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Teaching and Learning Materials in Tajikistan: How Do They Align With Reading Research?

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List of Acronyms and Abbreviations

| | |
|---------|--|
| AIR | American Institutes for Research |
| CC | Combined Consonants |
| CV | Consonant Vowel Combination |
| CVC | Consonant Vowel Consonant Combination |
| DIBELS | Dynamic Indicators for Basic Early Literacy Skills |
| EGRA | Early Grade Reading Assessment |
| FGD | Focus Group Discussions |
| GPE | Global Partnership for Education |
| MOES | Ministry of Education and Science |
| QLP | Quality Learning Project |
| QRP | Quality Reading Project |
| KII | Key Informant Interviews |
| SC | Save the Children |
| STEP-Up | Strengthening Educational Performance Up |
| SVR | Simple View of Reading |
| TFG | Teacher Focus Groups |
| TLM | Teaching and Learning Materials |
| USAID | United States Agency for International Development |

1.0 Introduction

1.1 USAID Quality Reading Project background

The main goal of the United States Agency for International Development (USAID) Quality Reading Project (QRP) is to improve reading scores of students in Grades 1–4 in Tajikistan and the Kyrgyz Republic. It is a 4-year project implemented by American Institutes for Research[®] (AIR[®]) and Save the Children (SC). The Project works to improve reading skills among primary-grade students through four main activities: (1) in-service teacher training; (2) increased availability of reading materials; (3) community support; and (4) government support. The USAID Quality Reading Project covers 60% of the primary schools in each country.

1.2 The current study

As part of USAID Quality Reading Project’s efforts to improve early grade reading outcomes, we conducted a study to review Tajikistan’s teaching and learning materials (TLM) for Grades 1–4. In Tajikistan, the Mother Tongue competencies are one of the core components of the TLM as they lay out what a child is expected to learn. These competencies in turn determine various other aspects of TLMs, such as curriculum, teacher training guides, and assessments. Therefore it is important that the competencies are reflective of the cognitive foundations of how children learn in general, and how they learn to read in Tajik in particular.

In addition to the competencies, the textbooks and reading materials in the classroom also constitute an important part of the TLM package. The effectiveness of these materials is contingent upon how closely they are aligned with the Mother Tongue competencies (assuming the Mother Tongue competencies are effective). In-class textbooks and other print materials are also important because print access in the home and community—especially access to decodable and leveled print materials appropriate for children just beginning to crack the code of literacy—may be limited before formal instruction starts. Therefore, the influence of these classroom-based TLM materials on children’s acquiring literacy in Tajikistan may be even more important than in print-rich communities.

As such, the main goal of this study was to explore whether the Tajikistan TLM’s presence and sequence support the acquisition of important reading skills. Specifically, we aimed to: (1) examine the appropriateness of the content of these materials through a literacy and language development lens, and (2) qualitatively determine the perceived usefulness/helpfulness of the materials from the perspective of key education stakeholders.

1.3 Background

A number of government assessments and donor-supported interventions have separately revealed that reading levels in Tajikistan are low. In 2008, for example, the government conducted a World Bank–sponsored National Assessment that showed that literacy and numeracy skills of Grade 4 students were below acceptable levels. More recently in 2010, the USAID/Quality Learning Project (QLP) conducted a baseline study for Grades 4 and 7 students in Tajikistan and Kyrgyzstan that further validated the low reading scores. In partnership with the Tajik government, USAID supported an Early Grade Reading Assessment (EGRA) in 2012 for students in Grades 2, 3, and 4. A sample of more than 4,000

