions were above 80%, and six were above 85%. Among multi-lingual countries on the African continent, these are high rates of mother tongue instruction.

The EGRA measured reading fluency (the number of words read correctly in 60 seconds). EGRA suggests a fluency benchmark of 60 words per minute (wpm) as a reasonable estimate of the rate at which students begin to read with sufficient fluency to understand what they read. Only about 5% of students scored at or above that benchmark, with a range of between 0.5% in Tigray and 16% in Addis Ababa. The EGRA also looked at the relationship between fluency and reading comprehension and, though the fluency rate that supports comprehension in the 80% to 100% range varied among the different languages, 60 wpm did appear to be both a sufficient and attainable benchmark. However, the percentage of grade 2 students who scored zero on the fluency subtest ranged from 69.2% in Sidama to 10.1% in Addis Ababa. This percentage dropped to 54% and 3.8%, respectively, among grade 3 students. The percentage of children reading at or above the

benchmark did increase from grade 2 to 3 and is much higher in Addis Ababa as well.

The EGRA measured reading comprehension (the ability to answer questions about a short reading passage). For the comprehension subtest, the percentage of grade 2 students who scored zero ranged from 72.8% in Sidama to 24.1% in Addis Ababa. Among grade 3 students, this dropped to 61.8% and 9.7%, respectively. The EGRA also measured oral comprehension, allowing an assessment of whether a reading comprehension score is due to reading skill or language skill. That is, if children can answer a question when a written passage is read to them but not when they must read it themselves, then low reading skill, not the language of the text, is the barrier to comprehension. The gap between the two scores ranged from 32.9% in Oromiya to 1.3% in Somali. Even Addis Ababa was at 15.3%. These data indicate that the form of the mother tongue language employed in the tests is probably not a barrier to comprehension, suggesting that the poor reading comprehension skills are the barrier.

Although some of the EGRA findings are discouraging, they do show that achievement does occur over a 1-year period (from grade 2 to grade 3). Some of this increase may be attributed to weaker students dropping out before grade 3, but it could also be that students in some contexts (Addis Ababa, for example) may be achieving more because of factors (a richer literacy environment, better-trained teachers, or more effective instruction) that have a substantial positive impact on learning. Replicating those factors in other environments, therefore, may improve achievement. The EGRA found that although boys had higher scores than girls, this difference came from boys doing better in rural areas. Girls had higher scores than boys in urban areas. These differences may be the result of factors inside the classroom or in the different cultures of rural and urban environments. It is common worldwide for rural girls to attend school less frequently than rural boys or urban girls, due to their greater workload at home, farther distance from school (increasing parents' fears of girls' safety walking to and from school), poor rural school conditions (such as lack of toilets) that affect girls more than boys, greater poverty among rural families that require parents to prioritize regular attendance for boys over girls, lack of female teachers in rural schools serving as role models for girls' education, and more conservative values in rural areas that lead parents to value a daughters' regular attendance less than a son's (Bertini, 2011). Determining which of these factors is most at play in Ethiopia is beyond the scope of this field study. However, rural girls' workload, compared to boys, may be the primary problem, based on interviews conducted by the field research team. When parents from a rural primary school in Oromiya were asked why girls' scores are lower they replied that "girls are loaded with housework. Sometimes they also work in the garden or farm. They are highly loaded when we compare to boys. They assist their mother, fetch water, and so on. The responsibility of boys is just herding cattle." The teaching and learning process coordinator from the Oromiya REB also replied, "girls are more shy." He went on to say that girls have "the burden of a workload at home." They are "expected to be the household manager, do house chores, and learn how to be a good wife. Boys have more free time. They may help with farming, but it's not intensive

compared to girls' work." He also mentioned, "boys can come together, work together, talk, and discuss. Girls' work is lonely and by themselves. Language is communication. Girls have no chance to exchange with their peer groups. Early marriage from age 13 is another problem."

The EGRA also found a significant increase in scores on all the subtests from grade 2 to grade 3. However, the subtest scores indicate that some skills that should have been mastered in grade 1, or 2 at the latest, were still being learned in grade 3. These data argue for defining specific skill benchmarks for each of the four early grades and then spending more class time on these skills, particularly for students who are at risk of not achieving them before moving on to the next grade.

The EGRA also looked at predictive factors, those factors that appear to be related to higher scores. Some of the predictive factors are ones that might be amenable to a programmatic intervention. That is, the MOE might be able to do something about them. These include encouraging and training families to help students with homework, providing a textbook for all students, establishing a mechanism for making grade-appropriate supplemental reading materials available to children, establishing some form of preschool or kindergarten for all children, and providing literacy training to parents. Some of these would be easier to address (providing textbooks for all children, for example) than others (establishing preschools or kindergarten classes, for example).

In this report, although the EGRA tested only grade 2 and 3 students in reading, we will make recommendations for the first cycle of primary (grades 1–4), extrapolating from the EGRA results.

English EGRA

In 2011, the TELL program supported the MOE in designing, planning, and implementing a nationwide English EGRA baseline. All nine regions and two city administrations participated in the assessment, which tested students who had completed grades 2, 3, and 4. In all, 19,603 students were tested. The TELL program utilized a technical approach for the EGRA in English that is based on widely accepted research and best known practices for standard based education (Linn, 2001; Linn & Herman, 1997; Hamilton, Stecher, & Yuan, 2008). This approach supports developing, implementing, and sustaining a system that can be used to (a) determine what students at grades 2, 3, and 4 know and are able to do with key minimum learning competencies (MLCs) of the Ethiopian curriculum and (b) inform educational policy, program planning, and decision making.

The standard based education system has five components: (1) content standards, (2) teacher training, (3) student assessment, (4) school accountability, and (5) dissemination. The last four components have to be substantially aligned with the first component, the nation's content standards (also referred to as MLCs in Ethiopia). The MLCs are considered to be the heart of the standards-based process. TELL employed the EGRA instrument in English, adapted for the Ethiopian context after reviewing Ethiopia's grade 2–4 English curriculum and MLCs and existing EGRA literature and instruments developed and implemented in various countries including for Ethiopia's EGRA for mother tongues. The MLCs were the basis for the reporting categories developed for each content domain and are used to help guide the development of test items.

At the time of writing this report, the analysis had not yet been finalized; however, the preliminary results showed that about two thirds of the students tested were not able to demonstrate the knowledge and skills expected of the curriculum's minimum learning competencies for each grade. This suggests that English literacy is at least as poor as mother tongue literacy throughout Ethiopia.

Purpose, Objectives, and Significance of the Study

The purpose of this field study report is to describe the current state of mother tongue and English literacy instruction in primary schools in Ethiopia, compare that description to evidencebased standards for good literacy instruction, and outline changes in policy and practice that would, over time, bring literacy instruction in Ethiopia in line with those evidence-based standards. The specific objectives of the study are to:

- review the evidence base for effective literacy and language instruction;
- describe examples of effective strategies used in other countries for improving early grade reading and language learning;
- collect field data about barriers and supports within the schools, communities, teacher training, and policy environments in Ethiopia that may hinder or support improving the effectiveness of literacy and language instruction; and
- present recommendations for short-, medium-, and long-term activities and steps to take to improve instruction and achievement in early grade mother tongue reading and English language learning in primary school.

The study suggests actions that the MOE could take immediately with its existing resources and outlines a plan to move forward, in manageable steps, to improve literacy instruction in both English and mother tongue languages in primary schools. The goal of this study is to assist the MOE to make appropriate, evidencebased changes in the short and long term, so as to maximize achievement by building on existing strengths and reducing the most critical hindrances. Evidence-Based Literacy and Language Instruction

The evidence base for designing and implementing language and literacy instruction for children includes evidence on three parts of the literacy learning system: (1) evidence about effective *reading instruction*, (2) evidence about *language of instruction*, and (3) evidence about effective *teacher training and professional development*. This section presents a review of the evidence base for each of these parts of the system.

Reading Instruction

The review for reading is informed by a theoretical perspective that defines literacy as a set of *component skills* that can and should be learned separately but also a set of *literacy practices* that require the integration of all of those skills to perform tasks with text. For those who are not familiar with theories of reading, we have found the following metaphor useful in understanding the difference between skills and practices.

When a football (soccer in the United States) team is preparing for a game, they spend some time practicing individual skills, such as passing or shooting goals, and some time playing the game. The players are practicing component skills and then integrating all of those skills to play a practice match. Many amateur players learned the game without formal practice of the component skills, and a few of those players may be quite good. However, most players who learn without a focus on component skills are not accomplished players, and almost no professional player learned in that way. In fact, most good amateur players probably practiced those skills on their own or with friends when they were young. Good players do not have to think about these component skills once they are in a match because the skills have become automatic through practice. While in the game, the player is, instead, thinking about strategy, predicting where the ball might go next, and assessing the strengths and weaknesses of the other team.

The same is true for reading. Some children learn how to read without components instruction, but most do not learn how to read well. Those who do learn to read well probably practiced the component skills alone or with family or friends. Children need instruction and practice in the components of reading, and then they need to use those skills to accomplish tasks with text. The tasks and the texts should be ones that challenge them to improve their reading, are not too difficult for them to read successfully, and are interesting and enjoyable for them. The component skills should be taught by starting with easy, simple skills and then slowly introducing more difficult, complex skills.

Good readers must efficiently and effortlessly integrate multiple, discrete component skills in order to make meaning from print (Adams, 1990; National Institute of Child Health and Human Development, 2000; Perfetti, 1988; Snow, Burns, & Griffin, 1998; Stanovich, 2000). A good reader immediately processes the visual information presented in the curves, lines, and dots that make up letters. Good readers instantaneously use this visual processing to call up information about sounds that the spelling patterns represent and to immediately activate knowledge about word meaning and use. Teaching that focuses only on components or only on reading practices does not provide sufficient support to children so that they can develop into good readers (Snow et al., 1998). Both should be taught from the earliest stages of learning to read.

These components are: phonological awareness, decoding and word recognition, vocabulary knowledge, oral reading fluency, and comprehension (National Institute of Child Health and Human Development, 2000). Together, these components enable readers to make meaning from text.

Phonological Awareness

Phonological awareness is the ability to recognize the different sound segments of spoken words such as syllables, onset-rimes, and phonemes (Adams, 1990; Snow et al., 1998). Recognizing smaller units such as phonemes is more difficult than recognizing larger units such as syllables, but phonemic awareness is crucial to word recognition in alphabetic scripts (Schatschneider, Francis, Foorman, Fletcher, & Mehta, 1999). Ziegler and Goswami (2006) also note that languages with an inconsistent symbol to sound mapping (such as English, for example) may be more challenging for children to learn as it forces them to rely more on whole-word recognition. Instruction that builds phonemic awareness is most effective when (1) children are taught to manipulate sounds with letters, (2) lessons are short and frequent, and (3) children are taught in small groups (National Institute of Child Health and Human Development, 2000).

Research with children learning to read a second language suggests strong crosslinguistic transfer of a variety of phonological awareness skills, even between languages that are phonologically dissimilar, enabling learners to draw upon phonological awareness skills in their first language to support reading in the second language. Among bilingual students, there is growing evidence that phonological awareness plays an important role in decoding and word recognition in both their first and second languages and that phonological awareness in a first language supports decoding and word reading in the second language and vice versa when both languages are alphabetic (Durgunoğlu, Nagy, & Hancin-Bhatt, 1993; Gottardo, 2002; Lindsey, Manis, & Bailey, 2003; Mumtaz & Humphreys, 2002; Quiroga, Lemos-Britton, Mostafapour, Abbott, & Berninger, 2002²). Phonological awareness is a languagegeneral ability underlying the acquisition of reading skills rather than a language-specific ability that develops separately within each language that is learned, however the size of the sublexical phonological unit that is important for reading acquisition varies in different languages (Caravolas & Bruck, 1993).

Decoding and Word Recognition

Decoding refers to the ability to connect phonemes to letters to "sound out" unknown words. Because English preserves the historical origins of its words at the expense of clear regular and consistent sound to letter relationships, decoding requires knowledge not only of those relationships but also of unusual

² Studies were conducted with Spanish-English and Urdu-English bilinguals.

clusters of letters (such as "ight" in night and right). Decoding in some of the eight mother tongue languages may be easier because the sound to letter (or letter combinations) relationship is regular and consistent.

Word recognition refers to the rapid and effortless ability to read whole words, or word parts, after patterns have been encountered in print a sufficient number of times to allow for automatic retrieval from memory. That is, they do not have to be sounded out. This automaticity of reading individual words out of context is critical for effective reading and is highly correlated with reading comprehension outcomes (e.g., Perfetti, 1985; Torgesen, Rashotte, & Alexander, 2001). Multiple encounters with words and letter patterns enable readers to retrieve words as whole units, freeing the reader from the need to decode those words. Children with weak decoding and word recognition skills tend to rely on contextual information as a primary strategy for reading words. Because of their overreliance on context, these children tend to make more word recognition errors, and they exhibit lower levels of comprehension (e.g., Adams, 1990; Perfetti, 1985; Stanovich, 1986).

Teaching decoding and word recognition is most effective when children are systematically taught the relationships between sounds and letters (referred to as phonics instruction; National Institute of Child Health and Human Development, 2000). This approach to instruction also supports reading comprehension. Moreover, sight word instruction (introducing words as whole units rather than analyzing their letter-sound correspondences) is also a critical part of early reading instruction, particularly in English, since many of the highest frequency words are not decodable using a set of rules (for example, *one*).

Initial reading instruction in a second language presents an especially formidable challenge given that students typically have not developed an oral second language foundation to draw from as they learn to read. In alphabetic languages, the critical insight in beginning to read, the alphabetic principle, is the understanding that there is a system by which sounds connect to print and that these sounds blend together to represent *meaningful* words (Snow et al., 1998). Making this connection between oral language and print may be more difficult for young children who have limited proficiency in the second language.

Research with bilingual children from diverse linguistic backgrounds learning to read in English suggests that (1) bilingual students benefit from explicit phonics instruction as one component of an integrated early literacy program (Lesaux & Siegel, 2003; Stuart, 1999), (2) English oral language competencies predict decoding and word recognition skills in English (Arab-Moghaddam & Sénéchal, 2001; Gottardo, 2002; Lindsey, Manis & Bailey, 2003), (3) development of reading in the second language draws on similar underlying skills (such as decoding) to the same degree as reading in the first language (Arab-Moghaddam & Senechal, 2001), and (4) readers who rely on context to read words in a second language tend to have poorer comprehension and overall reading ability than those who rely on decoding and word recognition (e.g., Chiappe & Siegel, 1999).

Vocabulary Knowledge

Vocabulary knowledge is the understanding of the meanings of words and their uses in varying contexts. A strong relationship between vocabulary knowledge and reading comprehension is well established in the literature on learning to read in a first or second language (e.g., National Institute of Child Health and Human Development, 2000; Snow, 2002; Snow et al., 1998). However, different kinds of vocabulary instruction lead to varying degrees of reading comprehension. Specifically, vocabulary instruction that focuses on definitions is less effective at supporting comprehension than vocabulary instruction that strives to explore word meaning and usage in several contexts (Beck, McKeown, & Omanson, 1987).

Instruction to support vocabulary growth is important for students learning a second language for several reasons. First, vocabulary growth enables students to acquire not just new labels for words they know but also new concepts (Nagy, 1988). Second, higher vocabulary levels lead to higher reading comprehension in a second language, though vocabulary levels in a first language do not necessarily lead to higher reading comprehension in a second language (Carlisle, Beeman, Davis, & Spharim, 1999; Carlisle & Beeman, 2000; Droop & Verhoeven, 2003; Hutchinson, Whiteley, Smith, & Connors, 2003; Leseman & de Jong, 1998; Verhoeven, 2000). Third, vocabulary knowledge is interrelated with other oral language and reading competencies. For example, vocabulary size may be a strong predictor of phonological awareness (Snow et al., 1998). In theory, children with broad vocabulary knowledge would have the advantage of being exposed to more

examples of phonemic distinctions within that language.³ Thus, for students whose first language phonology differs greatly from English, a broad English vocabulary could be especially important for building their ability to perceive phonemes in English as well as decoding and word recognition in English. This suggests that building that broad vocabulary in English will help the transition from mother tongue literacy to English literacy.

Oral Reading Fluency

Oral reading fluency is reading with speed and accuracy, but it also includes reading with the correct stress, intonation, and emphasis (e.g., National Institute of Child Health and Human Development, 2000; Torgesen et al., 2001). The development of oral reading fluency is critical because even students who are reading with a high degree of accuracy may have trouble getting the meaning of what they read if they are reading too slowly or with poor stress, intonation, or emphasis (Daane, Campbell, Grigg, Goodman, & Oranje, 2005; Snow et al., 1998). Fluency instruction involves oral reading of text at a student's reading level. The student is encouraged to read the same passage several times, each time trying to come closer to the oral reading demonstrated by a teacher.

It is highly plausible that the lack of knowledge of the vocabulary, syntax, and discourse structures of a second language may make oral reading fluency more challenging for students learning reading in a second language than for those learning in a first language. For students learning in a second language, their limited

³ For example, a child whose vocabulary includes both the words *pin* and *pen* may be more aware of the distinction between the vowel sounds than a child whose vocabulary includes only one of those words.

knowledge of vocabulary, syntax, and discourse structures in the second language may make reading fluency a highly challenging task, even if word reading accuracy and speed are at the level of students learning in a first language (Verhoeven, 1994).

Interventions designed to improve fluency for students learning to read in a second language (1) incorporate many components of reading instruction, including phonological awareness, phonics, and vocabulary knowledge; (2) include the oral rereading of familiar text during each session, and (3) employ a variety of texts (decodable and patterned, picture, and chapter books) (Koskinen et al., 2000; Linan-Thompson & Hickman-Davis, 2002; Linan-Thompson, Vaughn, Hickman-Davis, & Kouzekanani, 2003). Teachers assist children with both the meaning and pronunciation of unknown words, but texts should be at the student's level.

Reading Comprehension

Readers must actively work to make sense out of what they are reading by constantly integrating what they are learning in the text with what they know from their own experience and accumulated knowledge (e.g., Graesser, McNamara, & Louwerse, 2003; Snow, 2002). Students should be taught how to build a model of the text in their minds. In other words, in order to construct meaning of what they are reading, children must learn how to pay attention to whether what they are reading is "coming together" or "makes sense" with what they already read. From this perspective, one of the most important things for students to learn is the development of self-monitoring habits (e.g., Pressley, 1998). Active comprehension strategies for self-monitoring should be taught by demonstration and description to help children

understand the active thinking processes that make comprehension possible. Students can demonstrate deep comprehension by talking about how they are making sense of what they read and by answering questions about or discussing text events, information, character actions, and thematic elements.