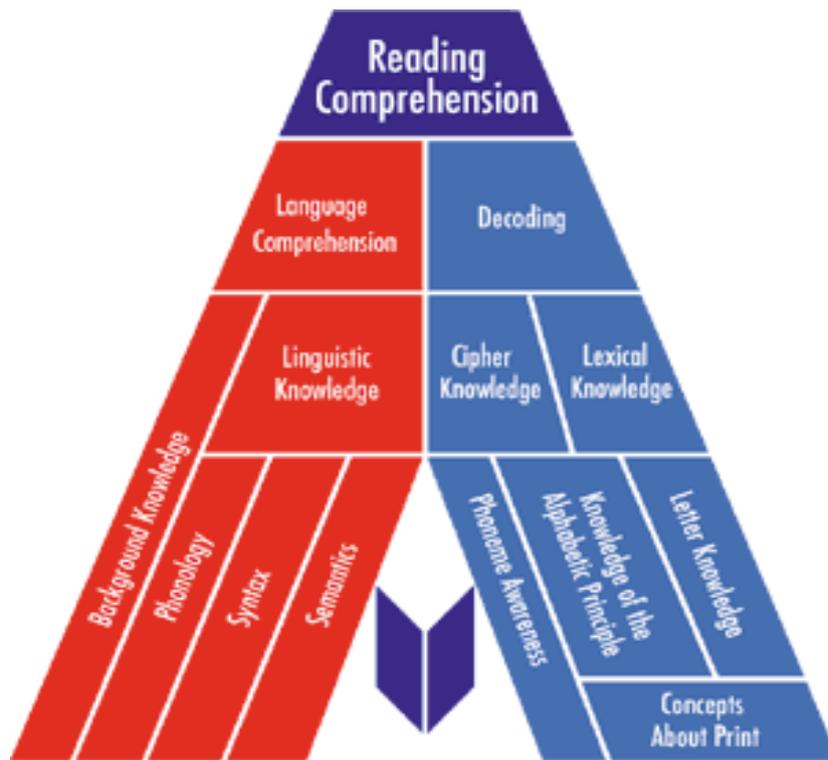
students were tested and a complementary qualitative review of current teaching practices intended to “scratch the surface” of reading pedagogy was undertaken. The tests were administered in Tajik and Russian languages. Although students who took the EGRA test in Tajikistan have some of the early skills necessary for basic literacy, including letter recognition, the students performed below national and international benchmarks in recognizing phonemes, word decoding, and reading fluency. Students were not reaching sufficient fluency levels to transition to reading comprehension, particularly in Grades 3 and 4. When compared to the Dynamic Indicators for Basic Early Literacy Skills (DIBELS) used in the West, a majority of the students in Grade 4 could not read at their grade level. Students also struggled with inferential comprehension questions, indicating low levels of reading comprehension. These difficulties in comprehension also reflected poor fluency, as students were more focused on reading the words and were less able to comprehend what they were reading. It was also evident that almost 41 percent of the students across all grades were not able to read at national standards for reading fluency, the only available benchmark of reading skills. The outcomes in reading comprehension indicated that students performed better on literal questions than inferential questions, indicating difficulties with reading comprehension and critical understanding of text, an indicator of functional literacy.

After the Soviet period, responsibilities for curriculum development were decentralized considerably, and the need for a Tajik-owned curriculum grew. This led to many changes and a constant state of flux of the curriculum until the last several years. The latest revisions of the main syllabus and curriculum for teaching reading and language were in 2013, when the Global Partnership for Education 4 (GPE-4) Mother Tongue competencies were introduced, and these will be reviewed in this report (although further reviews and the competency-based standards approval process is not expected to be finalized until August 2016 by GPE-4 and the Collegium of the Ministry of Education.).

Research on the foundations of learning to read, with a focus on Cyrillic orthographies

Decades of research have made it clear that for **reading comprehension** development, both decoding skills and language comprehension abilities are required; neither are sufficient on their own (Gough & Tunmer, 1986; Hoover & Gough, 1990). This so-called “Simple View of Reading (SVR)” has been validated in several languages (Florit & Cain, 2011; Joshi, Tao, Aaron, & Quiroz, 2012) and in second language (L2) reading acquisition (Lervåg & Aukrust, 2010; Proctor, Carlo, August, & Snow, 2005; Verhoeven, van Leeuwe, & Vermeer, 2011). Within the SVR model, decoding and language comprehension are made up of subconstructs. For example, decoding skills require concepts about print, letter knowledge, lexical knowledge, and cipher (or symbol) knowledge. Language comprehension requires background knowledge, phonology, syntax, and semantics (Catts & Weismer, 2006; Gough, Hoover, & Peterson, 1996; Ouellette & Beers, 2010). Figure 1 depicts this reading acquisition model through the lens of alphabetic languages, and can be applied to Cyrillic as well.