Sequencing the Learning Component Skills

Most of the research on early grade reading instruction has taken place in countries with rich literacy environments and primary schools that are well resourced and have well-trained teachers. Even in those countries, some children have trouble learning to read. These barriers to reading can be caused by many different factors, some of which are cognitive and some of which are related to the child's home and community environment (Purcell-Gates, 1997; Snow et al., 1998). Most children in Ethiopia live in language and literacy environments that need to be much richer. Until that richness is achieved, instruction should draw on some of the approaches employed with children who come from similarly weak language and literacy environments.4

Two effective interventions, employed by Orten-Gillingham and Wilson in their models, to address this situation are (1) to carefully sequence the learning of component skills from simple to complex and then directly teach these skills in a logical pattern and (2) to provide interesting and grade-appropriate reading materials. The sequence for English is well developed in the United States, but we are not sure what a proper sequence for each mother tongue should be. Providing reading

⁴ The Orten-Gillingham (www.orton-gillingham.com/frmMethodology. aspx) and the Wilson (www.wilsonlanguage.com/w_wrs.htm) reading methods are examples.

materials is challenging in Ethiopia as well. The recommendations section will have some advice on these two subjects.

The careful sequence of learning component skills does not mean that students should practice phonics until it becomes an automated skill before they begin reading for comprehension and writing to communicate. Children should be building all the component skills, but each skill should be sequenced and directly taught in a logical way. The recommendations section will have some advice on how this sequence could be developed for Ethiopia.

Language of Instruction

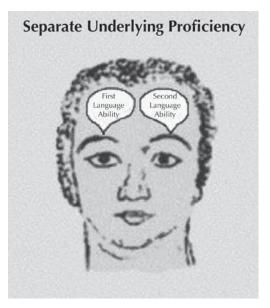
Children learn best in the language they understand well, and this includes both learning literacy and content knowledge. Key principles relate to *bilingualism, underlying proficiency,* and *transfer.*

Bilingualism

According to Cummins (1994) there are two main types of bilingualism: (1) additive *bilingualism,* in which the first language is continually developed and the home culture valued while the second language is added; and (2) subtractive bilingualism, in which the second language is added at the expense of the first language and culture, which diminish as a consequence. According to Baker (2001), additive bilingualism is linked to high selfesteem, increased cognitive flexibility, and higher levels of proficiency in the second language. Additive bilingualism should be encouraged for successful biliteracy. Many myths of bilingualism were built on looking only at subtractive bilingualism cases.

One of the common myths about language learning is that spending time developing the mother tongue (L1) takes away from learning a second language (L2). This theory of bilingualism suggests that the two languages coexist in a balance scale inside the brain (Baker, 2001). As one language grows stronger and more fully developed, this myth suggests that the other language must then grow weaker. One way to picture this myth is with two separate language balloons inside the brain. As one language balloon expands, the other must decrease in size to make room (Baker, 2001). See Figure 1.

Figure 1



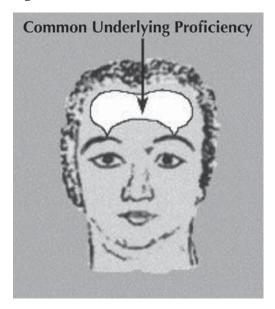
Source: Baker, 2001, p. 164

This balance scale view of bilingualism seems to be intuitively held by many people. Cummins (1980) refers to this as the *separate underlying proficiency model,* which suggests that the two languages function separately, that skills cannot be transferred between languages, and that there is only a limited amount of space for languages in the brain. However, many people are able to learn to be fluent in several languages, which challenges the idea that our brains hold only a limited amount of space for languages.

Underlying Proficiency

In fact, literacy skills in one's L1 (such as visual awareness, phonemic awareness, and reading speed) support reading in any other language, even when the L2 employs a different writing system; the cognitive and linguistic skills attained while learning to read in the L1 need not need be relearned in the L2 (however, the orthographic specific rules of the L2 and subsequent languages may need specific instruction).

Figure 2



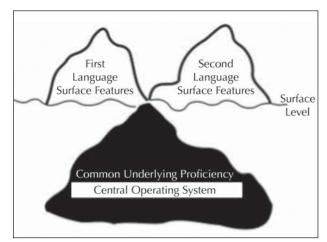
Source: Baker, 2001, p. 164

In opposition to the separate model, Cummins (1981) suggested the *common underlying proficiency model,* which states that when learning a L2, we use linguistic resources from

our L1. In other words, the set of skills that we learn in our L1 can be transferred to the L2 (see Figure 2). According to Cummins, the knowledge of language, literacy, and concepts learned in the L1 can be drawn upon in the L2 after oral L2 skills are developed, with no relearning required. The significance of the "no re-learning required" is that children are not disadvantaged by first studying their L1 and then learning a L2. Developing skills in the L1 greatly benefits L2 learning because most of those skills will not need to be relearned in the L2 (Baker, 2001; Alidou et al., 2006).

Baker 2001) depicted this theory of common underlying proficiency as a set of icebergs. As seen in **Figure 3**, the two languages look different on the surface and sound different in conversation, but under the surface, they share a common base of the iceberg and "operate through the same central processing system" (Baker, 2001, p. 165).

Figure 3



Source: Baker, 2001, p. 165

Transfer

A concept that is key to understanding Cummins's common underlying proficiency theory is cross-linguistic transfer or simply transfer. Transfer enables L2 learners to make use of the cognitive and linguistic skills they attained while learning to read in the L1 (Cummins, 1981). These very same skills gained during L1 reading "(for example, visual awareness, phonemic awareness, and speed of processing/automaticity) contribute to reading the L2 and any other language, even when the languages are typologically different and/or have different writing systems" (Benson, 2008, p. 4). Once they develop these skills in one language, according to the theory, they will not need to relearn them in their next language. The skill set will remain; the child will only have to focus on learning the new vocabulary and grammar of the L2. This means that, by focusing on fully developing their reading skills in the L1, students are also facilitating learning to read in the L2.

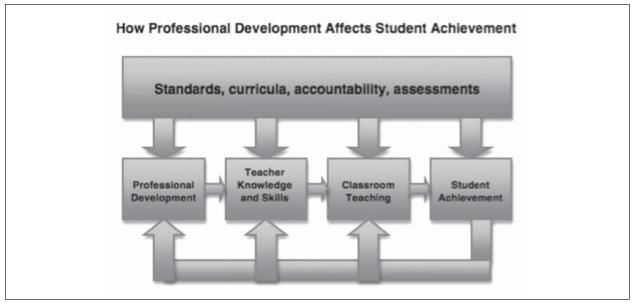
There are however, both positive and negative forms of transfer. Generally when the L1 and the L2 share a similar structure, linguistic interference can result in correct language production called *positive transfer*. Cognates are often used as an example of how the structure in the L1 is identical and easily transferable to the L2 resulting in correct speech. Language interference also results in speech errors known as *negative transfer*. Negative transfer occurs when speakers and writers transfer items and structures from the L1 that are different in the L2. Generally the greater the differences between the two languages, the more negative transfer can be expected (Koda & Reddy, 2008).

The process of transfer also works in both directions, as can be seen from the results of

students who studied only in French immersion programs, yet were still able to read their L1 even though they never officially studied it as a subject. Hovens's (2002) results from testing 1,664 children, in both traditional French immersion programs as well as mothertongue-based bilingual schools in Niger clearly demonstrate the power of transfer in either direction (p. 259). All students were tested in both French and their mother tongue, even though the students in the French immersion schools had never studied their L1. Students in the French immersion schools were able to use their L2 literacy skills to decipher and decode their L1, even though they had never officially learned to read in their L1. It is also quite telling that these same students actually tested better in their L1 than they did in French, which they had been studying. This study supports the theory that initial literacy learning is most efficient when conducted in a language the learner is familiar with and knows how to speak, "because so much of the automaticity and psycholinguistic guessing that are part of fluent reading rely on deep understanding of the language being read" (Benson, 2008, p. 5).

There are two conflicting hypotheses about the point at which transfer can occur. The *linguistic interdependence hypothesis* (LIH), proposes that L1 reading ability transfers to L2 reading and that developing the L1 should be the focus before exposing learners to the L2 (Cui, 2008). Studies have yet to determine exactly what this threshold is. Clarke (1979) and Cummins (1979) both suggested that if students don't reach this oral linguistic ceiling in the L2, they will have great difficulty transferring the skills they gained in the L1. Even if they are excellent readers in their L1, these readers will revert to poor reading strategies when presented with a challenging





Source: Yoon et al., 2007, p. 4

task in the L2 (Benson, 2008, p. 5). Therefore, it is equally important to develop literacy skills in the L1 and oral/aural skills in the L2 so that when it is time to transition to reading in the L2, students will be able to transfer their skills from one language to the other.

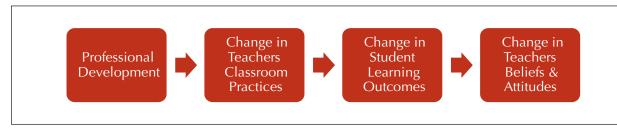
These theories present a strong argument in favor of using the mother tongue as the language of instruction at the primary level before transitioning into an official language. Research clearly indicates that children learn best in the language in which they are most familiar, and this includes both content knowledge and literacy. The difficulty is providing these children with both the skills they need to become literate in L1 while teaching them oral L2 skills so that at a later point they are able to transition into using the official language as a language of instruction. The research is not yet clear on when this transition should occur, only noting that the longer children spend learning in their L1, the better

they will do when they transition into the L2, assuming that they have also attained a certain level of oral fluency in the L2. This indicates that instruction needs to focus on helping children develop literacy in their mother tongues at the primary level, but the focus must equally be on developing L2 oral skills if the children are transitioning into the L2 at a later point in their schooling.

Teacher Training and Professional Development

Teachers need specific training in how to provide effective literacy and language instruction so that children's reading and English improve. Thus, it is helpful first to consider models of how teacher professional development is related to increasing student achievement, a key question for improving teacher quality. There are two common models; in the first (see Figure 4) professional development increases teacher knowledge

Figure 5



Source: Guskey, 2002, p. 383

and skills and affects their attitudes. As a result, teachers then change what they do in the classroom, leading to greater student achievement (Yoon, Duncan, Lee, Scarloss, & Shapley, 2007).

In the second model (see Figure 5), changes in attitudes and beliefs occur only after changes in classroom practice have resulted in the desired learning outcomes for students. In other words, it is teachers' successful implementation of changes in the classroom, when teachers have seen the actual improvements related to implementation of a particular technique, that changes their attitudes and beliefs. Guskey (2002) cautioned that the actual change is more cyclical because teachers have to at least believe enough in the new technique learned during training or professional development for them even to try it in their classroom. Yet, it does support the notion that if teachers can be encouraged to try a particular technique, even if they are not sure of its efficacy, they may eventually adopt or integrate it permanently into their teaching if the students respond positively.

In addition, while professional development is necessary for improved student learning, it alone is probably not sufficient, as the other factors discussed in this report—including learning materials, school leadership, community involvement, and supportive policies—also play a role in student achievement.

Both of these models of teacher change, however, rely on effective professional development, and the research on professional development in the United States supports five key components of effective training and professional development: *subject matter knowledge, sufficient training time, continued supervision and support, collective participation,* and *job-embedded learning*.

Focus on Building Subject Matter Knowledge

In K-12, a strong correlation exists between student achievement in K-12 science and mathematics and the level of knowledge of K-12 teachers in science and math (Committee on Science and Mathematics Teacher Preparation, 2000). Teachers themselves report that professional development focused on content knowledge contributes to changes in instructional practice (Garet, Porter, Desimone, Birman, & Yoon, 2001). In the case of early grade primary teachers, the content knowledge they need is how to teach the components and processes of reading, how students learn to read, and how best to teach reading and writing skills. Where a L2 eventually becomes the primary language of instruction (as English is in Ethiopia), content knowledge for primary school teachers should also include knowledge of L2 acquisition theories and techniques, including how best to specifically teach speaking, listening, reading, and writing skills in the new language.

Sufficient Training Time

Training must provide sufficient time and resources for teachers to acquire that knowledge and to practice instructional skills in real-life classroom settings. Professional development is more effective in changing teachers' practice (at least as self-reported) when it is of longer duration (Porter et al., 2000; Supovitz & Turner, 2000). Longer-term professional development permits more time for teachers to learn about their own practice, especially if it includes follow-up (Joyce & Showers, 1995; Stein, Smith, & Silver, 1999). In their study of adult basic education teacher change, Smith and colleagues (2003) found a direct and positive correlation between the number of hours teachers participated in professional development activity and the amount and type of change related to the topic of the professional development they demonstrated in the following year. Studies of the professional development of K-12 educators teaching English-language learners have also shown that creating change in teachers is a time-consuming process that requires many meetings and workshops over an extended period of time (Anderson, 1997; Calderón & Marsh, 1988; Ruiz, Rueda, Figueroa, & Boothroyd, 1995). Professional development should also follow principles of adult learning; it should establish a supportive environment, acknowledge teachers' prior experience, help teachers consider how new learning applies to their specific teaching situation, and encourage teachers to make explicit their

implicit knowledge about teaching (their "craft knowledge"; Gardner, 1996). In their multiyear study of more than 700 K–12 bilingual teachers who participated in multidistrict training focused on literacy development, Calderón and Marsh (1988) found that to ensure that the training would be used, it is necessary to present theory, model the instructional strategies, and give teachers the opportunity to practice with feedback and extensive support, all of which is easier to do when training is of longer duration, whether single or multiple session.

Continued Supervision and Support

One-shot training, even when it is multiple days, is rarely effective at permanently changing teachers' attitudes and behaviors. Teachers need follow-up in the way of supervision, support, and practice after initial training. If professional development is organized outside of the school (as most is), the training should be designed to make a strong connection between what is learned in the professional development and the teacher's own work context. Professional development needs to help teachers plan for application and to identify and strategize barriers to application that they will face once they are back in their programs (Ottoson, 1997): "Devoting no time or little time for synthesis, integration, and planning beyond the [professional development] program is inadequate preparation for application. Helping participants anticipate and plan for barriers may facilitate practice changes" (p. 105). The training or professional development should also include a variety of activities, such as theory, demonstration, practice, feedback, and classroom application (Joyce & Showers, 1995; Joyce, Wolf, & Calhoun, 1993; Mazzarella, 1980). If professional development is short term

or single session, it needs to be followed by assistance to help teachers implement what they learned (Stein & Wang, 1988) because "teachers are more likely to learn from direct observation of practice and trial and error in their own classrooms than they are from abstract descriptions of teaching" (Elmore, 1996, p. 24).

Collective Participation

Teachers and headmasters from the same school should participate together in professional development. "Professional development is more effective when teachers participate with others from their school, grade, or department" (Porter et al., 2000, p. ES-9). In research on adult basic education professional development, Smith, Hofer, Gillespie, Solomon, & Rowe (2003) also found that teachers from the same adult basic education program participating together in professional development changed their thinking and acting more after professional development as compared to teachers who participated without other teachers from their workplace. Langer (2000), in a qualitative study of 25 schools (44 teachers in 14 high-performing schools and 11 average-performing schools) over 5 years, concluded that professional development contributes to high performance when it focuses not on individual teachers but on groups of teachers within schools, especially where school culture supports the professional lives of the teachers. Professional development schools constitute another collaborative approach to teacher professional development that is becoming popular in many teacher education programs. In this model, teacher education students, cooperating teachers, and university supervisors discuss and analyze classroom experiences with the aim of combining forces to improve instruction

(Neubert & Binko, 1998). Research in K–12 indicates that school leadership plays a role in readying teachers for change by creating a positive culture that lets teachers' attitudes change naturally when they see how and whether a new practice helps students' learning (Sparks, 1995). Taylor, Pearson, Peterson, and Rodriguez (2005) also found that school leadership was an important factor in improved student achievement among teachers in 13 different schools trying to implement researchbased reading instruction strategies.

Job-Embedded Learning

Training and ongoing study with other teachers while they are teaching should be based on principles of adult learning theory, which includes active learning, peer learning, collaborative group learning, and opportunities for reflection and discussion. Professional development under the job-embedded model is located within a school, program, or other local context as part of an effort to create ongoing professional communities (Hord, 1997). Schools and programs develop sitebased learning communities where professional development is woven into the fabric of the school community, balanced at times with the cross-fertilization of new ideas from outside the school (Taylor et al., 2005). Professional development activities include study circles, sharing groups, or inquiry groups made up of teachers from the same school or division. The focus is on developing teacher knowledge in the content area, analyzing student thinking, and identifying how that knowledge can be applied to changes in instructional practices tailored to the local educational context. Ancess (2000), after interviewing 66 teachers in three high schools, identified teacher inquiry

about student learning and student work as a powerful tool for changing teacher practice and ultimately changing school structure. Part of the reason school- or job-embedded, ongoing professional development can be more effective than traditional teacher training is that it is structured to provide a strong emphasis on analysis and reflection rather than just demonstrating techniques. Guskey (1997, 1999) and Sparks (1994, 1995) advocated professional development that focuses on learning rather than on teaching; on problem solving and reflectiveness rather than on acquiring new techniques; and on embedding change within the program rather than on promoting individual change. In a longitudinal study of the impact of professional development in 13 schools, 92 teachers, and 733 students in grades 2-5 in high-poverty areas, Taylor and colleagues (2005) investigated the effectiveness of job-embedded professional development on reading scores, where teachers working together were introduced to the research on reading instruction and analyzed their school's reading achievement data as part of a larger reform effort to improve reading scores. Increased comprehension and fluency scores (after 2 years) were found in schools where teachers collaborated in reflective professional development and used data to improve their teaching practice, aided by changes at the school level-effective school leadership and commitment to the reform effort-that supported such change.

The movement for teacher professional communities within schools grew from the belief that one can't take individual teachers out of their environment, train and change them, then put them back into the same environment and expect them to change that environment. Rather, teachers need a community of teachers within the school so they can learn together about their work as they apply that learning (Calderón, 1999; Grossman, Wineburg, & Woolworth, 2000). In a review of previous research about the relationship between K-12 school culture and the effectiveness of professional development, Olson, Butler, and Olson (1991) found that collegiality emerged as a key indicator. Interactions with colleagues seemed to help teachers develop a "body of technical knowledge about what teaching practices are likely to be effective" (Olson et al., 1991, p. 23) and a sense of their own competence (Smylie, 1988). Other research suggests that more collaboration within a school increases teachers' commitment to teaching (Rosenholtz, 1987), which may in turn support openness to new knowledge and practices. When teachers don't have the opportunity to talk to colleagues about strategies learned during professional development, they are less likely to implement them (Gardner, 1996; Huberman & Miles, 1984; Smith et al, 2003); the greater the communication, the more likely teachers were to adopt the new practice (Adey, 1995). In short:

Teaching practice is unlikely to change as a result of exposure to training, unless that training also brings with it some kind of external normative structure, a network of social relationships that personalize that structure, and supports interaction around problems of practice. (Elmore, 1996, p. 21)

Summary of Evidence Base on Reading, Language Learning and Teacher Training

In short, the evidence base indicates that the principles discussed below are applicable to improving language and literacy learning in Ethiopia.

Reading instruction should include both direct teaching of component skills and practice with reading and writing. The component skills are phonological awareness, the ability to recognize the different sounds or phonemes of spoken words; decoding, the ability to connect phonemes to letters to "sound out" unknown words; vocabulary knowledge, the understanding of the meanings of words and their uses in varying contexts; oral reading fluency, reading with speed and accuracy, as well as with the correct stress, intonation, and emphasis; and comprehension, actively working to make sense of a text by constantly integrating what is being learned in the text with what is known from experience and accumulated knowledge.

Children learn best in the language they understand well, and this includes both learning literacy and content knowledge. For successful biliteracy, teachers should encourage additive bilingualism, in which the L1 is continually developed and the home culture valued while the L2 is added. Literacy skills in one's L1 (such as visual awareness, phonemic awareness, and reading speed) support reading in any other language, even when the L2 employs a different writing system. The cognitive and linguistic skills attained while learning to read in the L1 need not need be relearned in the L2 because of the process of transfer. The level of reading skills acquired in the L1 usually predicts the level of skills that will be reached in the L2. While learning literacy in the L1, therefore, students should be building oral skills in the L2.

Teachers need specific training in how to provide effective literacy and language instruction. Primary teachers need knowledge of the components and processes of reading, how students learn to read, and how best to teach reading and writing skills, as well as how to teach English as a second language. Training must provide sufficient time and resources for teachers to acquire that knowledge and to practice instructional skills in real-life classroom settings. "To improve professional development, it is more important to focus on the duration, collective participation, and the core features (i.e., content, active learning, and coherence) than type" (Garet et al., 2001, p. 936). Highquality training is characterized by strong facilitation, good group dynamics among the teachers participating, and flexible but clear adherence to the professional development design. Teachers will need continued supervision, support, and practice after initial training. Training and ongoing study with other teachers while they are teaching should be based on principles of adult learning theory, which includes active learning, peer learning, collaborative group learning, and opportunities for reflection and discussion. Teachers and headmasters from the same school should participate together in professional development. Reform, by its nature, requires intensive resources, and researchers (Knapp, 2003; Stein & D'Amico, 2002) seem to agree that intensive professional development is key to changing not just policy but the educational core: the way in which teachers and students interact in classrooms around subject matter (Elmore, 1996).

Methodology of the Study

The study employed a force field analysis to identify, describe, and assess the strength of both the existing supports, which might help the MOE reach its goals, and the existing barriers to achieving those goals, as well as the likelihood that each support could be strengthened and each barrier diminished. To do this, the study team (1) reviewed existing documents and study reports, (2) interviewed a wide range of stakeholders, including USAID officials, MOE officials, TELL program staff, school leaders, teachers, parents and children, and (3) observed several classrooms in session. The study team then analyzed all of these data to develop an understanding of how to build supports and diminish barriers to improvement of both English and mother tongue literacy instruction in Ethiopia. The study timeframe and specific protocols can be found in Appendix B, and a list of interviewees and site visits can be found in Appendix C.

Rationale

EGRA mother tongue results indicate that most grade 3 students are not reading with sufficient fluency and comprehension to use reading to learn during the rest of their primary school career. Even more discouraging is that a large percentage of grade 3 students appear to have little or no reading skill at all. Learning to read fluently and with comprehension is the foundation on which all subsequent schooling rests, and something must be done to address this problem. This study is meant to identify ways in which the MOE could begin addressing this problem quickly and then continue improving instruction until most students are reading by the end of grade 4.

The TELL program has provided comprehensive training to over 71,000 primary school teachers who teach English. The training included a set of useable strategies for improving English instruction to make it more interactive. However, EGRA mother tongue results indicate that children's reading skills in mother tongue are lagging even after several years of schooling. Easily integrated English teaching approaches might be readily adapted for mother tongue literacy instruction. By identifying those TELL program and mother tongue instructional approaches from within Ethiopia and other countries that are most easily integrated into current teaching practice, the MOE might begin training teachers to use these approaches before developing any new approaches that might require more time and effort before teachers adopt them as common classroom activities.

Comprehensive reform of Ethiopia's education system, which offers literacy instruction in multiple languages, is a long and complex process, but some changes in instruction could start early and lead to immediate improvements in learning gains. A phased approach to education reform would ensure that primary school students benefit during the time it takes to develop and implement new learning and teaching standards, curriculum, materials, and teacher training programs. In addition, early steps will allow teachers and administrators to develop their understanding of the new instructional approach in small increments, rather than being overwhelmed by too much change. The study, therefore, identifies immediate, mid-range, and long-term steps that are based on an understanding of the resources (both human and physical) that currently exist in the country.

Study Questions

The study seeks to answer the following questions:

- 1. What are attainable goals for improvement in English and mother tongue literacy instruction within 2 years, within 5 years, and within 10 years?
- 2. What strengths and gaps exist in the current practices being used for literacy and language instruction?
- 3. What strengths in practice can be built upon or expanded, and what changes in practice (based on effective practices document from literacy improvement programs in other developing countries) would help Ethiopian schools to reach these goals?
- 4. What are recommended strategies for implementing those changes?
- 5. What policies would support those changes?
- 6. What investments are needed to support those changes?
- 7. How will the MOE know that they are reaching these goals?

8. If the goals are not met, how will the MOE know what additional changes will be necessary?

Study Components

The study collected data at four levels: (1) classroom and school, (2) parents and community, (3) regional, and (4) national. The study team employed skill assessments, individual and group interviews, observations, and analysis of existing data.

1. **Classroom and School.** The goal at this level is to understand how literacy instruction is now taking place, what teachers and school administrators believe good instruction looks like, and what resources schools have to support instruction. To gather this information, the study interviewed teachers, school leaders, and selected students with the objective of determining the extent to which the five core literacy skills are being directly taught; whether students are helped to practice oral language, reading, and writing skills in their mother tongue and English; whether these instructional activities are taking place in ways that are effective; and whether any practices might be detrimental to learning. The study also assessed teacher and administrator beliefs about what makes good literacy instruction in order to determine whether or not beliefs must change for improved instruction to be successful. To understand the context within which language and literacy instruction in Ethiopia takes place, the study team informally observed several classes when they visited schools.

- 2. **Parents and Community.** The goal at this level is to assess the literacy environment in which students live as well as the beliefs and practices of parents and others in the family or community that might support or hinder learning.
- 3. **Regional.** The goal at this level is to identify and describe institutions, such as staff and experts in regional departments or CTEs, that have or could have a direct impact on schools in their region, and assess what type of support these institutions would need in order for them to play a more effective role in supporting literacy instruction. The study interviewed selected staff from REBs or CTEs and reviewed existing documents, such as curriculum, supervision and assessment guides, and so on, to gather information about how these institutions may play a role in strengthening literacy and language instruction. Specific institutions targeted included but were not limited to regional state and city administration education bureaus and their relevant departments and colleges of teacher education.
- 4. Federal/National. The goal at this level is to identify and describe institutions, such as staff at Directorates and Universities, which have or could have a direct impact on all schools and assess the type of support these institutions would need for them to play a more effective role in supporting literacy instruction. Specific institutions targeted included but were not limited to key departments of the Ministry of Education such as Curriculum and Teacher Development and Addis Ababa University.

In addition, the existing policies that support literacy instruction were reviewed and analyzed to see how they support and impede instructional improvement.

Overview of Data Collection Methods

The data collection methods used by the study team included:

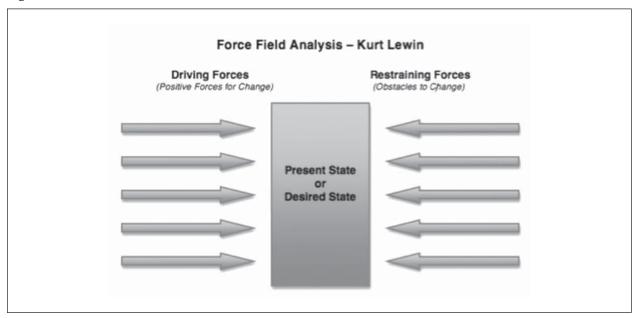
- 1. Briefings with program staff and USAID staff
- 2. Interviews with key stakeholders, including:
 - MOE officials
 - TELL program staff
 - National level staff and experts
 - Regional level staff and experts (including teacher trainers)
 - Teacher training centers
 - School leaders
 - Teachers
 - Parents
 - Students
- 3. Attitudes assessments of school leaders, teachers, and parents about reading and language learning
- 4. Informal observation of schools, classrooms, communities, and teacher training
- 5. Informal conversations with selected students and community leaders/members
- 6. Document review

Rationale for Use of Force Field Analysis Framework

Lewin's (1951) force field framework (see Figure 6) defined an existing situation as the result of supports and barriers, all of which could be changed. The supports, which are moving the situation in a positive direction, could be made stronger, and the barriers, which are constraining movement in a positive direction, could be made weaker. The force field analysis defines the existing supports and barriers and then identifies those that could be changed with the least amount of effort to produce the greatest positive change. Some supports and barriers may be left as they are and some may be addressed to produce an imbalance (stronger supports and weaker barriers) that would lead to positive change. The value of this approach to evaluation is that it produces recommendations that lead to the greatest positive change with the least amount of investment of time and money.

To identify these forces, the team of consultants interviewed TELL program staff, Ministry of Education officials, local and regional officials, teacher training staff, teachers from grades 1–8, parents, and students. The interviews helped the team identify supports and barriers but also helped to identify strategies to build up supports and overcome barriers. In essence, the force field analysis promotes a *drivers of change* perspective that can help the MOE design more effective policies and strategies to implement those policies.

Figure 6



Source: Lewin, 1951

Interviewed	Number
Teachers	5
Parents	26
Students	4
School Directors	3
Classes Observed	5
Cluster Supervisors	2
Regional Education Bureau (REB) Staff	9
Ministry of Education Staff	4
University Staff	2
Teacher Training College Staff	5
Teacher Trainees	5
Teacher Training Classes Observed	3
SIL staff	2
USAID Staff	2
TELL Staff	2

The psychologist Kurt Lewin found that looking only at the partial picture provides a misrepresentation of a problem and that, in order for change to occur, the whole situation must be taken into account. The force field analysis helps to determine the totality of forces acting for or against a given solution to a problem. This analysis makes the determination of an effective solution to a problem much easier. Lewin found that some forces are promoting change (driving forces) and others are trying to maintain the status quo (resisting forces). Both sets of forces should be taken into account when dealing with, managing, or reacting to change; however, in order to bring about change, the driving forces must become stronger than the resisting forces.

The force field analysis provides a useful framework for analyzing the supports and barriers to improving mother tongue literacy and English instruction and identifying strategies for change. The team organized the interview questions around the goal of improving mother tongue literacy and English learning at the primary level. To do this, the study employed a set of common guestions in each interview to collect data on stakeholders' perceptions of forces supporting this goal, forces resisting this goal, and strategies to strengthen the supports and weaken the barriers. These common questions were supplemented with specific questions for each type of stakeholder interviewed. This set of questions were developed without sufficient input from USAID, Ministry of Education, and TELL program staff in Ethiopia, but the consultant who traveled to Ethiopia reviewed them with those staff to be sure the questions produced useful insights.

Common Questions

The common questions used in each stakeholder interview were:

- What is the goal you would set for early grade reading achievement in Ethiopia? Specifically:
 - By what grade should students be able to read a text in their mother tongue out loud?
 - By what grade should students be able to read a text in their mother tongue and understand what it means?
- 2. What would the teaching of mother tongue reading look like in primary schools in rural Ethiopia, if it were working as you wanted it to?
- 3. What do you think is happening now in mother tongue reading? (How close or far are we from the goal you would set for mother tongue reading achievement?)

- 4. What is the goal you would set for **English** language learning?
 - By what grade should students know enough spoken English to engage in instruction in that language?
 - By what grade should students know enough English literacy to read their textbook and do assignments in English?
- 5. What would the teaching of English look like in primary school in rural Ethiopia if it were working as you wanted it to?
- 6. What do you think is happening now in English? (How close or far is it from the goal you would set for English language learning?)

Considering some of the following components of education...

	Teacher training
School	Supervision
	Learning materials
	Instructional practice
	Literacy environment in school
	Literacy environment in community
Community	Media (especially for English)
Community	Community support for schools and staff
Home	Parental and family support
	Literacy environment in the home

- 7. What are the supports that you think now exist in early grade reading instruction that can contribute to reaching the goal?
- 8. What are the barriers that you think now exist in early grade reading instruction that are a hindrance to reaching the goal?

- 9. What are the supports that you think now exist in English language instruction that can contribute to reaching the goal?
- 10. What are the barriers that you think now exist in English language instruction that are a hindrance to reaching the goal?
- 11. What specific strategies would you suggest for increasing the supports and reducing the barriers to better reach the goal for early grade mother tongue reading achievement?
- 12. What specific strategies would you suggest for increasing the supports and reducing the barriers to better reach the goal for English language learning achievement?

Data Analysis

The study team's approach to analyzing the data was to:

- 1. Compare and contrast the goals mentioned by each of the major stakeholders; discuss implications of overlaps and differences.
- 2. Group common goals and analyze supports, barriers, and strategies accordingly.
- 3. Analyze suggested strategies related to goals, supports, and barriers.
- 4. Consider how stakeholders' attitudes relate to goals or serve as supports or barriers.
- 5. Analyze implications of these findings against evidence-based effective instructional practices in reading and language learning from other developing countries.

- 6. Present findings according to the research questions (below).
 - What strengths and gaps exist in the existing practices being used for literacy and language instruction?
 - What strengths in practice can be built upon or expanded, and what changes in practice (based on effective practices document from literacy improvement programs in other developing countries) would help Ethiopian schools to reach these goals?
- 7. Present next steps in the short-, mediumand long term, according to the research questions (below).
 - What are attainable goals for improvement in English and mother tongue literacy instruction within 2 years, within 5 years, and within 10 years?
 - What are recommended strategies for implementing changes to reach goals in a phased approach?
 - What policies would support those changes?
 - What investments are needed to support those changes?
 - How will the MOE know that they are reaching these goals?
 - If the goals are not met, how will the MOE know what additional changes will be necessary?

Findings and Recommendations

The analysis and findings begin with the study question: What are **attainable goals** for improvement in English and mother tongue literacy instruction within 2 years, within 5 years, and within 10 years? Then, the report presents the major findings under five components of the early grade reading system in Ethiopia, which are:

- 1. **Learning materials** (including the literacy environment in schools)
- 2. **Instruction** (classrooms and classroom activities)
- 3. Teacher training, supervision, and monitoring (including beliefs and attitudes)
- 4. **Family and community support** (homework support, the literacy environment in communities, and community libraries)
- 5. National and regional support infrastructure (technical assistance, administration, management, and policy).

Under each of the five components listed above, the report presents findings around the following three questions, which formed the structure of the study's evidence gathering:

- What strengths and barriers were found in the existing practices being used for literacy and language instruction?
- What strengths in practice can be built upon or expanded, and what changes in practice (based on effective practices documented from literacy improvement programs in other developing countries) would help Ethiopian schools to reach these goals?
- What are **recommended strategies for implementing changes** to reach goals in a phased approach?

In each of the sections below, we start by presenting the findings about strengths in existing practices and policies upon which changes can be built. Then, we discuss the findings about barriers in existing practices that need to be addressed in order for improvements in children's reading and English acquisition to occur. We then make recommendations about actions for change, both recommendations that might be useful immediately and those that would take some time to implement. Finally, we present a table summarizing the strengths, barriers, recommendations, and evidence base for those recommendations. (The last section of the report concludes with next step suggestions on how the MOE might move forward.)

Based on the information available during this study, which included a 3-week in-country field visit, readers are cautioned not to generalize the following conclusions too broadly. The field team visited a limited number of schools in just three regions, Amhara, Oromiya, and Addis Ababa. It was necessary to limit the number of regions visited due to the timeframe available for completing this study. The three regions selected were chosen based on factors such as distance and travel time from Addis Ababa, differences in mother tongue script (latin alphabet versus fidels), prevalence of mother tongue usage nationally, and involvement in the mother tongue EGRA. The observations reported here may therefore not be common across the country. However, the low performance of grade 3 students on the mother tongue EGRA suggests that something is wrong. The findings presented here suggest what those problems might be, and the recommendations will present ways to address them. A more comprehensive field observation study might provide an accurate assessment of how widespread these problems are, but even if they are problems in a minority of schools, they should be addressed in those schools. As an initial study, the recommendations are based on limited data, but they do form reasonable hypotheses that could be strengthened or weakened by further study.

Goals

Findings

Interviewees had a hard time articulating goals for English and mother tongue literacy. Parents were clear that they wanted their children to acquire both English and mother tongue literacy. They saw English literacy as necessary for the future educational and economic success of their children and believe that mother tongue literacy is necessary to keep children linked to the culture of their parents. National officials, school leaders, and teachers expressed vague goals of children becoming literate, both in their mother tongue and English, though interviewees held different opinions as to when the teaching of English literacy should begin. For some, the decision of when to begin English literacy appears to be influenced by their belief that English literacy is more important than mother tongue literacy.

The commitment to both mother tongue and English literacy is a support to improved instruction. However, the inability of parents, teachers, and MOE officials to express specific goals that are described in terms of developmental steps is a barrier to their understanding of whether or not children are making progress in primary school. Even if it were true that English literacy is more important for future success than mother tongue literacy, good instructional practice dictates that students should build reading skills in their mother tongue while simultaneously increasing their oral skills in English. Once children have sufficient decoding, fluency, and comprehension skills to be independent readers in their mother tongue and have a sufficiently large vocabulary in English, they could easily begin learning English reading and writing while continuing to build their mother tongue literacy skills. For most Ethiopian children, the quickest path to English literacy begins with acquiring mother tongue literacy while building oral English skills. Thus, the system would benefit from defining specific benchmarks for fluency and comprehension for grades 1 through 3 in each language, including English.