Figure 1. Reading Acquisition Model



Source: Hoover & Gough: <https://www.sedl.org/reading/framework/overview.html>

Learning to read Cyrillic orthographies is different from learning to read English in at least one important way—orthographic transparency—and this has important implications for the way reading should be taught and assessed. Orthographic transparency refers to the degree to which one letter always has the same sound. For example, the letter “c” in English may be /k/ as in /cat/, or /s/ as in /city/, or /ch/ as in chicken, and therefore no one-to-one correspondence exists between sounds and letters in English. This is called a “deep” or “opaque” orthography. Tajik, Russian, and other Cyrillic languages have a transparent orthography, which means that letters almost always make the same sound. For example, об-ob (water), дар-dar (door) китоб- kitob (book). This means that children will need less time to acquire decoding skills and other script-related skills (such as word naming, letter naming, and oral reading fluency); and therefore can spend more time focusing on language comprehension subskills, such as phonology, syntax, and semantics. In this document, we examine whether the competencies and TLM reflect this orthographic principle.

In 2006, a study was conducted that showed that there are five “big” skills that are important for reading development in English-speaking children: phonemic awareness, alphabetic principle, reading fluency, vocabulary, and comprehension (NICHD, 2006). Because the importance of these skills has been validated for English, we will briefly examine the presence and sequencing of these skills in the TLM.

In addition to orthographic considerations, several factors (*see Box 1*) that are important to consider when developing textbooks and other decodable and leveled text materials for instructional uses have been identified (Davidson, 2013; Mesmer, 2008).

Box 1: Factors to Consider When Developing Texts

1. Introducing the scope and sequence of letter sounds in the language in terms of frequency in the natural language.
2. Introducing words and concepts gradually, with short words first and then building to longer words.
3. Starting with words and concepts that are from “easy” or familiar domains, building into more “difficult,” academically oriented domains.
4. Starting with familiar words and concepts and building toward the unfamiliar.
5. Starting with support from large pictures, actions in the classrooms, flashcards, and other scaffolds that focus on language comprehension, and then building into decoding.
6. Starting with shorter sentences and texts, and increasing the length over time.
7. Beginning with short words focused on common consonants and vowels and increasing word length over time.
8. Focusing on monomorphemic, concrete nouns and simple verbs in the early stages and continuing to increase complexity, depth, and nuance of meaning.
9. Starting with wide and sparse spacing and building toward more text on a page.
10. Beginning with very simple punctuation and idiomatic usage and increasing difficulty through the grades.

Grounded by this background and research base on literacy acquisition and text materials, this review seeks to answer the following main questions:

1. What is the main content of the Mother Tongue competencies (i.e., standards) for Grades 1–4, and how do they align with research on reading development?
2. How do the textbooks and other in-class TLM align with the Mother Tongue competencies?
3. What are education stakeholders’ perceptions of the TLM?

2.0 Method

We will answer these questions using the standards and TLM at the time of data collection (November–December 2015) including the syllabus/curriculum, and in-class materials. All questions asked of the stakeholders were in reference to these standards. The scope of the questions was only for Tajik (Mother Tongue) language for Grades 1–4.

To meet the needs of the education stakeholders in Tajikistan, we conducted key informant interviews (KII), a teacher focus group (TFG), and classroom observations, as well as conducted an in-depth review of the Tajik language competencies for Grades 1–4 and TLM by literacy experts, Dr. Pooja Nakamura, Dr. Rebecca Stone,¹ and Tajik-language reading expert, Sherali Saidoshurov (Master of Arts in Education).²

Specifically, we drew on the following sources of information:

¹ Drs. Nakamura and Stone are senior researchers (literacy specialists) at American Institutes for Research, each having more than 7 years each of literacy research and implementation in varying educational settings worldwide.

² Sherali Saidoshurov is the Education Project Manager for USAID Quality Reading Project in Tajikistan with 6 years of experience working in this field.