Recommendations

The Ethiopian education system needs clear, objective goals for English and mother tongue literacy for each year of primary school, and it needs to integrate the promotion of those goals into everything it does in primary education. Eventually, for example, a study team arriving in Ethiopia should hear the same set of goals from MOE officials in Addis Ababa and from parents, teachers, and students in the most remote rural village.

The review of literature in the Reading Instruction section (page 11 above) provides a framework for a curriculum for grades 1–4, in that teachers should be building all of these skills and employing instructional activities that have been proven to build those skills. The new K–3 curriculum and materials developed in Ghana might be a good example for Ethiopia to look at since it also employs a mother tongue/ English approach to literacy instruction. The Ghanaian example describes goals that could be reached in Ethiopia after several years of development.

The first step in this effort should be an initial set of goals that are limited but the attainment of which would lead to higher mother tongue EGRA scores. The drawback to this approach would be that teachers might begin teaching only those skills that are outlined in the goals for their grade. This is not a good longterm strategy-teachers should be teaching all the skills each year-but it could make an immediate improvement in instruction that should show up on any future EGRA assessment. In addition, it would give teachers the opportunity to practice teaching to instructional goals, and this might make it easier for them to make the next step to a more comprehensive curriculum, such as the one in Ghana.

The process for setting these goals would be for the MOE to set goals for grade 4. Since the mother tongue EGRA found that only 5% of grade 3 students were reading at 60 wpm and that the range of zero scores were between 10% and 62% by region, a goal of 60 wpm in grade 4 might be a reasonable initial step. The percentage of students who scored zero on the mother tongue EGRA comprehension subtests was a similar range of around 10% to 69%, and so a comprehension goal of 80% might be a reasonable first step. The MOE would then plot a set of goals for each grade that would achieve the grade 4 goals.

As an example, reading goals for grade 1 might include the ability to name all the letters, identify the sound made by each letter, and decode one- and two-syllable words. For grade 2, goals might include the ability to pronounce a list of 100 words drawn from their textbook in 2 minutes (sight word vocabulary), and for grade 3, the ability to read fluently at 30 wpm with 50% comprehension. The skill goals for each grade should provide a foundation for the next set of goals.

Since the dropout rate for grades 1–4 is high, the attainment of these goals will be judged by the progress of a declining student population. The MOE, therefore, should set first-cycle completion rate goals as well. Improving achievement rates and improving completion rates should be the primary purpose of any primary school improvement effort.

This study was too short to provide a detailed set of reading instruction goals for the MOE. The MOE could use the mother tongue EGRA study as an indication of the outcomes of their grade 1–4 literacy learning efforts, even though its sample was only grades 2 and 3. The data paint a picture of schools that need a lot of improvement. The MOE could seek the advice of reading specialists who could work with them to plot out an initial step that could be implemented immediately, an interim step, and a final step that would bring them up to a stage where most students are learning to read sufficiently well by grade 4 that they could continue improving by using that skill to learn history, science, math, and the other subjects taught in higher grades.

With regard to attainable goals for English language acquisition in the primary grades, we assume that those already exist and were used to inform the recent revisions of the new English textbooks. We recommend that when the English EGRA report comes out, it should be used to develop specific attainable goals for grades 1-4 English language. Certainly, the emphasis in the earliest grades should be on developing oral English vocabulary (grade 1 goal), with the idea that by the end of 4 years, students will be able to read and write everything that they can say (grade 4 goal). The English EGRA report can then be used to determine attainable goals for grades 2 and 3 for English language acquisition.

Learning Materials

Findings

The foundational learning materials in any education system are the textbooks, specifically, that each child has access to books. Unfortunately, interviews with REB officials in charge of textbook distribution determined that textbooks are not distributed in such a way that all schools receive at least some textbooks. Rather, textbooks are often delivered to all students in each school until the books run out, and so students in some schools receive no textbooks. This approach to distribution is not an MOE policy, but the way in which books are distributed leads to this outcome. This approach to textbook delivery probably advantages urban students over rural students and might be one cause for higher EGRA scores in urban areas than in rural areas. In addition, at the time of this study, the new TLMP English textbooks for grades 3 and 4 were still in the process of being printed. Therefore, the grade 3 and 4 teachers who received TELL training (using the new books) are still teaching in classrooms where students do not have the revised books. As a result, many of them may have trouble integrating what they learned at the TELL training into their teaching. Though the TELL evaluation found that 85% of teachers were using TELL strategies, the field observations of grade 3 and 4 TELL teachers (only three teachers) found that they were not using TELL methodology. The TELL evaluation took place soon after training, whereas the field observations were done much later. The timely distribution of textbooks, therefore, may be critical to ensuring that what teachers learn in training is put into practice in schools.

Interviewees at every level, from school directors to Woreda (district level administrators) and REB officials, noted that there is a problem with textbook distribution. Frequently, Woredas are unable to accurately predict the numbers of textbooks they need for the coming year, and MOE budgets are often inadequate to meet the demand. The distribution process itself may contribute to the problem: textbooks are printed at the central level and delivered outwards to the REBs; however, at that point, rather than the REBs distributing the books to the Woreda offices (who then distribute them directly to schools) the Woreda offices are required to come to the REB to pick up the textbooks. In addition, schools are required to

come to the Woreda offices to pick up their books. However, Woreda offices generally lack the vehicles and staff needed to pick up textbooks from the REBs, and schools face the same problems when they must pick up the books from their Woreda. This approach to distribution provides an advantage to schools that are close to their REB or Woreda and where transportation services are available. This may be another reason rural schools are disadvantaged.

In terms of the quality of the textbooks, the existing mother tongue and pre-TLMP English textbooks are unattractive: they contain few illustrations, are printed only in black and white, and have binding that is wire saddle-stapled or wire side-stapled, resulting in shorter book life. The paper is of low grade and weight, leading to a show-through of printing from one page to another and low resistance to tearing. On the other hand, the TLMP English textbooks are full of pictures and are printed in color, and parents like the TLMP textbooks and believe that their children are more excited to read them compared to other textbooks.

Teacher guides for the existing mother tongue and pre-TLMP English are either nonexistent or do not contain the required material for all grades. Teachers are expected to depend on the activities and methods described in their syllabus, but very few of the observed teachers do so. Teaching, in fact, largely consists of encouraging students to memorize what is printed on the pages of their textbooks, when they have them.

There are potential strengths to build on in the area of supplementary teaching materials. Teachers observed during the field visit do appear to be making posters, charts, and other teaching and learning materials for the classroom; during the classroom observations conducted by the research team, however, these materials were rarely used in the classroom and remained in a teacher resource room. It is unclear how often these teachers actually incorporate the learning materials into their lessons, though it seems doubtful that those who do use them would not use them when visited by an outside group. Only one teacher was observed using flash cards, but no other teachers observed used teaching or learning materials, other than the textbook and chalkboard. The teacher who used the flash cards also had a very active and studentcentered classroom, and there was a clear difference in the level of participation and engagement of her students versus the other classrooms visited. Very few of the classrooms visited have materials up on the walls, and few have extra reading materials in any language. Generally grade 5-8 teachers rotate to different classrooms but grades 1-4 teachers are with the same group of students all day. Since this is the case in most of the schools that were visited. it is unclear why early grade teachers couldn't keep materials up on the walls or post student work. Based on the classrooms observed, students have little exposure to print materials other than their textbooks and what is written on the chalkboard.

Less than half of Ethiopian primary schools have established school libraries to provide students with access to reading materials other than their textbooks. The 2010/2011 ESAA (EMIS, 2011, p. 38) states that 11,627 out of 28,349 primary schools (about 41%) reported having school libraries, and this is an increase from the 2008/2009 ESAA of 8,993 libraries out of 25,212 primary schools, or 36% (EMIS, 2010, p. 39). School directors reported seeking assistance from NGOs to fill their libraries through book donations. An NGO, CODE-Ethiopia, is working on building libraries in schools and communities as well as providing supplementary reading materials to schools in local languages. CODE-Ethiopia holds storywriting contests for both teachers and students, and the winning entries are published and distributed to libraries (interview with Bahir Dar REB; email correspondence with CODE-Ethiopia, www.codeethiopia.org.et/code/).

Even when schools have libraries, the libraries in the observed schools were often closed (even during their posted hours of operation), had few resources of appropriate grade level, and had few supplementary (and fun) reading materials. School libraries visited typically had only academic texts or extra copies of textbooks. The books did not seem appropriate for the primary level or relevant to the lives of students and were reportedly mainly used by teachers.

Recommendations

Primary school children need textbooks and additional reading material. The MOE could move ahead immediately by ensuring that sufficient textbooks are produced and distributed to schools so that every child has a textbook within the first few days of each school year. If this is not immediately possible, then the practice of providing books to all students in some schools and no students in other schools should be ended, but producing and distributing enough textbooks probably could be accomplished by moving funds from other MOE activities into textbook production and distribution. Delivering books to schools is a logistics problem, but there must be some way to solve it. For example, in a similar situation in the 1990s, Thailand mobilized its army to deliver reading materials to every village, no matter how remote. The MOE has enough experience with textbook production and distribution that it should be able to plan and implement a new approach that would put a textbook in every student's hands. The plan should also include a simple mechanism for checking on whether or not distribution is working efficiently.

The mother tongue EGRA study suggests that a textbook in every child's hand would make a difference in reading achievement, but children need other reading materials as well. It appears that Ethiopia has many school and community libraries, but some of them are not being used. Usually, libraries go unused because there is no one to manage a system of keeping track of who has taken the materials out and whether or not they have replaced them. The NGO, CODE-Ethiopia, is building and maintaining libraries. The MOE could learn from their experience and plan for the establishment of community libraries in, connected to, or near every primary school. The existing school library materials could be put into a community-managed library, and students could be encouraged to write materials that could be placed in the libraries as well. The U.S. NGO, Room to Read (www.roomtoread.org), probably has the most experience with this issue, and they do work in Tanzania. A visit to Tanzania by CODE-Ethiopia and MOE staff might lead to a collaboration or at least some good advice.

The majority of schools visited during this study had pedagogical rooms where teaching materials were stored. This is another resource that should be used. The MOE could work with each region to find ways to move these materials out of storage and into classrooms and then provide training to teachers on how to use them in instruction. Eventually, the MOE should then design a set of simple and inexpensive classroom teaching materials (such as picture story posters with key words) that support the specific learning goals set out for each grade. USAID's Primary School Support Program: A School Fees Pilot project in Malawi, which included the Beginning Literacy Program for Malawi, is a good example of how to do this, and this might present another opportunity for the MOE and Regional staff to learn from a successful project (see AIR, 2009b). Examples of these materials might be letter and syllable charts to support decoding, word flash cards in the mother tongue and English that could build sight-word vocabulary and oral vocabulary, and big books or posters with stories that teachers can read to students, students can read out loud, and teachers can ask guestions about. Save the Children's Literacy Boost is another example of training teachers to create and use supplementary materials, helping students to write and produce homemade books, and helping parents to support their children's reading (Rosenberg, 2012).

Instruction

Findings

Several positive practices are currently underway with regard to instruction. For example, about half of the teachers observed during this research seem to be grouping students in their classrooms so that those with high and low abilities are sitting together, which allows the teacher to teach them as a group and have students help each other. This is facilitated by classrooms that have desks with benches on either side so that students are facing each other, and this could facilitate group work and peer learning, even in crowded classrooms. The majority of teachers observed seem to be encouraging to students and use applause to support them. All of the observed urban schools are also offering free tutoring help after school hours, and teachers have incentives to participate, since it affects their yearly evaluation.

Some regions (Amhara, for example) have created a competition among schools by recognizing those that produce students with the best reading and writing scores. REB officials are also publishing and distributing findings on best practices based on the experience of high-performing schools in their regions (interview with Bureau Head of Amhara REB).

Even with these innovations, the use of instructional time is still a major issue affecting learning in the classroom. In the classes observed, much of the classroom time was spent writing the date, lesson title, and instructions on the board, copying charts (often directly from the students' textbooks) and checking the previous day's homework. The teacher then had very little time left to actually teach the lesson, considering most class periods were only 40-45 minutes long. When instruction did take place, it often took the form of copying lessons from the board or oral repetition after the teacher in drill-type exercises. In addition, teachers employed too much repetition of teaching activities. Even when students seemed to understand the material in a lesson, teachers did not move on to another activity, which resulted in a waste of instructional time. The double shift system

used in many of the observed schools—in which one group of students studies in the morning and another group in the afternoon leads to decreased classroom time as well.⁵ Observed classrooms are overcrowded and have fixed bench-style seating, making it hard for teachers to re-arrange students in groups. Classrooms were very dark, with no electricity and little natural light, and so students had trouble reading their texts and the blackboard.

The amount of time allocated to both reading instruction and to English instruction is too short for students to achieve more robust achievement goals, even if the policies are strictly followed. According to the national primary school curriculum, English is only taught for six 40-minute periods per week, which evidence shows should probably be longer. In actuality, schools that were observed during the research trip implemented these periods differently. Some do one period of English a day with an extra period 1 day a week (or not) and others do 2 days of three periods in a row. The limited time for English instruction, in particular, is substantiated by the TELL observations reports, where grade 1-4 teachers reported that the "short class period" allocated to teaching English was a challenge for using the new TELL techniques.

One of the strengths to build on in the English language teaching system is, obviously, the fact that over 71,000 teachers have been exposed to new teaching techniques through the TELL program, and previous evaluations indicate that some of these techniques are being used more often than others by teachers. Unfortunately, none of the visits to primary schools included observation of TELL-trained grade 1 and 2 teachers, and the grade 3- and 4 English classes observed did not indicate any use of TELL techniques, most probably because the new textbooks had not yet been printed and delivered (as of this report's writing). According to Amhara REB officials, TELL methodologies are good; the books and content were very interesting (especially the pictures and colors): "The TELL contribution is high with materials and trainings." As for direct information from teachers, the field research was only able to observe one TELL-trained grade 4 teacher, due to limited time in the field. She initially reported that she tries to apply the TELL strategies using the old English textbooks, since the new English textbooks that are meant to accompany the TELL strategies have not yet been printed and distributed. When shown a list of strategies and asked which ones she uses, she said she has forgotten what she learned at the training and she doesn't have the book, which is why she doesn't use the strategies. In other words, the field study did not uncover much new information about specific techniques highlighted in the TELL training that might be adapted and used for mother tongue instruction.

One way to extend the teaching of reading and English instruction would be to integrate literacy skills and English language work into the teaching of other subjects, such as math, social studies and history, even in the primary grades. For example, math classes can include reading and writing text through word problems, not just using numerals. While the field study team

⁵ The fact that the national statistics state that only about one fourth of schools runs on a double shift system, yet these were the majority of schools visited during the field trip, is an example of how education statistics may not be complete. This is a common issue across all country educational statistics (e.g., the U.S. high school graduation rates don't clearly represent the true reality of high school drop outs). While it may simply have been happenstance that most of the schools visited were employing double shifts, it may also indicate that MOE might want to institute a sample check on statistics that are important to them, or look at ways to improve their educational management information system.

did not observe classes in other content areas (with the exception of one math class), training teachers how to integrate literacy and English into other content areas could, over the long term, increase children's exposure to practice in these skills. For example, in the Philippines, a schoolwide training program was conducted for all content instructors and the headmaster about how to bring literacy into science, math, and other content classes. This team of teachers and headmaster then worked together, during the training, to make short- and long-term implementation plans (USAID/Education Quality and Access for Learning and Livelihood Skills, 2011).

Grades 1–4 teachers interviewed were also unhappy with the self-contained classroom system. They want to specialize in one subject instead of teaching all subjects to their students. The current policy discussions are working toward a change in this direction, but until there are enough specialized teachers, teachers will continue to teach in the self-contained classrooms.

Based on the teachers observed and interviews with teacher supervisors, directors, and teacher trainers, little to no assessment of student learning occurs on a continuous basis to ensure that students are understanding the content being taught. According to the Education and Training Policy (Federal Democratic Republic Government of Ethiopia, 1994, 3.3.1), teachers are expected to implement continuous assessment and aptitude tests throughout the year to gauge student performance, but teachers often feel their large class size prohibits them from conducting continuous assessments. The MOE Education and Training Policy states that students must have a minimum of 50% achievement in order to be promoted, but the majority of teachers interviewed were not familiar with this policy and believed that they were expected to promote all students, with the result that assessment might seem pointless to teachers. This practice was borne out in schools visited for this research, which appeared to implement a free promotion system where all students in grades 1–3 automatically pass onto the next grade whether they have achieved the required skills or not.

Teachers, school directors, and MOE officials were asked about their beliefs as to how children learn literacy. Two thirds of those interviewed shared the belief that children must begin learning to read by memorizing text, which was reflected in their own personal experiences of learning to read: "Today . . . students can't read like we did when we were in traditional schools using rote memorization" (interview with the director of Tsehay Chora Primary School). Though memorization does play a part in early grade reading instruction (to automate the decoding process and build a sight vocabulary), memorizing text is not good instruction. In addition, there is a push for children to learn English, not to mention beliefs about the uselessness of learning to read in mother tongue: "Using the mother tongue is a notion, but not so much researched. They say it serves as a bridge for later learning, but I don't think there's research." (interview with an English Lecturer at Kotebe CTE). These beliefs are a barrier to improving mother tongue reading instruction.

Recommendations

Instruction is not producing acceptable results (as the mother tongue EGRA results show). In fact, the observations during the study suggest

that, except for call and response practice, very little actual instruction was taking place. The MOE could move ahead immediately to help teachers transition from doing unproductive activities to doing some simple productive activities. This might take the form of a simple lesson plan that has teachers doing the same three or four types of activities each day. For example, the 40-minute class period could be divided into four activities using the existing textbook. The Indian NGO, Pratham, has an approach they describe as: "Say something. Do something. Read something. Write something." Teachers following the Pratham approach have students do all four activities within the class period (Chavan, 2004). Any new instructional approach for mother tongue and English literacy should ensure that students are engaged in learning for the entire class period, that they are active during part of that period, and that they speak, read, and write each day.