1. Interview with Mr. Sharifmurod Isrofilniyo, Director of the Education Development Institute of the Academy of Education of Tajikistan. Director Isrofilniyo is responsible for overall management of educational research activities, standards and curriculum development, and revision of assessment systems (both classroom-based and national);
2. Interview with Mr. Shermahmad Yormahmadov, the Director of the Republican Teaching and Methodological Center under the Ministry of Education and Science (MOES) and with Deputy Director Sharofova Bibihavo. They are responsible for the provision of methodological support at the national level through regional and District Education Departments, designing mentoring programs, the design and delivery of methodological seminars, and issuing methodological journals;
3. Teacher focus group: Sixteen teachers participated in the focus group that included an equal number of men and women. All participants taught the Mother Tongue class to children in Grades 1–4, and were responsible for teaching all other subjects for their class as well. The half-day focus group was conducted with all 16 teachers at the same time. Participants were compensated for their travel to the meeting. Mr. Khurshanov Khursehn, a translator, and Mr. Muhiddin Ziyoev, and Mr. Fayziddin Niyozov—coauthors of the Mother Tongue competencies—were also present. Appendix A provides the TFG question protocol.
4. Two classroom observations: For participant confidentiality we are referring to these schools as School A and School B. Grades 1, 2, and 3 were observed in both schools. All these schools were implementing the GPE-4 standards as a pilot at that time, and were part of the USAID Quality Reading Project. Appendix B contains the classroom observation protocol.

In addition to conducting KII and a TGF, we also conducted a desk analysis of the Tajik language competencies for Grades 1–4 (as available in draft form as of December 2015), and an analysis of the textbooks. Local Tajik education experts conducted the textbook analysis using a tool that reviews a sample number of pages from the textbook for various criteria of developmental progression of TLM, such as support from pictures (support for the language comprehension skills of reading development); sentence complexity (logical progression of the syntax component of language comprehension); and phonological complexity (logical progression of the complexity of the sound units). Appendix C contains the textbook review criteria protocol. The next section provides a discussion of the main findings from each of these sources.

3.0 Findings

In this section, the main findings from the KII, TFG, classroom observations, and the desk analysis will be discussed for each question.

What is the main content of the Mother Tongue competencies (i.e., standards) for Grades 1–4, and how do they align with research on reading development?

Desk Analysis

We use the term “Mother Tongue competencies” and “standards” interchangeably, as they are intended in the Mother Tongue competencies document. The standards for “Mother Tongue” as a subject have been through several rounds of revisions in the past decade, including in 2007, 2009, and 2012. Currently, with technical and financial support from the USAID Quality Reading project, GPE-4 is developing new competency-based standards along with in-service teacher trainings for Mother Tongue instruction, which are expected to be complete and approved by August 2016. Here we conduct a desk review the version of these standards that were provided to us in November 2015. According to the MOES (2013), the following features separate the new competency-based standards, from previous versions:

- Each standard maps onto a particular competency.
- Focus is on all language modalities: reading, writing, speaking, and listening.
- The logical sequence in the competencies reflect the Tajik phonological and orthographical rules, as opposed to be being based solely on international standards.
- Teachers have a syllabus, calendar, and illustrative lesson plans that enable flexibility and creativity.

Below we provide a brief grade-by-grade breakdown of the Tajik language (Mother Tongue) competencies, and then review them in light of the research on reading development. Please see Appendix D for an abridged table of the Mother Tongue competencies.

Grade 1

In Grade 1, there are two main periods of teaching the Mother Tongue³: (1) Literacy and Language Skills Development Period; and (2) Teaching of the Mother Tongue Period. In Grade 1, Mother Tongue is taught 10 hours per week, 34 weeks per year, for a total of 340 hours per school year.⁴ A calendar with lesson plans and learning activities and objectives is provided.

1. The Literacy and Language Skills Development Period consists of three subperiods:
 - a. The prealphabetic period (preparation period) (30 hours) that focuses heavily on oral language development, phonological skills development, and the practice of “parts” of letters;
 - b. The alphabetic period (Alifbo period) (120 hours), during which children are taught to read (“decode”) and write (“encode”) the lower and upper case letters of the alphabet; and
 - c. The postalphabetic period (20 hours), which focuses on reading fluency, comprehension of oral stories, and writing short words and sentences.
2. The Teaching Mother Tongue Period that focuses on various “competencies” including reading skills but goes beyond that to broader learning competencies and life skills such as:

³ The Mother Tongue subject (i.e., Tajik language as a subject) is compulsory in the first through fourth grades. Reading and writing are taught within this subject and are not standalone subjects.

⁴ Assuming optimal attendance by teachers and students and time on task.

- a. Specific reading subskills, such as phonemic awareness, letter knowledge and decoding, vocabulary, reading fluency, reading comprehension, writing skills, and spelling;
- b. Generic learning competencies, such as “listen to the teacher and classmates presentations,” “use everyday life experience during lessons and vice versa,” and “do learning tasks on time”; and
- c. Life skills, such as respect, care for the environment, personal hygiene, making requests and apologies.

Grade 2

In Grade 2, Mother Tongue is taught 10 hours a week, 34 weeks per year, for a total of 340 hours per school year (same as year 1). The lessons are broken down into 12 topical units with calendars and lesson plans having learning activities and learning objectives clearly provided.

The main competencies for Grade 2 include:

- Speaking development (which includes both speaking and listening);
- Reading (phonetics, reading words, learning vocabulary (embedded within “reading” skills), fluent reading, and cognitive reading);
- Writing (that includes handwriting, grammar and punctuation, and creating text); and
- Life and educational competencies.

Grade 3

In Grade 3, Mother Tongue classes are taught 8 hours per week for 272 hours of instruction per school year. Lessons are divided by units and lesson plans are provided for teachers. In Grade 3, the objectives for the Mother Tongue class expand from the main reading, writing, speaking, and listening skills to broader “moral–behavioral competencies” (including learning to love the motherland, developing social communications, and taking care of nature).

The following competencies are included under reading and writing skills: decoding, vocabulary, reading fluency, reading comprehension, writing (focusing specifically on handwriting), spelling, grammar, composition, editing, and oral speech development.

Grade 4

Grade 4 Mother Tongue classes are taught 8 hours per week for 272 hours of instruction per school year. The standards and syllabus documents for Grade 4 have detailed lesson plans for teachers mapped by units, which list the learning topics and contents, amount of time per task, learning objectives, as well as type of lesson (a “wrap-up” of a unit, an assessment lesson, or mixed). There is also a description of general pedagogical principles, such as traditional methods (e.g., “methods for gaining knowledge” or “methods for motivation”) and interactive student-centered methods (e.g., students take initiatives and teach each other).

Grade 4 focuses on some life and generic skills as well as the following main reading- and writing-focused competencies (that are similar to Grade 3): decoding, vocabulary, reading

fluency, reading comprehension, spelling, grammar, composition, and oral speech development (speaking and listening). The only difference from Grade 3 is that the focus is no longer on handwriting or editing, with the assumption that these skills are mastered by Grade 4.

Alignment of competencies with current research

The primary objective of this section was to determine how these competencies align with research on reading development. We identified three places having strong alignment with the research, and two places having divergence from research, or at least not enough empirical basis for it.

Aligned with research

In terms of alignment, first, there is a specific “prealphabetic period” in which so-called emergent literacy skills (Teale & Sulzby, 1986) are targeted. The importance of dedicating instructional time to developing prereading skills is even more important in low-income settings where children may not have access to print in the home or community and may enter first grade without the benefit of preschool or kindergarten education. The explicit teaching of oral language skills and phonological skills helps lay the foundation for later literacy acquisition. In addition, the focus on understanding “letter parts” reflects the development of a “concept of print,” or an emergent understanding of how print works, which in turn is a significant predictor of later reading ability (Clay, 1991).

Second, a focus on all modalities of language acquisition, namely reading, writing, listening, and speaking, are incorporated explicitly into the competencies from the first grade. A fundamental and reciprocal relationship exists among oral language (listening and speaking), written language, and reading. Initially reading and writing are dependent on oral language skills so including all modalities when teaching children to read is important. Most models of reading acquisition indeed conceptualize reading itself as consisting of various subskills (Hoover & Gough, 1990; Joshi & Aaron, 2000), and showing the significant relationships between each of these skills (Adams, 1990). In addition, the focus on language comprehension subskills right from the start, in conjunction with phonics and phonological awareness building are likely to be a successful approach to literacy acquisition in transparent orthographies, like Cyrillic in which master of the sound–symbol correspondence rules are likely to not take nearly as long as those in English—an opaque orthography.

Third, the standards promote general pedagogical principles that have been proven effective for reading development, such as child-centered pedagogies, active learning, and methods for gaining knowledge versus methods for motivating. The classroom observations clearly showed that teachers are incorporating some of these methods in their daily teaching.