In addition, this instruction should be consistent with the evidence-based approach outlined above. Over the course of several years, teachers should be trained to both understand the evidence-based approach to reading and also acquire the skills needed to teach to each of the component skills. This is, unfortunately, a long-term effort. A more immediate impact could be made by giving teachers specific activities that address the component skills and fit into the simple lesson plan framework.

For even a simple lesson plan to work, teachers will need training that, in part, overturns unproductive attitudes about literacy learning. The teachers interviewed had a theory of how children learn to read; they said that students needed to memorize the text. Training should provide them with a simple description of the theory outlined in the Reading Instruction section above. In addition, how the specific goals teachers are trying to reach at each grade fit into that theory should be made explicit, and teachers should be given an opportunity to learn and practice techniques that have proven to develop each skill. Along with training, each teacher needs a teacher guide for the mother tongue and English textbooks their students are using. Even now, many teachers do not have the teacher's guides they need. Providing each teacher with a guide for each textbook could be something done at the same time that every student is being provided with a textbook.

The MOE needs a new approach to mother tongue instruction and needs to implement the TELL English instruction approach. Mother tongue instruction could draw on the classroom activities of the TELL program with which teachers are most comfortable and seem to use more often than others. For example, both the drawing technique (grades 1-2) and the sketch to stretch technique (grades 3-4), which build students' comprehension of what they heard or read, were reported to be commonly adopted in English instruction; therefore, a promising technique for use in mother tongue instruction may be some type of drawing activity where children can sketch and share what they have read about. Similarly, word walls (grades 1-2) and scrambled sentences (grades 3-4) are techniques teachers more frequently used, perhaps because they are simple for teachers to implement and students to understand and are visual reminders of the words. Therefore, activities such as large posters that present words, pictures, and stories that children can hear read to them, then see and do something with (talk about, draw about, and-in the later grades-write about) could be very helpful for

increasing mother tongue reading skills. The grade 1-2 technique rereading is probably used by many TELL-trained teachers because it most closely approximates what they are already doing: reading aloud and having children read after them. However, the evaluation indicated that teachers were not implementing that as ideally as it was presented in the training, so teachers may need follow-up training and inschool peer/supervisor support to correctly use such easily adopted techniques that are familiar. All of these activities are supported by the evidence base on reading, which recommends that students manipulate and be exposed to an environment filled with words while learning to read, and they could quickly and easily be adapted for mother tongue reading instruction. Pre-service and in-service teachers should be introduced, repeatedly, to the most commonly used techniques that can be adapted from TELL to mother tongue reading instruction, particularly if they get students actively involved (as the four techniques above seem to do); however, a 4-day training does not seem to be enough to cement the use of more unfamiliar techniques. In addition, without accompanying textbooks for use by all children, better techniques are less likely to be used, so a priority is getting the new English textbooks and any existing mother tongue reading textbooks into all children's hands every year.

Another, longer-term activity to consider would be revisiting the previous effort made by the MOE with regard to interactive radio instruction, an instructional tool designed to deliver active learning by radio. It has been shown to improve both educational quality and teaching practices in classrooms⁶. Audio lessons guide the teacher and students through activities, games, and exercises that teach carefully organized knowledge and skills. During short pauses built into the radio scripts, teachers and students participate in the radio program, often more than 100 times in a halfhour lesson, reacting verbally and physically to questions and exercises posed by radio characters. Interactive radio instruction can also be delivered to classrooms on CDs or mp3s, with accompanying audio players. Significant efforts have been make in the development of this type of supplementary instruction already. Determining and addressing the challenges preventing its full implementation in various regions should be a long-term goal of the MOE.

Teacher Training, Supervision, and Monitoring

Findings

Positive developments are underway related to preparing and supporting teachers. For example, the MOE recently established a teacher licensure directorate to develop standards for teachers. Although this is still in the development stages, the directorate plans to design standardized entrance exams for entering the CTEs as well as exit exams that teachers would take upon finishing their studies at the CTEs. The MOE has also recently developed a continuous professional development program to upgrade teachers' skills and knowledge, which is in the early stages of implementation. English Language Improvement Programs

⁶ For more information on Interactive Radio Instruction, see "Tuned in to student success: Assessing the impact of interactive radio instruction for the hardest-to-reach," available at: http://idd.edc.org/ sites/idd.edc.org/files/EDC%20Tuned%20in%20to%20Student%20 Success%20Report.pdf.

or Centers (ELIP/ELIC) at the CTEs serve as a potential resource for English language improvement of teachers. Many of the CTEs have rooms dedicated as ELIC centers and resources such as TVs with English language videos as well as English books. Not all ELIPs and ELICs visited had a dedicated person to run activities; interviewees reported that these resource rooms used to have a specific coordinator, that had dropped away, but they had plans to bring back a coordinator who could help teachers find and access teaching resources. Teacher trainees need a greater incentive to attend; because there is currently no examination to measure teacher trainees' English language ability before they move into the teaching force, they currently have little motivation to use the centers.

On the negative side, there is a definite lack of alignment between the work of the Teacher Development Directorate, the Department of Curriculum, and the CTEs. This is evidenced by the fact that the teacher training curriculum is not at all aligned with the classroom curriculum that trainees are expected to follow when they become teachers. However, during interviews with the Curriculum Development and Implementation Director and the Director of Teacher Development at the MOE, both recognized this problem and noted that steps are being taken to address the problem.

Currently, lecturers at the CTEs are given a syllabus and outline for their courses from the MOE and expected to develop their classes based solely on those two documents. In this case, the professor becomes the textbook, which leads to lecture-style (chalk and talk) teaching. Active learning methodologies are rare at the colleges, and teacher trainees are rarely given the chance to observe the kind of teaching they are expected to conduct. Based on observations of classes at CTEs and interviews with CTE professors and deans, teacher trainers at the CTEs do not model the teaching practices they are asking their students (potential teachers) to adopt often enough. However, the TELL program has reportedly had some success getting the Master Trainers from the CTE's to use the TELL strategies in their own classrooms, providing evidence that the CTE training has the potential to change if such CTE staff were involved as Master Trainers in a TELL-like training that focuses on mother tongue reading instructional techniques. Given that the TELL training is a successful model for initial training of in-service teachers in new techniques, it could be a fruitful next step for CTE staff to be involved in training teachers similar techniques for reading instruction.

Much of the pre-service curriculum focuses on improving potential teachers' own reading, writing, and English skills, rather than building skills in the pedagogy of teaching. Teachers come into the program with low skills in all three areas, so the remedial instruction is useful. According to department heads at Kotebe College and Debre Birhan's CTE, teacher trainees generally take only one class on how to teach reading and writing skills in a mother tongue and one class in reading and writing in English, so the program does not seem to prioritize classes that provide rich information about direct instruction. Teacher trainees do not have access to the textbooks they will be using in the classroom until they take part in a practicum. All three CTEs visited stated that student teachers only had access to copies of textbooks in the library. Recently, the MOE reviewed the practicum experience for student

teachers and found that it was lacking (interview with Ato Eshetu Asfaw, and Expert in the Teacher and Educational Leaders Development Directorate [TELDD], MOE). The MOE is in the process of putting out new guidelines for the practicum that will encourage more mentoring and support for student teachers and more time in the classroom.

Thus, teachers do not receive sufficient preparation in how to teach reading and writing skills as an actual set of distinct skills, and teachers' English abilities are poor. The lack of training and lack of skill in English may be reasons most teachers use repetition and rote memorization instead of more interactive and intentional instructional methodologies. Radio instruction in English, which could help overcome teachers' lack of skill by exposing children directly to English language activities, is available but not used consistently, in part because of a lack of funding for batteries or other sources of electricity and poor radio reception (reported by school directors at three different schools).

Interviews with teachers indicate that at least some enter the profession because it is the only job they can find, and they see it as a path to other fields. When asked what they want for their future, three out of five teacher trainees participating in a focus group at Sabeta Teacher Training College responded that they hoped to move into careers other than teaching. Teachers are poorly paid, which leads to low motivation, and there are few incentives for teachers who perform well since the current teacher licensure system is based entirely on the hours of training attended and not on classroom performance. Currently, there is no qualifying exam to become a teacher, although several CTEs are instituting their own exam. When students graduate from the CTE, they automatically become teachers, although the Teacher Development and Teacher Licensure Directorates are working on a policy to change this system. This provides little incentive for teacher trainees to improve their English skills or study hard to master instructional strategies because there is no final exam.

Once teachers are in the classroom, the researcher observed that there is very little follow-up or support. Teachers interviewed reported that school directors and REB staff rarely supervised them; directors are often not trained in how to support teachers through observations. Although the regional supervisory system lacks support (supervisors, especially in rural areas, have no funds for transportation to the schools in their cluster and often have little authority to carry out their duties), the structure is in place and could be improved. In addition, some schools have established teacher peer observation programs.

The MOE has made efforts in the past few years to establish a robust continuous professional development program for in-service training of teachers; however, quite a bit of work is still needed before this new approach is fully implemented. Until this new approach is fully functional throughout the country there is no systematic in-service training system—either at the school level, the Woreda, or the REB level—that could provide all teachers with regular follow-up trainings to help them brush up current skills or learn new instructional strategies. The teacher training conducted by the TELL program does focus on how to teach. The program used a cascade training model, in which a group of master trainers trained a

group of national trainers, who then trained local trainers who trained teachers. This system is reported to have worked well, but there was no follow-up with teachers after they were back in the classroom to support and guide them in using new English language teaching techniques. Establishing school-based (job-embedded) teacher study groups as part of the TELL inservice training could be helpful in serving as a follow-up activity that would help teachers talk about the new reading instruction or Englishlanguage instruction techniques they are using in their classrooms.

Recommendations

Teacher training, supervision, and monitoring should look more like a system. That is, teacher training should focus on how to teach, supervision should focus on improving teaching, and monitoring should focus on whether or not a teacher's students are learning. The MOE could move ahead immediately by linking these three processes to a modest change in instruction, such as the simple productive activities suggested above. The USAID-supported Centers of Excellence for Teacher Training was a program in Latin America which worked to increase the reading teaching skills of teachers working in grade 1–3 classrooms.⁷ It was a 2-year study which included training teachers in evidence-based reading methods and classroom management techniques, using diagnostic tools, applying research to test efficiency of tools, and using ICT, when appropriate for strengthen reading programs. The Centers of Excellence for Teacher Training model introduced techniques such as continuous teacher training throughout

7 For a description of the CETT program and evidence of its impact, see: http://pdf.usaid.gov/pdf_docs/PDACS248.pdf.

the school year and follow-up support in the classroom. The teacher trainers visited Centers of Excellence for Teacher Training classrooms, observed teachers and provided feedback and recommendations. In addition, teacher circles provided teachers with the opportunity to share their experiences.

Pre-service training for grade 1–4 teachers should spend a significant amount of time on how children learn to read, the components of reading, ways to improve performance on the components of reading, and how to support children to read and write. It should also spend significant time on helping trainees improve their reading, writing, and oral skills in English. This would mean a change in the amount of time spent on building these skills during in-service training, which would require reorganizing the entire curriculum. In addition, students should see more demonstrations of teaching and practice more teaching during pre-service training. Immediately, however, the TELL techniques-and adapted, commonly used TELL techniques adapted for mother tongue reading instruction-should be integrated into the reading and English pre-service courses, and the teacher trainees' practicum should be encouraged or required to try out these techniques during their practicum and practice teaching.

In-service should focus on helping teachers understand the components of reading and begin actively teaching each of the components every day in class, even if only for five minutes each. Developing a model of a keyword poster with a simple picture and short story could be used to help teachers understand how to teach phonemes and syllables, vocabulary, fluency, and comprehension from one source, supplemented with activities such as *drawing*, *sketch to stretch*, *PCRW*, *scrambled sentences*, and *word wall*. The University of Massachusetts, working with a local Guatemalan education organization, is currently proposing to develop such posters in an indigenous language and then use mobile phone conference call training and daily text messaging to teachers to remind them of simple techniques for teaching the component skills every day using the posters. If supplemented by teacher study groups in each school, supported by the headmaster to meet once a month, immediate and simple changes in teachers' current classroom instruction can occur through peer modeling.

In addition, many teachers may need help to improve their English language ability. Since in-service training resources are limited, some of this training may have to take place through some form of self-directed training. The USAIDfunded Whole School Reading Program in the Philippines (USAID/Education Quality and Access for Learning and Livelihood Skills, 2011) helps school-based groups of teachers to improve their English after they leave intensive in-service training, and this might provide a model for Ethiopia. In this training, teachers are helped to improve their English literacy, identify ways to continue that learning after training, and form a school-based group to work together on this task.

Supervision of grade 1–4 teachers should focus on observing and improving reading instruction. To do this, supervisors will need a supervision tool that helps them judge teacher performance in teaching the components of both mother tongue and English reading instruction and give teachers advice on how to improve. In the United States, a supervision tool that might be adapted for Ethiopia provides a set of levels of implementation of each teaching practice (Smith, Brady, & Clark-Chiarelli, 2008a, 2008b). This tool provides supervisors with five levels of implementation of three or four instructional practices for each of 17 reading subcomponents (the component skills mentioned above and such things as classroom organization, management, and climate). The supervisor observes instruction and identifies where on the 1–5 scale a teacher's practice is located. Then, the supervisor helps the teacher understand the next level of implementation and returns later to judge whether or not the teacher has progressed. For reading fluency, as an example, the five levels are:

- 1. The teacher does not read aloud for the purpose or modeling fluency. Reading aloud may be for the purpose of reading instructions rather than connected texts.
- 2. The teacher reads aloud to the class, but his or her reading may be characterized by a lack of fluency or expression.
- 3. The teacher models fluent reading, though he or she does not explicitly draw students' attention to specific features of fluency.
- The teacher models fluent reading and draws students' attention to specific features of fluency. However, efforts to engage students in discussion of such features are somewhat less evident.
- 5. The teacher models fluent reading and draws students' attention to specific features of fluency (e.g., pausing at punctuation) through discussion. For example, the teacher initiates a discussion pointing out how the

placement of words on the pages guided his or her phrasing.

This approach to supervision provides teachers with an evaluation that identifies what they are doing right and then gives them a specific way to improve their teaching in a limited and manageable step.

Monitoring should focus on student performance. To do this, monitoring staff will need simple assessment tools that measure progress on the components of reading. Cards with letters of the alphabet, syllables that represent phonemes, whole words drawn from the reading textbooks, and fluency passages are easy to prepare. Monitoring staff need only assess a sample of students in a class to assess whether or not instruction is having an impact. These assessments need not be as rigorously designed or implemented as a national EGRA. The goal should be to develop a rough estimate of teacher performance through assessing the progress of a sample of students in each class toward the attainable goals set for that grade in reading and English.

Family and Community Support

Findings

Parents interviewed during this study indicated that they want their children to be educated so that they can earn a better income and support their family. They feel it is important for their children to learn their local language so they are connected to their own community and maintain their culture. They also want their children to learn English so they can communicate globally and be successful in higher education. Parent focus groups indicated that parents are willing to support their children to achieve these goals, but aren't always sure how they can do that since they themselves are uneducated, and they have many other worries connected to the daily survival of their family. Families are, at present, an underutilized resource.

Parents report checking their children's homework, even though they themselves are not literate, by looking for the "X's" and asking their child what they did wrong, then praising their child when they see a check mark. Parents seem to have high expectations for what their children should be able to do as far as reading and writing but need a few strategies as to how they could best support them at home. To address this situation, communities are looking for ways to support students by forming village committees of the most educated people in their community who are then charged with following up with students in the community to look at their homework and see that they are attending class.

The number of families with access to preprimary education (preschool or kindergarten) is small but growing. More schools are now offering grade zero classes, which are equivalent to preschool or kindergarten. The ESAA (EMIS, 2011) states that only about 382,741 out of 7.31 million children in the appropriate age group (age 4–6) have access to preprimary education in 3418 kindergartens all over the country. However, even these modest numbers represent an increase of 8.3% over the previous year.

Another strength on which to build are the Parent Student Teacher Associations schools have set up to help parents become involved, as well as a Kebela education and training board that includes teachers, the school director, and community members. The Kebela is charged with managing school affairs such as student behavior and resource mobilization. School directors who were interviewed also noted that they try to keep parents informed through school meetings or sending letters home. Parents clearly desire this contact from the schools but also want to hear specifically from schools when their children are doing well. According to parents in two focus groups, the only time the school contacts them is when their child is doing poorly, which leaves a negative impression. Parents often feel blamed when their children do not succeed.

Parents interviewed report having few or no reading materials available in their homes in any language, meaning that the first time students have access to print materials is when they enter kindergarten or grade 1. There is also a belief among at least some parents interviewed that early access to literacy materials will have a negative effect on their children. Parents report that community libraries are rare except in urban centers, and even there, it seems that most students don't use them. Students do report listening to English radio, reading English magazines, and watching football games with English commentary, and this should have a positive impact on their oral English skills.

Recommendations

Families and communities have shown a willingness to help schools succeed. The MOE could move ahead immediately by building on some of the existing parent behaviors. For example, if teachers assigned homework on a regular schedule so that parents knew when their children were supposed to be doing it, parents might be more likely to encourage them to do it on time. If homework papers were always marked in a consistent way, parents, even those who are not literate, could ask their children questions about mistakes and praise them for good work. REBs, using a template designed at the national level, could develop simple, picture-based posters that can be distributed to families of primary school children, depicting the reading support activities they can do at home on a daily basis; for example, looking at the child's homework, asking the child to read aloud letters, words, or sentences for the parents; getting the child to label household objects on small pieces of scratch paper in both mother tongue and English; having older siblings or parents reading aloud to the child; or oral storytelling and family discussion, and so on. Radio and TV ads could make the parents aware of these posters and reinforce the activities.

Because many families might have trouble with these tasks, NGOs, churches or informal associations could make homework support a community activity. These community collaborations could also help to establish and maintain libraries or take on other learning support activities. Again, the USAID-supported Primary School Support Program (PSSP) and its Beginning Literacy Program for Malawi worked with communities to help increase children's exposure to text, simply and inexpensively (AIR, 2009b). For example, the PSSP taught teachers how to work with children to develop their own stories and homemade books, and worked with community members to support literacy fairs, reading clubs, and guest reader/storyteller programs.8

⁸ For examples of family- and community-led activities, see the USAID-funded Primary School Support Program's "Let's Read Malawi!" publication, available at: http://pdf.usaid.gov/pdf_docs/ PDACN036.pdf.