Lack of alignment with research

One of the areas that could be better aligned with research (or is lacking a strong empirical basis) is the conflation of skills, such as reading fluency and oral speech development. For example, regarding oral speech development, one of the competencies includes “reading prose and poetry aloud with fluency” that is more about “fluency” and less about speech development. Clear operational definitions of all skills in ways that teachers can understand them, implement them, assess, and “remedy” them if needed will help further ground the competencies in a strong research base.

Another issue is the heavy focus on reading as an art form versus reading for meaning. Starting from Grade 2 it becomes increasingly clear that the standards promote beautiful handwriting, and “speed” reading as a means of obtaining and preserving culture with the great emphasis on Tajik poetry as an art form and “beautiful” handwriting. Although nothing is wrong with appreciating reading and writing for their aesthetic features, this becomes a problem when teachers replace reading with comprehension for reading “with speed and beauty”. In fact, one can argue that reading with comprehension might in fact increase the ability of literature to serve as a means of preserving and appreciating culture. In addition, it may be a concern that an overemphasis on “high literature” and poetry may not necessarily be the ideal gateway to get very young children interested in reading, as they tend to be metaphorical and contain vocabulary that may not be at the level of easy understanding (and therefore not be motivation to read more) for an elementary/primary school student.

A final issue is the apparent lack of concrete examples for assessing some of the competencies. Apparently teachers have good examples to follow regarding different teaching practices, but not regarding assessments. For example, it is interesting to note that one of the competencies across all four grades is that students “value the opportunity to read and write.” How teachers can measure what value a student places on reading and writing is unclear.

How do the textbooks and other in-class TLM align with the Mother Tongue competencies?

The Mother Tongue textbooks for Grades 1–4 were developed in 2012 by the MOES. The Grade 1 textbook has 167 pages, and the Grades 2–4 books are substantially longer at 315, 343, and 343 pages, respectively. The core reading components (comprehension, vocabulary, phonics, phonology, fluency, and writing) are included at varying levels of difficulty across all four grades; however, comprehension is treated only at a cursory level. Even in the higher grades, comprehension questions focus mostly on factual questions and rarely reach the inferential level. The focus is less on critical thinking than on being able to describe exactly what happened in the passage or story. This is a clear gap in the textbooks that should be addressed in future iterations and that in the meantime should be addressed through trainings with teachers on how to develop higher level comprehension skills in their students.

As students move through the grades, they should be presented with texts that are increasingly longer and more complex in terms of vocabulary, sentence structure, and text organization. Determining the complexity of a text is not an exact science, nor does a single source of information exist that can accurately summarize the complexity of a text. Therefore, to determine if the Mother Tongue textbooks for Grades 1–4 align with the Tajik standards described above and contain appropriate progressions of difficulty throughout the grades, our Tajik education expert, Mr. Sherali Saidoshurov, conducted a mini textbook analysis of a sample of pages from the beginning and end of the Tajik textbooks for Grades 1–4.

For each book, Mr. Saidoshurov randomly selected about ten pages at the beginning of the book and ten pages in the second half of the book in order to cover material from the beginning and after progressing halfway through. If any selected pages contained only instructions for the teacher, a table of contents, or was otherwise not primarily teaching

material, he selected a new page. He filled out a rubric⁵ (see Appendix C) for each of six different criteria for analyzing textbook complexity. The criteria include: (1) sentence complexity, (2) pictures that supplement words and stories, (3) word domain difficulty, (4) word length, (5) word frequency and (6) phonological complexity (Fry, 2002). Whereas some of the measures determining readability of text are quantitative and can be measured easily through counting (e.g., word length and word frequency), other measures are more qualitative and require some professional judgment (e.g., word domain difficulty and sentence complexity) as they require the reviewer to make judgements about the complexity of ideas or the relevance of vocabulary to children’s context. In the following section, we describe the results of the textbook analysis on each of these six criteria and discuss the progression in level of difficulty (or lack thereof) from Grade 1 to Grade 4.

(1) Sentence complexity: Measures the complexity of the sentence structure by the number of clauses and the complexity of the ideas.

- *Easy:* Indicates that there is only one clause⁶ and not too many ideas within one sentence.
- *Medium:* Indicates that it is a compound sentence with two connected clauses and more complex ideas.
- *Difficult:* Indicates that it is a complex sentence with multiple clauses and many complex ideas held together within one sentence.