School staff is probably not experienced with organizing parents and communities to play a more active role in children's learning. A teacher or headmaster could take on the role of family and community liaison, an educated member of the community could take on this role, or a local NGO might manage this effort. The person chosen would need training, but this may be a task that each liaison must learn how to do on his or her own, again using a simple template created at the national level but implemented at the REB or Woreda level. The training could provide an introduction of what types of activities family members and communities could do to help children learn. The Publications for Parents section of the U.S. National Institute for Literacy (http://lincs. ed.gov/publications/publications.html) provides research-proven activities for parents and others to do with children before and after they begin school. These liaisons could also help form (or use existing) parent associations that could begin to work more closely with schools to support literacy learning in the home and community. In the long term, the MOE would create a plan for ensuring that each community has a library connected to or located at the school and run jointly by the school and community. There are models for these types of libraries in the United States-such as Pelham, Massachusetts-where the town library also serves as the school library, and time is set aside each week for each class to spend time in the library so that students can browse for and read books. If there is space here also for teachers to make their teaching and learning materials, these can be posted on the walls after use for everyone to see.

National and Regional Support Infrastructure

Findings

A strength of the current system is that there is a national policy framework within which to design activities and initiatives that will improve practices. The MOE has developed the General Education Quality Improvement Program (GEQIP), which comprises the following six pillars (2008):

- 1. Teacher Development
- 2. Curriculum
- 3. Management and Leadership
- 4. School Improvement
- 5. Civics and Ethical Education
- 6. Information Communications Technology

Visits to primary schools indicated that most school directors are in fact carrying out the school improvement plan. The objectives of the plan are to:

- Improve student learning achievement outcomes
- Ensure democratic, participatory, open, and accountable school management and administration
- Facilitate greater freedom in school management and administration through decentralization of responsibilities (Ministry of Education, 2008, p. 41)

The school improvement plan is focused on four school "domains":

- 1. The teaching and learning process,
- 2. School leadership and management,
- 3. Safe and healthy school environment, and
- 4. Relations among parents, community, and school. (Ministry of Education, 2008, p. 41)

The main activities focus on the development of school improvement plans and development of a school self-assessment system, including training in these areas. Almost all school directors spoke of their school improvement plan, and cluster supervisors were also involved in ensuring that schools were carrying out these plans. Directors and cluster supervisors were also very familiar with the GEQIP's six pillars, and it seemed to be on everyone's agenda.

The MOE has established a national policy of creating kindergarten or grade zero classrooms at every school throughout the country. This policy was strongly supported by UNICEF and has been in effect for the last 2 school years. The majority of schools visited on the research trip for this study did have a grade zero classroom with children aged 4 to 6 from the local community. This is a positive policy that supports literacy acquisition since children will be exposed to text at an earlier age.

However, there is a tension between national policies and the goal of decentralization; national/regional technical assistance, administration, and management institutions must work together to support improvement in instruction. National policy mandates 8 full years of instruction in mother tongue; however, this policy is not followed in some regions, which switch to English as the medium of instruction after only 5 years. The decentralized nature of the system allows each region to make this decision based on context. In some cases, there is a belief by teachers, school directors, and even some policy makers that starting English-only instruction earlier will allow students to build stronger English literacy skills, and that this is better for school children. In other regions, where there is a wide diversity of mother tongue languages, the region may switch to English as medium of instruction because choosing one local language over many others has political ramifications. English is a neutral choice in these cases.

However, this tension between national policy and regional decision making means that the mother tongue policy and the institutions that implement that policy do not appear to be working toward the same goal. In addition, because of the de facto policy of "free promotion" of students in grades 1–3 regardless of whether they had attained the appropriate skills to move on to the next level of education, the issue of whether students actually acquire mother tongue literacy before moving to English can be moot.

Recommendations

The study visit to Ethiopia was short, and this did not leave much time to gain an understanding of the national and regional support infrastructure. This infrastructure should be helping the MOE understand whether its policies are being implemented and whether they are having the desired effect. Based on that assessment, the infrastructure should organize school and regional resources to move in the right direction. We understand that some regions are choosing to start English-only instruction sooner than grade 9, and that they have this power through the decentralization policies. We recommend that Regions be required to follow the national mother tongue policy for at least grades 1–4, and preferably for the full 1–8 grades. These first 4 years build a strong foundation of mother tongue literacy that will make the transition to English and Amharic literacy more successful.

The interviews do indicate that stakeholders are fairly well informed about the policies set by the national government under the General Education Quality Improvement Program, and that school principals are working on school improvement plans. However, what appears to be missing is a way for the MOE at the central level to find out how people at the local level are solving problems (such as choosing one specific mother tongue language among many) during implementation of policies. If the MOE had a mechanism for finding out what reasonable adaptations to policy are being made at the local level, they could provide feedback to the regions and/or share this information with other regions when good strategies are adopted. Again, documenting and sharing information about adaptations to policies at the local level is a problem shared by many countries, but we could not find information about whether and how other countries deal successfully with this communication and informationsharing problem.

However, the MOE could move ahead immediately by simply identifying a single MOE staff member for each region whose sole job is to understand the national policies, assess policy implementation, and identify reasons why that implementation may not be going as well as it should. For example, this person would monitor the distribution of textbooks and identify barriers to this policy's full implementation, or identify successful strategies that regions are using to ensure comprehensive distribution, where it occurs. Eventually, the MOE could establish regional institutions with staff who explain and promote national policy and monitor its implementation. The primary job of this staff should be solving problems and identifying problems that may not be solvable without further policy or teacher training changes. If these staff were then to meet periodically across regions, they could build a continuous improvement model for policy implementation and adaptation that serves to share successful strategies across the country on an ongoing basis.

The changes to instruction needed to ensure that all children learn to read by the end of grade 4 will require additional resources. The most immediate source of those resources would be to reassign existing resources to more productive areas, in terms of instructional outcomes. A new study might look at the existing budget and staffing framework and look for ways in which more resources could be put into three areas: (1) teaching and learning materials, (2) teacher training, and (3) supervision focused on improving instruction. This report identified a number of positive activities in Ethiopia supported by the MOE, donor agencies, and NGOs, as well as some activities that have been successful outside Ethiopia. The activities occurring in Ethiopia could be expanded and the agencies that fund successful activities outside Ethiopia might be willing to support them here. These immediate resources could have a positive impact, but greater resources will be needed over the next 10 years.

Summary of Fin	dings and	Recommendations
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Component	Key strengths	Key barriers	Recommendations* (Recommendations that are low investment are marked with one +. High investment are marked with ++.)	Evidence or experience to support
Attainable goals for literacy and English- language learning	EGRA results provide the evidence and motivation for setting specific mother tongue reading goals and English-language achievement goals for first cycle primary grades.	Multitude of languages Existing beliefs about how fast children learn to read Pressure to move quickly to all-English instruction.	Short-term Set interim goals for reading and writing in mother tongue and English, based on the results of EGRA, for grades 1–4.+ Long-term Work with reading specialists to detail how to implement these goals immediately and over the long term.++	K–3 curriculum in Ghana EGRA
Learning materials (including the literacy environment in schools)	The TLMP English textbooks are colorful and full of pictures and parents and students find them interesting. NGOs such as CODE-Ethiopia are working to produce more local language reading materials and to build and stock community libraries. Many schools have teacher resource rooms with lots of teaching and learning aids available.	Textbooks are often bland and uninteresting to students with no color and few images. Textbooks are rarely present in a 1:1 student- to-textbook ratio. The system of printing and distributing textbooks is extremely unwieldy and rarely results in timely deliveries in the appropriate amounts. Teachers often lack teachers' guides to follow. Classrooms visited had little to no materials on the walls and no extra reading materials. Teaching aids were rarely observed being used during instruction. Less than half the primary schools throughout Ethiopia have school libraries. Those that do are lacking in appropriate reading material.	 Short-term Move resources into printing and distributing mother tongue and English literacy textbooks and teacher manuals to ensure that every child has textbooks and every teacher has teacher manuals.+ Design a lesson plan framework, instructional activities, and classroom materials that are linked to the textbooks to achieve these goals. Both the mother tongue and English literacy components of this effort should draw on the TELL model.++ Start encouraging primary teachers to post, and keep posted, learning materials on the walls of all classrooms.+ Long-term Develop a plan to double-check whether every child has a textbook.+ Keep all school libraries open and stocked with supplementary, appropriate reading materials; where possible, establish a shared school/ community library with someone to manage it full-time.++ Whenever mother tongue textbooks are next printed, use the new English textbook as a model for color, pictures, layout.++ 	EGRA USAID's PSSP project in Malawi Save the Children's Literacy Boost (Rosenberg, 2012) National Institute of Child Health and Human Development, 2000 EGRA <i>Room to Read</i> program

Component	Key strengths	Key barriers	Recommendations* (Recommendations that are low investment are marked with one +. High investment are marked with ++.)	Evidence or experience to support
Instruction (classroom activities)	Teachers seem to be grouping students so that those with high and low abilities will be together and can help each other. Many schools are offering free tutoring help after school hours. Teachers are positive and provide encouragement to their students.	Teachers' English abilities are poor, leading them to use repetition and rote memorization instead of more interactive methodologies. Much of the classroom time is spent on classroom management (writing the date and lesson title on the board, copying directions and charts on the board, etc.), checking homework. Teachers do not understand or use continuous assessment. Classrooms are often dark. The amount of time for English and mother tongue instruction is too short. Teachers seem to practice free promotion even though that is not the official policy.	 Short-term Ensure that every teacher has a teacher guide for each textbook.+ Adapt TELL techniques <i>drawing</i> and <i>word walls</i> (grades 1–2) and <i>sketch to stretch</i> and <i>scrambled sentences</i> (grades 3 and 4) for mother tongue instruction.+ Give teachers a lesson plan format with specific and simple activities (such as adapted TELL techniques above) for having children "say something, do something, read something, writing something" in each 40-minute reading or English class period each day.++ Develop a keyword poster model that directs teachers to teach each component skill every day.+ Long-term Increase the time in pre-service courses and in-service training focused on what the components of reading are and what instructional activities match the components.++ Provide grade zero classes in all schools across the country and campaign for all children to attend.+++ Investigate and support interactive radio instruction for both mother tongue and English language instruction.++ 	TELL evaluations Pratham approach in India National Institute of Child Health and Human Development, 2000 Snow et al., 1998 Porter et al., 2000

Component	Key strengths	Key barriers	Recommendations* (Recommendations that are low investment are marked with one +. High investment are marked with ++.)	Evidence or experience to support
Teacher training, supervision, and monitoring (including beliefs and attitudes)	Establishment of the teacher licensure directorate to develop standards for teachers. Development of a continuous professional development program to upgrade teachers' skills and knowledge English Language Improvement Programs or Centers (ELIP/ELIC) at the CTEs serve as a potential resource for English language improvement. Cluster supervisors monitor and observe teachers and provide support when they are able.	Lack of communication between the Teacher Development Directorate and the CTEs Poor English ability of incoming trainees Curriculum for teaching trainees how to teach reading and writing skills includes only one course. No textbooks for the trainees to use or follow Little to no access to student textbooks at CTEs for trainees to get familiar with Lack of time for practicum and proper mentoring by instructors and experienced teachers No qualifying exam to become a teacher Little connection between the CTE curriculum and what teachers will actually be doing in the classroom ELIP (ELIC) centers at the CTEs are not well utilized or coordinated. Little modeling at the CTEs of active learning methodologies and continuous assessment Teachers aren't explicitly taught how to teach reading and writing skills. Teachers receive little support once they are in the classroom. Supervision is limited because of resource constraints for supervisors' travel costs.	Short-term Provide headmasters and supervisors with a simple classroom observation tool that helps them monitor whether teachers are implementing what they learned and encourages teachers to use these new techniques.+ Ensure that teacher trainees and in-service teachers see many demonstrations of the use of TELL- adapted techniques and other activities for mother tongue reading.+ Require teacher trainees to use each activity at least twice during their practicum.+ Long-term Develop a training program that prepares teachers to meet the goals set reading achievement and English language learning. This training should help teachers understand the theory of how children learn to read, the goals their students should achieve, and ways in which they can help children achieve those goals within the resources they now have at their schools.++ Establish school-based teacher study groups for follow-up and ongoing sharing.++ Develop simple letter, syllable, word, and sentence cards in each mother tongue for teachers and monitors to test a sample of students at every supervisory visit.+ Develop in-service/professional development activities to train teachers in content areas (science, math, history, etc.) how to integrate reading and writing instruction into all of their lessons.+	Smith et al., 2008a Smith et al., 2008b Save the Children's Literacy Boost Guskey, 2002 Garet et al., 2001 Elmore, 1996 Langer, 2000 Taylor et al., 2005

Component	Key strengths	Key barriers	Recommendations* (Recommendations that are low investment are marked with one +. High investment are marked with ++.)	Evidence or experience to support
Family and community support (homework support, the literacy environment in communities, and community libraries)	Parents want their children to be educated so they can earn a better income and support their family. Parents want their children to learn their local language so they are connected to their own community and maintain their culture. Parents want their children to learn English so they can communicate globally and continue to higher education. Parents have a fairly high expectation of what their children should be able to do as far as reading and writing. Parent Student Teacher Associations exist in communities. Kebela Education and training board concept supports schools.	Parents report having no literacy materials in the home in any language. Some parents harbor beliefs that early access to literacy materials will have a negative effect on their children. A minority of children have access to preprimary education (preschool or kindergarten). Parents feel that they are unable to assist their children with homework because they themselves are not educated.	 Short-term Design an easy-to-remember homework checking system and in-home reading activity guide for parents, presented in a pictorial poster, and distribute to all grade 1-4 children's households.++ Long-term Develop a simple template for training school/community reading liaison.+ Ask schools to identify the liaison (teacher or headmaster) who works with a community group (Parent Student Teacher Association, Kebela board) to promote community/ school library and making homemade books.++ Develop an out-of-school literacy program for adolescents/school dropouts that will help them build their skills and return to school at an age-appropriate grade level.++ 	Purcell-Gates, 1997 Snow et al., 1998 Girls Access to Education Program in Nepal (Comings & Soricone, 2005)

Component	Key strengths	Key barriers	Recommendations* (Recommendations that are low investment are marked with one +. High investment are marked with ++.)	Evidence or experience to support
National and	General Education	Regions feel pressure	Short-term	EGRA
National and regional support infrastructure (technical assistance, administration, management, and policy)	General Education Quality Improvement Program Grade zero policy	Regions feel pressure or need to move to all- English instruction before grade 9, counteracting the national policy of 8 years of mother tongue instruction.	Fund a multi-case study of schools that are already performing well in reading with existing resources; document and disseminate these findings in easy-to-read format. Fund an assessment of how existing educational resources could be focus on (1) teaching/learning materials, (2) teacher training, and (3) supervision for improved instruction. Build awareness throughout the system of rationale for mother tongue instruction.+ Undertake an informal assessment of improvement at the end of 2 years of implementation. This could take the form of a sample survey employing the EGRA fluency and comprehension subtests with grades 2 and 3, since a baseline already exists.++ Identify a staff member at the national level whose job it is to assess implementation, especially comprehensive textbook distribution.+ Long-term Design and pilot a process for gauging and documenting how challenges to implementing national policies are addressed at the local level.++ Use results from resource assessment	EGRA Baker, 2001 Cummins, 1981 Hovens, 2002
			to approach international public and private funders for money to support specific recommendations.++	

Next Steps

Every country's efforts to improve the quality of reading instruction are, necessarily, a process of continuous improvement, best done as a partnership between the local level (schools and teachers) and the regional or central level (CTEs, MOE). The EGRA mother tongue results indicate that a large percentage of grade 2 and 3 students are not learning to read. However, some children are learning how to read, and some regions-and most likely some schoolsare doing a much better job than others. The MOE, using the concept of positive deviation, should view the already high-performing students and their schools as a source of information on how to improve learning outcomes; sponsoring a multi-case study research project that looks at and documents in depth the activities of successful schools and teachers. These case studies could then be written into easy-to-read stories that could be included in pre-service and in-service teacher training as well as for school-based teacher/ headmaster study groups to read and discuss as part of their school improvement plan work.

The other source of information to disseminate to all stakeholders should be an easy-to-read brochure, poster, or guide representing the basic principles from empirical evidence as to how children learn to read and learn a second language. Almost all of the students who are succeeding in Ethiopia are learning from teachers who are using some form of evidence-based practice (or those children are following that approach on their own or with members of their family); otherwise they would not be performing well. A future study should investigate these high-performing students to see whether their experience or the practices within their schools could be replicated elsewhere.

Unfortunately, most children are attending classes in which they are neither being taught in a way that will build strong reading skills nor spending enough time learning; at the same time, they do not have access to a textbook or supplemental reading materials. The MOE should undertake an effort to improve instruction and the school, community, and home learning environment for all grade 1-4 students. This is a big task, one that will take many years to accomplish. These recommendations are structured around what the MOE could do over the next 2 years, over the next 5 years, and over the next 10 years to address this need. All three sets of activities should begin as soon as possible, but the emphasis and most of the resources would go first into the 2-year plan, then the 5-year plan and finally the 10-year plan. This phasing ensures that something is done as soon as possible to help children learn to read, while taking the time to make systemic change that will put Ethiopia on the path to a grade 1-4 school system that has an effective mother tongue and English literacy program.

Within 2 Years

The MOE's first goal should be to make as much positive change as possible within its present resources. This might look like a small change, but any positive change is going to have a positive impact on children and will pave the way for more improvements in the future. This initial step should:

- Move resources into printing and distributing mother tongue and English literacy textbooks and teacher manual to ensure that every child has textbooks and every teacher has teacher manuals.
- 2. Set interim goals for reading and writing in mother tongue and English, based on the results of the EGRAs, for grades 1–4.
- 3. Design a lesson plan framework, instructional activities, and classroom materials that are linked to the textbooks to achieve these goals. Both the mother tongue and English literacy components of this effort should draw on the TELL model, which introduces concrete activities that teachers can try and out and slowly integrate into their everyday teaching, such as drawing activities, word and sentence manipulation activities, and activities that increase the number of mother tongue and English words seen every day in their classrooms.
- 4. Develop a training program that prepares teachers to meet the goals set out in #2. This training should help teachers understand the theory of how children learn to read, the goals their students should achieve, and ways in which they can help their children achieve those goals within the resources they now have at their schools. This training program should be incorporated into preservice training for grade 1–4 teachers, as well, and should focus on making small but immediate changes in the classroom using

posters or other learning materials that teachers themselves create from a model or template.

- 5. Provide headmasters and supervisors with a simple classroom observation tool that helps them monitor whether teachers are implementing what they learned and encourage teachers to use these new techniques.
- 6. Develop a template for a picture-based poster that can go to parents of primary schoolchildren, depicting the types of activities they can do in the home to encourage their children's reading development.
- 7. Identify schools that are already performing well with similar resources and fund a short multi-case study research project to document their actions and disseminate this information through pre-service and inservice training to teachers and headmasters around the country.
- 8. Undertake an informal assessment of improvement at the end of 2 years of implementation. This could take the form of a sample survey employing the EGRA fluency and comprehension subtests with grades 2 and 3, since baselines already exist.

Other countries with EGRA data similar to Ethiopia's have not taken this initial step; instead, they have moved directly to the design of an entirely new curriculum and materials. In some cases, this choice has delayed any immediate action or classroom change for years, and when the new program is ready, very few resources are left for teacher training. The TELL program has developed a teacher training approach that is focused on teaching skills, and this could be the basis for improving the existing pre-service and in-service teacher training. Particularly in the first four grades, well-trained teachers with handmade materials will be more effective than poorly trained teachers with excellent materials.

Within 5 Years

The MOE's second goal should be to reform the mother tongue literacy program, as has been done with English literacy, and expand support for learning. This second should:

- 1. Employ a linguist, an English as a second language expert, and a reading expert to look at the eight languages of Ethiopia and suggest how each language should be taught. That is, how the component skills should be sequenced over the first four grades of primary school.
- 2. Develop a new set of mother tongue learning objectives for each grade and design materials and teacher training to support the achievement of those objectives.
- 3. Change pre-service and in-service training to be consistent with the new mother tongue program and modeled after the English training program developed under TELL and TLMP.
- 4. Fully institute the cluster-based and CTE linkage professional development programs and consider establishing cross-Woreda teacher sharing and peer-learning program managed by the CTEs or REBs and established either at the REB or Woreda level. This program would allow teachers

to share how they are teaching and ask for help from other teachers and the CTE staff in solving problems.

- 5. Develop supervision and monitoring program that assesses whether or not teachers are following the new approach, helps them improve their performance, and gives teachers feedback on whether their students are learning.
- 6. Develop a program that provides gradeappropriate supplemental reading materials to all students.
- 7. Develop a mother tongue and English literacy program for out-of-school children and youth. Millions of Ethiopian children and youth have learned something in school but still do not have literacy skills sufficient to accomplish every day and work-related tasks. This program could be an adaptation of the grade 1–4 program. This was successfully done in Nepal with the USAIDfunded *Girls Access To Education* (GATE) program (Comings & Soricone, 2005).
- 8. Undertake a full mother tongue and English EGRA to judge progress since the baseline study. The follow-up EGRAs should be standard based as was the TELL English EGRA and should use psychometric methods such as equating to ensure that accurate comparisons can be made with the baseline assessment.
- Document and disseminate case studies of schools and teachers who have successfully increased reading and English language achievement through these efforts.

Within 10 Years

The MOE's third goal should be to deepen and expand the support to reading instruction based on the experience of the first 5 years.

- 1. Review the findings of the second EGRA administrations to identify areas of strength and weakness and to set a new set of goals for grades 1 to 4.
- 2. Based on the review of EGRA findings, set higher goals and redesign the mother tongue and English language programs in order to meet the higher goals.
- 3. Expand mother tongue and literacy instruction to other subject areas so that everything grade 1–4 students do helps them develop their mother tongue and English literacy skills.
- 4. Undertake a third mother tongue and English EGRA to judge progress.

Appendix A: References

Adams, M.J. (1990). *Beginning to read: Thinking and learning about print*. Cambridge, MA: MIT Press.

Adey, P. (1995). The effectiveness of a staff development program: The relationship between the level of use of innovative science curriculum activities and student achievement. Washington, D.C.: Education Resources Information Center (ERIC Document Reproduction Service No. ED383567).

Alidou, H., Boly, A., Brock-Utner, B., Diallo, Y., Heugh, K, & Wolff, H. E. (2006). *Optimizing learning and education in Africa – the language factor: A stock-taking research on mother tongue and bilingual education in Sub-Saharan Africa*. Paris, France: Association for the Development of Education in Africa, GTZ and UIE. Retrieved February 20, 2012, from http://www.adeanet.org/adeaPortal/adea/ downloadcenter/Ouga/B3_1_MTBLE_en.pdf.

American Institutes for Research (2009a). USAID – AIR / Teach English for Life Learning (TELL) Classroom observation activity data analysis report. U.S. Agency for International Development. American Institutes for Research (2009b) Together for change: The story of how PSSP: SFP'S methods and practices improved education in Dowa district. Retrieved February 20, 2012, from http://pdf.usaid.gov/pdf_docs/ PDACN038.pdf.

American Institutes for Research (2010). USAID – AIR / Teach English for Life Learning (TELL) 2010 Classroom observation activity data analysis report. U.S. Agency for International Development.

American Institutes for Research (2011). USAID – AIR / Teach English for Life Learning (TELL) 2011 Classroom observation activity data analysis report. U.S. Agency for International Development.

Ancess, J. (2000). The reciprocal influence of teacher learning, teaching practice, school restructuring, and student learning outcomes. *Teachers College Record*, *102*, 590–619.

Anderson, P. J. (1997). Professional development schools: A balanced wheel makes it better for everyone. *TESOL Journal, 7,* 19–24.

Arab-Moghaddam, N., & Sénéchal, M. (2001). Orthographic and phonological processing skills in reading and spelling in Persian/English bilinguals. *International Journal of Behavioral Development, 25,* 140–147.

Baker, C. (2001). *Foundations of bilingual education and bilingualism* (3rd ed). Clevedon, United Kingdom: Multilingual Matters. Beck, I. L., McKeown, M. G., & Omanson, R. C. (1987). The effects and uses of diverse vocabulary instructional techniques. In M. G., McKeown & M. E. Curtis (Eds.), *The nature of vocabulary acquisition* (pp. 147–163). Hillsdale, NJ: Erlbaum.

Benson, C. (2008). Summary overview: Mother tongue-based education in multi-lingual contexts. *Improving the quality of mother tongue-based literacy and learning: Case studies from Asia, Africa and South America*. Bangkok, Thailand: UNESCO Asia and Pacific Regional Bureau for Education, pp. 1–11.

Bertini, Catherine. (2011). Girls grow: A vital force in rural economies. Chicago, IL: The Chicago Council on Global Affairs. Retrieved January 26, 2012 from http:// www.thechicagocouncil.org/UserFiles/ File/GlobalAgDevelopment/Report/ GirlsGrowReportFinal_v9.pdf.

Borman, G., & Hewes, G. (2002). The long-term effects and cost-effectiveness of Success for All. *Educational Evaluation and Policy Analysis, 24* (4), 243-266.

Calderón, M. (1999). Teachers' learning communities for cooperation in diverse settings. *Theory Into Practice, 38*(2), 94–99.

Calderón, M., & Marsh, D. (1988, Winter). Applying research on effective bilingual instruction in a multi-district inservice teacher training program. NABE Journal, 133–152.

Caravolas, M., & Bruck, M. (1993). The effect of oral and written language input on children's phonological awareness: A cross-linguistic study. *Journal of Experimental Child Psychology*, *55*, 1–30. Carlisle, J. F., & Beeman, M. M. (2000). The effects of language of instruction on the reading and writing achievement of first-grade Hispanic children. *Scientific Studies of Reading*, *4*, 331–353.

Carlisle, J. F., Beeman, M. M., Davis, L. H., & Spharim, G. (1999). Relationship of metalinguistic capabilities and reading achievement for children who are becoming bilingual. *Applied Psycholinguistics, 20,* 459–478.

Chavan, M. (2004). Read India: Pratham Resource Center Working Papers, No. 1. Retrieved on January 27, 2012, from http:// pratham.org/images/resource%20working%20 paper%202.pdf.

Chiappe, P., & Siegel, L. S. (1999). Phonological awareness and reading acquisition in English and Punjabi-speaking Canadian children. *Journal of Educational Psychology, 91,* 20–28.

Clarke, M. (1979). Reading in Spanish and English: Evidence from adult ESL students. *Language Learning, 29,* 121–150.

Comings, J. P., and Soricone, L. (2005). *Teaching adults to read: The world education approach to adult literacy program design*. Boston, MA: World Education. Retrieved February 21, 2012, from http://www.worlded.org/docs/Publications/ teaching_adults_to_read.pdf.

Committee on Science and Mathematics Teacher Preparation. (2000). Educating teachers of science, mathematics, and technology: New practices for the new millennium. Washington, DC: National Academies Press. Cui, Y. (March, 2008). L2 Proficiency and L2 reading: Consolidating the linguistic threshold hypothesis. Language & Literacy Graduate Student Conference Proceedings, Victoria, BC, Canada.

Cummins, J. (1979). Linguistic interdependence and the educational development of bilingual children. *Review of Educational Research, 49,* 222–251.

Cummins, J. (1980). The construct of language proficiency in bilingual education. In J. E. Alatis (Ed.) *Georgetown University round table on languages and linguistics* (pp. 81–103). Washington, DC: Georgetown University Press.

Cummins, J. (1981). The role of primary language development in promoting educational success for language minority students. In California State Department of Education (Ed.) *Schooling and language minority students: A theoretical framework* (pp. 3–49). Los Angeles, CA: Evaluation, Dissemination and Assessment Center, California State University.

Cummins, J. (1994). Knowledge, power, and identity in teaching English as a second language. In F. Genesee (Ed.), *Educating second language children: The whole child, the whole curriculum, the whole community* (pp. 103–25). Cambridge, England: Cambridge University Press.

Daane, M. C., Campbell, J. R., Grigg, W. S., Goodman, M. J., & Oranje, A. (2005). Fourth-grade students reading aloud: NAEP 2002 Special Study of Oral Reading (NCES 2006-469). U.S. Department of Education. Institute of Education Sciences, National Center for Education Statistics. Washington, DC: Government Printing Office. Droop, M., & Verhoeven, L. (1998). Background knowledge, linguistic complexity, and secondlanguage reading comprehension. *Journal of Literacy Research, 30,* 253–271.

Droop, M., & Verhoeven, L. (2003). Language proficiency and reading ability in first- and second-language learners. *Reading Research Quarterly, 38,* 78–103.

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

Education Management Information Systems (EMIS). (September 2011). Education Statistics Annual Abstract 2010/2011. Ministry of Education. Addis Ababa, Ethiopia. Retrieved January 10, 2012 from: www.moe.gov.et.

Education Management Information Systems (EMIS). (March 2010). Education Statistics Annual Abstract 2008/2009. Ministry of Education. Addis Ababa, Ethiopia. Retrieved January 10, 2012 from: www.moe.gov.et.

Elmore, R. F. (1996). Getting to scale with good educational practice. *Harvard Educational Review, 66,* 1–26.

Federal Democratic Republic Government of Ethiopia (1994). Education and Training Policy. Addis Ababa, Ethiopia: St. George Printing Press.

Gardner, J. (1996). *Professional development which provides an icing on the pedagogical cake*. Washington, DC: Education Resources Information Center (ERIC Document Reproduction Service No. ED400589). Garet, M. S., Porter, A. C., Desimone, L., Birman, B. F., & Yoon, K. S. (2001). What makes professional development effective? Results from a national sample of teachers. *American Educational Research Journal, 38*, 915–945.

Gottardo, A. (2002). The relationship between language and reading skills in bilingual Spanish-English speakers. *Topics in Language Disorders*, 22(5), 46–70.

Graesser, A. C., McNamara, D. S., & Louwerse, M. M. (2003). What do readers need to learn in order to process coherence relations in narrative and expository texts? In A. P. Sweet and C. E. Snow (Eds.), *Rethinking Reading Comprehension* (pp. 82–98). New York, NY: Guilford Press.

Grossman, P., Wineburg, S., & Woolworth, S. (2000). *What makes teacher community different from a gathering of teachers?* (Occasional paper). Washington, DC: Center for the Study of Teaching and Policy and Center on English Learning & Achievement.

Guskey, T. R. (1997). Research needs to link professional development and student learning. *Journal of Staff Development, 18*(2), 36–40.

Guskey, T. R. (1999). Moving from means to ends. *Journal of Staff Development, 20*(2), 48.

Guskey, T. R. (2002). Professional development and teacher change. *Teachers and Teaching: theory and practice,* 8(3/4), 381–391.

Hamilton, L. S., Stecher, B. M., & Yuan, K. (2008). *Standards-based reform in the United States: History, research, and future directions*. Los Angeles, CA: RAND Corporation. Hord, S. (1997). *Professional learning communities: Communities of continuous inquiry and improvement*. Austin, TX: Southwest Educational Development Laboratory. Retrieved March 31, 2006, from http://www.sedl.org/pubs/ change34/.

Hovens, M. (2002) Bilingual education in West Africa: Does it work? *International Journal of Bilingual Education and Bilingualism*. 5(5), 249–266.

Huberman, A. M., & Miles, M. B. (1984). Innovation up close: How school improvement works. New York, NY: Plenum Press.

Hutchinson, J. M., Whiteley, H. E., Smith, C. D., & Connors, L. (2003). The developmental progression of comprehension-related skills in children learning EAL. *Journal of Research in Reading*, *26*, 19–32.

Joyce, B. R., & Showers, B. (1995). *Student achievement through staff development: Fundamentals of school renewal* (2nd ed.). White Plains, NY: Longman.

Joyce, B., Wolf, J., & Calhoun, E. (1993). *The self-renewing school*. Alexandria, VA: Association for Supervision and Curriculum Development.

Knapp, M. S. (2003). Professional development as a policy pathway. *Review of Research in Education, 27,* 109–157.

Koda, K., & Reddy, P. (2008). Cross-linguistic transfer in second language reading. *Language Teaching*, *41*, 497–508.

Koskinen, P. S., Baker, T. K., Blum, I. H., Bisson, S. A., Phillips, S. M., & Creamer, T. S. (2000). Book access, shared reading, and audio models: The effects of supporting the literacy learning of linguistically diverse students in school and at home. *Journal of Educational Psychology, 92*, 23–36.

Langer, J. A. (2000). Excellence in English in middle and high school: How teachers' professional lives support student achievement. *American Educational Research Journal, 37,* 397–439.

Lesaux, N. K., & Siegel, L. S. (2003). The development of reading in children who speak English as a second language. *Developmental Psychology, 39,* 1005–1019.

Leseman, P. P. M., & de Jong, P. F. (1998). Home literacy: Opportunity, instruction, cooperation, and social-emotional quality predicting early reading achievement. *Reading Research Quarterly, 33,* 294–318.

Lewin K. (1951). *Field theory in social science,* New York, NY: Harper and Row.

Linan-Thompson, S., & Hickman-Davis, P. (2002). Supplemental reading instruction for students at risk for reading disabilities: Improve reading 30 minutes at a time. *Learning Disabilities Research and Practice, 17,* 242–251.

Linan-Thompson, S., Vaughn, S., Hickman-Davis, P., & Kouzekanani, K. (2003). Effectiveness of supplemental reading instruction for second-grade English-language learners with reading difficulties. *The Elementary School Journal, 103,* 221–238. Lindsey, K. A., Manis, F. R., & Bailey, C. E. (2003). Prediction of first-grade reading in Spanish-speaking English-language learners. *Journal of Educational Psychology*, *95*, 482–494.

Linn, R. L. (2001). *The design and evaluation of educational assessment and accountability systems*. CSE Technical Report 539. Los Angeles, CA: National Center for Research on Evaluation, Standards, and Student Testing.

Linn, R. L., & Herman, J. L. (1997). *Standards-led assessment: Technical and policy issues in measuring school and student progress.* CSE Technical Report 426. Los Angeles, CA: National Center for Research on Evaluation, Standards, and Student Testing.

Mazzarella, J. A. (1980). Synthesis of research on staff development. *Educational Leadership*, *38*, 182–185.

Ministry of Education (2008). General Education Quality Improvement Package (GEQIP) for Ethiopia.

Mumtaz, S., & Humphreys, G. W. (2002). The effect of Urdu vocabulary size on the acquisition of single word reading in English. *Educational Psychology, 22,* 165–190.

Nagy, W. E. (1988). Teaching vocabulary to improve reading comprehension. Urbana, IL: National Council of Teachers of English.

National Reading Panel (2000). *Teaching children to read: An evidence-based assessment of the scientific research literature on reading and its implications for reading instruction*. Washington DC: National Institute of Child Health and Human Development. National Institute for Literacy. (n.d.). *Bridges to practice: The project*. Retrieved February 20, 2006, from: http://www.nifl.gov/nifl/ld/bridges/about/project.html.

National Institute of Child Health and Human Development. (2000). *Report of the National Reading Panel. Teaching children to read: An evidence-based assessment of the scientific research literature on reading and its implications for reading instruction.* Retrieved February 21, 2012, from http://www.nichd.nih. gov/publications/nrp/smallbook.htm.

Neubert, G. A., & Binko, J. B. (1998). Professional development schools: The proof is in the performance. *Educational Leadership*, *55*, 44–46.

Olson, T. A., Butler, J. A., & Olson, N. L. (1991). *Designing meaningful professional development: A planning tool* (Field Test Version). Portland, OR: Northwest Regional Educational Laboratory (ERIC Document Reproduction Service No. ED334671).

Ottoson, J. M. (1997). After the applause: Exploring multiple influences on application following an adult education program. *Adult Education Quarterly, 47*(2), 92–107.

Perfetti, C. A. (1985). *Reading Ability*. New York, NY: Oxford University Press.

Perfetti, C. A. (1988). Verbal efficiency in reading ability. In M. Daneman, G. E. Mackinnon & T. G. Waller (Eds.), *Reading Research: Advances in theory and practice* (pp. 109–143). New York, NY: Academic Press. Porter, A. C., Garet, M. S., Desimone, L.D., Yoon, K. S., & Birman, B. F. (2000). *Does professional development change teaching practice? Results from a three-year study: Executive Summary*. Washington, DC: U.S. Department of Education, Office of the Under Secretary.

Pressley, M. (1998). *Reading instruction that works*. New York, NY: Guilford Publications.

Purcell-Gates, V. (1997). *Other people's words: The cycle of low literacy.* Cambridge, MA: Harvard University Press.

Quiroga, T, Lemos-Britton, Z., Mostafapour, E., Abbott, R. D., & Berninger, V. W. (2002). Phonological awareness and beginning reading in Spanish-speaking ESL first graders: Research into practice. *Journal of School Psychology, 40,* 85–111.

Rosenberg, T. (2012, January 19). A Boost for the World's Poorest Schools. *The New York Times*. Retrieved from http://opinionator.blogs. nytimes.com/.

Rosenholtz, S. J (1987). Educational reform strategies: Will they increase teacher commitment? *American Journal of Education*, *95*, 534–562.

Ruiz, N. T., Rueda, R., Figueroa, R. A., & Boothroyd, M. (1995). Bilingual special education teachers' shifting paradigms: Complex responses to educational reform. *Journal of Learning Disabilities, 28,* 622–635. Schatschneider, C., Francis, D. J., Foorman, B. R., Fletcher, J. M., & Mehta, P. (1999). The dimensionality of phonological awareness: An application of item response theory. *Journal of Educational Psychology*, *91*, 439–449.

Smith, C., Hofer, J., Gillespie, M., Solomon, M. & Rowe, K. (2003). *How Teachers Change: A Study of Professional Development in Adult Education. NCSALL Reports #25.* Boston, MA: National Center for the Study of Adult Learning and Literacy. http://ncsall.net/fileadmin/ resources/research/report25.pdf.

Smith, M. W., Brady, J. P., & Clark-Chiarelli, N. (2008a). *User's guide to the early language & literacy classroom: K–3 tool.* Baltimore, MD: Paul H. Brooks.

Smith, M. W., Brady, J. P., & Clark-Chiarelli, N. (2008b). *Early language & literacy classroom: K*–*3 tool*. Baltimore, MD: Paul H. Brooks.

Smylie, M. A. (1988). The enhancement function of staff development: Organizational and psychological antecedents to individual teacher change. *American Educational Research Journal*, *25*, 1–30.

Snow, C. (2002). Reading for Understanding: Toward an R&D Program in Reading Comprehension. Santa Monica, CA: RAND Corporation. http://www.rand.org/pubs/ monograph_reports/MR1465. Also available in print form.

Snow, C. E., Burns, M. S., & Griffin, P. (1998). *Preventing reading difficulties in young children*. Washington, DC: National Academies Press. Sparks, D. (1994). A paradigm shift in staff development. *Journal of Staff Development, 15*(4), 26–29.

Sparks, D. (1995). Focusing staff development on improving student learning. In G. Cawelti (Ed.), *Handbook of research on improving student achievement* (pp. 163–169). Arlington, VA: Educational Research Service.

Stanovich, K. E. (1986). Matthew effects in reading: Some consequences of individual differences in the acquisition of literacy. *Reading Research Quarterly, 21,* 360–406.

Stanovich, K. E. (2000). Toward an interactivecompensatory model of individual differences in the development of reading fluency. In K. E. Stanovich (Ed.), *Progress in understanding reading* (pp. 21–43). New York, NY: Guilford Press.

Stein, M. K., & D'Amico, L. (2002). Inquiry at the crossroads of policy and learning: A study of a district-wide literacy initiative. *Teachers College Record*, *104*, 1313–1344.

Stein, M. K., & Wang, M. C. (1988). Teacher development and school improvement: The process of teacher change. *Teaching and Teacher Education*, *4*(2), 171–187.

Stein, M. K., Smith, M. S., & Silver, E. (1999). The development of professional developers: Learning to assist teachers in new settings in new ways. *Harvard Educational Review, 69,* 237–269. Stuart, M. (1999). Getting ready for reading: Early phoneme awareness and phonics teaching improves reading and spelling in inner-city second language learners. *British Journal of Educational Psychology*, *69*, 587–605.

Supovitz, J. A., & Turner, H. M. (2000). The effects of professional development on science teaching practices and classroom culture. *Journal of Research in Science Teaching, 37,* 963–980.

Taylor, B. M., Pearson, P. D., Peterson, D. S., Rodriguez, M. C. (2005). The CIERA school change framework: An evidence-based approach to professional development and school reading improvement. *Reading Research Quarterly, 40, 40–68.*

Torgesen, J. K., Rashotte, C. A., & Alexander, A. W. (2001). Principles of fluency instruction in reading: Relationships with established empirical outcomes. In M. Wolf (Ed.), *Dyslexia, fluency and the brain* (pp. 333–355). Timonium, MD: York Press.

USAID/Education Quality and Access for Learning and Livelihood Skills (2011). Whole School Reading Program: EQuALL2's Evolving Focus on Improving Reading Skills of Teachers and Students. *Learning Series*, *1*(5), 1-4. Retrieved February 20, 2012 from http://www. equalls2.org/resources.

Verhoeven, L. T. (1994). Transfer in bilingual development: The linguistic interdependence hypothesis revisited. *Language Learning, 44,* 381–415.

Verhoeven, L. (2000). Components in early second language reading and spelling. *Scientific Studies of Reading, 4,* 313–330. Yoon, K. S., Duncan, T., Lee, S. W.-Y., Scarloss, B., & Shapley, K. L. (2007). *Reviewing the evidence on how teacher professional development affects student achievement* (Issues & Answers Report, REL 2007–No. 033). Washington, DC: U.S. Department of Education, Institute of Education Sciences, National Center for Education Evaluation and Regional Assistance, Regional Educational Laboratory Southwest. Retrieved February 21, 2012 from http://ies.ed.gov/ncee/edlabs/projects/project. asp?ProjectID=70.

Ziegler, J. C., & Goswami, U. (2006). Becoming literate in different languages: Similar problems, different solutions. *Developmental Science*, *9*, 429–436.

Appendix B: Study Protocols and Timeframe

Timeframe (September 2011 – January 2012)

	Task	Time Frame
1.	Develop concept paper outlining research design.	9/19 – 9/29
2.	Revise research design	9/28 – 10/21
3.	Develop research protocols	9/28 – 10/21
4.	Data collection in Ethiopia	10/27 – 11/15
5.	Data analysis and first draft of report	11/12 – 12/16
6.	Revisions and final report	12/16 – 1/27

Role-Specific Data Collection Protocols

Briefings with TELL program staff

- 1. What do you think about the TELL evaluation results?
- 2. Why do you think the TELL evaluation indicated that certain strategies weren't being used as much by teachers?
- 3. What is your plan for spreading TELL strategies within schools (from the TELL-trained teacher to the non-trained teachers)?
- 4. Have you seen evidence that TELL strategies are moving from TELL-trained teachers to others, and if so, how is that happening? If not, why do you think it's not happening?
- 5. Have you seen TELL teachers generalizing the techniques they learned to other topics, content, or skills, or are they just repeating exactly what they learned in training?
- 6. Did the TELL trainees learn a theory about language acquisition and improvement?
- 7. Do you have any reason to believe that TELL strategies are influencing mother tongue reading strategies, or could do so?
- 8. What do you think are the biggest benefits of TELL?
- 9. What do you think is constraining the level of success of TELL?
- 10. What strategies could either improve the benefits or limit the weaknesses of TELL in order to improve its success?

Briefing with USAID staff

- 1. What are you hoping to achieve with this study?
- 2. How do you plan to use it?
- 3. Who is the target audience for this study, beyond USAID?
- 4. What do you feel are the most important questions to answer?
- 5. Do you want to suggest any particular format for recommendations?

Interviews with MOE officials and national level staff and experts

- 1. What policies support reaching your goals for mother tongue reading and English? How?
- 2. What policies (or lack thereof) act as barriers to reaching your mother tongue reading and English goals? How?
- 3. What policies need to be dropped, added, or changed to better support reaching your goals for mother tongue reading and English?

Interviews with regional level staff and experts (including teacher trainers)

- 1. How do you train teachers to teach reading?
- 2. How do you train teachers to teach English?
- 3. What are the regularly scheduled in-service training that teachers are required to go to?
- 4. What specific activities are teachers being trained to do in the school?
- 5. What supports and barriers do you think exist in:
 - Teacher selection and placement? Is a teacher's mother tongue taken into account when assigning that teacher to a certain school or district?
 - Teacher preparation? What language is teacher education conducted in?
 - In-service improvement? In what language s) are in-service trainings conducted?
 - Evaluation and supervision? How are classes observed? Who does it? How can classroom observation fit into improvement of reading and English instruction? How could you make teacher peer observation productive as part of teacher training for improving instruction?

Interviews with school leaders

- 1. What is the role of a school leader in the improvement of instruction?
- 2. What activities do you do to support and improve teacher practice?
- 3. What type of school environment do you think would support reading and English language achievement?
- 4. What is your plan for spreading TELL strategies and use within your school?
- 5. How can classroom observation fit into improvement of reading and English instruction? How could you make teacher peer observation productive as part of teacher training for improving instruction?

Interviews with teachers

- 1. In what ways do the school facilities support or hinder instruction?
- 2. What TELL strategies (have a list of strategies, including strategies that evaluation showed weren't being used) are you using in class, and why? What strategies are you not using, and why?
- 3. What supports or hinders you in using particular TELL strategies?
- 4. What do you remember about learning to read? About learning to speak English?
- 5. How would you rate your ability to teach in the children's mother tongue?

Interviews with parents

- 1. What do you want school to do for your children?
- 2. What benefit do you feel that will have for your child(ren)?
- 3. Which language(s) would you like your children to read in?
- 4. What are the most useful languages for work in this district or region?
- 5. In the last year, how often have you visited the school? Spoken with a teacher?
- 6. By what grade would you like your child to be reading fluently with understanding in mother tongue? In English?
- 7. Do you talk to your children about what goes on in school? How often?
- 8. Do you check your child's schoolwork or homework? How often?
- 9. Are there older children in the family, and do they help younger siblings with school?
- 10. What kind of reading materials do you have in your house?

Attitudes Assessments

Asked of teacher trainers, school leaders, teachers, and parents about reading and language learning

Reading

- 1. Should children learn how to memorize before they can read with understanding?
- 2. Should children learn how to read before they can learn how to write?
- 3. Should children have memorized the alphabet before reading any words?
- 4. Should children have time during class to read silently?
- 5. By what grade do you think students should be reading fluently with understanding in their mother tongue?

English

- 1. Should children's English mistakes always be corrected?
- 2. Should only English be used during English lessons?
- 3. When should children start learning how to read in English?

Informal Observation

Classroom Context Description

Observe a few classes to experience the feel for where these classes fall generally among classes the team has observed around the world. Notes should include what the teacher is doing and what students are doing.

- Teacher strategies (level of participation by students). Rote teaching or actual interaction? How much teacher presenting time? Call and response? Whole class choral reading, vs. individual questioning, vs. pairs? Time spent reading? Time spent writing?
- Language use in the classroom: mother tongue and/or English?
- Are there textbooks?
- Are there materials (posters, flash ards, etc.)?
- Are specific TELL strategies in use or not?

Community Visits

- Interview Kebele/School Education and Training Board members and other community members, as appropriate, about their observations of resources that support reading practice. Is there any parent/teacher association? Any parent/teacher visits or mechanisms like mothers' groups for connecting families and school?
- Look for reading resources: any kind of local library or reading room, a newspaper that gets delivered, or other reading resources in the village.

Teacher Training

- What does it look like? Is training lecture, demonstration, or practice?
- Do trainers have manuals for teaching about how to do reading instruction?
- What are the attitudes and knowledge of the pre-service students?

Informal Conversations

For each classroom observation, ask teacher for the names of a few of the best students for a focus group:

- What reading do you do outside of school?
- Who helps you with reading or schoolwork?
- [pick up whatever book they are working in]: Can you just read this? (To gain a feeling for fluency)
- Do you like reading? Why or why not?

- Do you like learning English? Why or why not?
- Do you ever hear English outside of school? Where, how?
- Describe the activity the teacher does in reading class that you like the most.
- Describe the activity the teacher does in English class that you like the most.

Document Review

- Analyze the EGRA data: What does it say about what's needed for instruction? Draft a short review of current research on best reading instructional practices for the EGRA situation in Ethiopia.
- 2. Short review of best teacher training/ professional development practices.
- 3. Explain what the literature (generic and anything about Ethiopia) says about the impact of mother tongue literacy on English.
- 4. Review instructional materials used in reading classes (textbooks, teacher guides, classroom materials).

Debriefing at End of Field Visit

Small focus group before ending the trip (3–5 people from TELL, MOE, USAID):

- 1. Share some of the major findings.
- 2. Ask for interpretation and feedback.

Appendix C: List of Interviewees and Site Visits

Data Collection Tasks During 3-Week Field Visit

Data collection task	Purpose	How (research protocol)	When
Briefings with TELL program staff Mr. Jeremy Koch, COP Ato Dessalegn Garsamo, Deputy COP	Gain a better understanding of the program as well as any nuances that aren't apparent in the program documents.	Interviews	Oct 31 – Nov 1, 2011
Courtesy meeting with USAID Ms. Allyson Wainer, Chief, Basic Education Services Office Ato Tesfaye Kelemework, Deputy Chief, Basic Education Services Office	Inform them of the study plans and objectives and protocol for the 2-week visit.	Presentation of the study and research plan. Discussion and questions.	Nov 2, 2011
Briefings with MOE staff Ato Girma Alemayehu, Director, Curriculum Development & Implementation Directorate Ato Eshetu Asfaw, Expert, Teachers, Educational Leaders Development Directorate Ato Dessalegn Samuel, Director, Teachers and Leaders Professional Licensing Directorate Ato Yasabu Berkneh, Expert, TLPLD	Gain a better understanding of the MOE's current policies and priority areas with regard to literacy improvement interventions.	Interviews	Nov 2 – Nov 14, 2011
Briefings with Addis Ababa City Government EB staff Ato Tekalign, Gebresellasie, Owner, Curriculum Development Sub- Process Ato Tadele Bekele, Expert, Teacher Development Sub-Process Tsegaye Shinbir, English Curriculum Implementer	Gain a better understanding of the regional policies and priority areas with regard to literacy improvement interventions.	Interviews	Nov 3 – Nov 11, 2011

Data collection task	Purpose	How (research protocol)	When
Briefings with Oromia RSEB staff Obbo Befikadu Hordofa, English Curriculum Implementer – Ato Hailu Amare, Owner, Teaching and Learning Sub-Process	Gain a better understanding of the regional policies and priority areas with regard to literacy improvement interventions.	Interviews	Nov 3 – Nov 11, 2011
Briefings with Amhara RSEB staff Ato Negusu Tilahun, Head of the REB Ato Yoseph Gebre Eqziabher, Expert, Teacher and Leaders Development Core Process Ato Chalachew Gelaw, Amharic Curriculum Implementer Ato Eyasu Aemiro, English Curriculum Implementer	Gain a better understanding of the regional policies and priority areas with regard to literacy improvement interventions.	Interviews	Oct 31 – Nov 1, 2011
Briefings with SIL staff Ato Mesfin Derash, Coordinator, Multilingual Education Department Ms. Ajia Katriina Ahlberg, Coordinator, Literacy and Education Department	Understand more about the linguistic underpinnings of the various Ethiopian languages and how that affects the learning of Amharic or English.	Interviews	Nov 7, 2011
Briefings with University staff Obboo Tolemariam Fufa, Afan Oromo Department Head Ato Dereje Gebre, Amharic Department Head	Hear from language department heads about their perception of the barriers and resources that exist around mother tongue literacy and English language instruction.	Interviews	Nov 3 – Nov 11, 2011
Briefings with CTE staff – Kotebe Teacher Training College W/ro Almaz Debru, English Lecturer and TELL master trainer Ato Seife Hassen English Lecturer Ato Simret Girma, Lecturer and Head of Preschool Department First year Communicative English Skills I Course – Classroom observation Health and Nutrition Course for Pre-K teachers – Classroom observation	Hear from language department heads about their perception of the barriers and resources that exist around training teachers for mother tongue literacy and English language instruction. Also to observe classes and see how future teachers are taught.	Interviews and classroom observations	Nov 3 – Nov 11, 2011

Data collection task	Purpose	How (research protocol)	When
Briefings with CTE staff – Sebeta Teacher Training College (Oromia) Obboo Aanaatee Bali'is Dureessaa, Academic Dean Obboo Nooria Ibrahim, Language Department Head Focus group of second and third year language teacher trainees	Hear from language department heads about their perception of the barriers and resources that exist around training teachers for mother tongue literacy and English language instruction. Also to speak with teacher trainees to find out about their experiences.	Interviews and focus group	Nov 3 – Nov 11, 2011
Briefings with CTE staff – Debre Birhan Teacher Training College Ato Abiy Yimer, Vice Dean and In-service training coordinator Ato Gebeyehu Yismaw, English Instructor Ato Anteneh Wudu, Amharic Department Head	Hear from language department heads about their perception of the barriers and resources that exist around training teachers for mother tongue literacy and English language instruction.	Interviews	Nov 3 – Nov 11, 2011
Primary school visit in Addis Ababa region Ato Fekade Silase Mekuria, Director, Tsehay Chora Primary School Grade 4 English teacher – TELL trained (interview and classroom observation) Grade 4 students (1 male, 1 female) Ato Habtom Haile, Director, Menelik II Primary School Grade 6 English Teacher – Not TELL trained: (interview and classroom observation) Grade 6 students (1 male, 1 female) Parent focus group (13 parents)	Understand what a typical classroom looks like and hear from teachers, directors, students, and parents about their literacy and English learning and teaching experiences.	Interviews, classroom observation, focus group with parents	Nov 3 – Nov 11, 2011
Primary school visit in Oromia region Parent focus group (10 parents with children in grades 1–4) Teacher focus group (3 teachers) Grade 2 classroom observation (Math Class)	Understand what a typical classroom looks like and hear from teachers, directors, and students about their literacy and English learning and teaching experiences.	Interviews, classroom observation, focus groups	Nov 3 – Nov 11, 2011

Data collection task	Purpose	How (research protocol)	When
Primary school visit in Amhara region W/ro Manalebish Mulat Cluster Supervisor School Director – Atse Sertse Dengel Melake Seged Primary School Grade 1 English classroom observation – Non-TELL teacher Grade 4 English classroom observation – TELL teacher	Understand what a typical classroom looks like and hear from teachers, directors, and students about their literacy and English learning and teaching experiences.	Interviews, classroom observation	Nov 3 – Nov 11, 2011
Document review	Documents on TELL, the curriculum, and background documents on literacy and language in Ethiopia. Documents describing best practices in other developing countries seeking to improve literacy in the early grades.	Documents (Education and Training Policy, Strategies, Minimum Learning Competencies, syllabi, course content outlines in the CTEs)	Before field trip, during field trip

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