Table 1 below shows the analysis of sentence complexity in the Tajik textbooks for Grades 1–4. Approximately 70% of the sentences on the sampled pages from the Grade 1 textbook appear to be simple sentences with only one clause, and 25% of sentences are slightly more complex with two clauses. As the grades increase, so do the complexity of the sentences, and we see a higher percentage of medium- and high-level sentences in the upper grades. The one discrepancy in the progression is that in Grade 2, there are 5% more high-level sentences than in Grade 3, but this may be just a result of the selected pages. Slightly concerning is that 5% of the sampled Grade 1 sentences have high-level structures that have multiple clauses and many complex ideas. In Grade 1, when students are just learning to decode text, the sentences should remain short and focused on a single idea.

Table 1. Sentence complexity analysis: Grades 1–4

| Criteria | Grade 1 | | | Grade 2 | | | Grade 3 | | | Grade 4 | | |
|----------------------------|---------|-----|------|---------|-----|------|---------|-----|------|---------|-----|------|
| | Easy | Med | Diff |
| Sentence Complexity | 70% | 25% | 5% | 65% | 20% | 15% | 65% | 25% | 10% | 60% | 24% | 16% |

(2) Pictures that supplement words and stories: Measures the presence of pictures that align with the words on the page.

- *Always:* Every page has at least one picture that aligns with the text on the page.
- *Sometimes:* Some pages have at least one picture that aligns with the text on the page.
- *Never:* No pages have pictures.

⁵ This rubric was adapted from a tool designed by AIR for the USAID-funded Zambia Strengthening Educational Performance (STEP-Up) program; the adapted version took into account the nuances of Cyrillic.

⁶ A clause is made up of groups of words that contain a subject and verb.

Table 2 below shows the analysis of supplementary pictures in the Tajik textbooks for Grades 1–4. Of the sampled pages for each grade, we see that all pages contained pictures to support the words or stories except for the Grade 3 textbook in which only some of the pages contained supporting pictures.

Table 2. Supplementary picture analysis: Grades 1–4

| Criteria | Grade 1 | | | Grade 2 | | | Grade 3 | | | Grade 4 | | |
|------------------------|---------|------|-------|---------|------|-------|---------|------|-------|---------|------|-------|
| | Always | Some | Never |
| Supplementary Pictures | ✓ | | | ✓ | | | | ✓ | | ✓ | | |

Pictures that directly support and help interpret the written text are key for helping beginning readers to make sense of unknown words and to make guesses about a story plot. Pictures can also increase comprehension by providing elaboration for a text explanation and improve recollection and retention. According to the USAID report titled *Books that Children Can Read: Decodable Books and Book Leveling* (2013), one of the text support factors is “pictures [that] tell the story or explain vocabulary” (p. 5). According to this report, out of the 10 levels of text readability, Levels 1 and 2 rely heavily on pictures to assess the meaning of a text and in Level 3, students use pictures more to “check and confirm” (p. 20). It is not until Level 8 out of 10 where students begin to rely less on “picture cues and more on large chunks of text for comprehension” (p. 21). How well the pictures directly support the text or how many pictures are included on each page is unclear from our analysis, but at least there seems to be a strong presence of pictures in textbooks throughout the grades, with the possible exception of Grade 3, where some pages have with no pictures. Interestingly, Grade 4 texts appear to have more pictures than Grade 3, which leads to the question of whether there is a logical progression in the use of pictures to support the print.

(3) Word domain difficulty: Measures the relative complexity of words in relation to their relevance to the child’s life/context.

- *Easy:* Words are related to simple topics familiar to the students (e.g., home, animals, food, classroom).
- *Medium:* Words are outside the immediate context including basic terms related to academic content (e.g., geography, social science).
- *Difficult:* Words are outside the general context of Tajik life, and a fairly high academic knowledge is required.

Table 3 below shows the analysis of word domain difficulty in the Tajik textbooks for Grades 1–4. Progression in domain difficulty from Grade 1 to Grade 4 seems appropriate as 100% of the Grade 1 words are related to familiar and recognizable topics and the domains slowly increase in difficulty with 30% of the words becoming of medium difficulty in Grade 2, and 35% in Grades 3 and 4. No difficult words were identified in any of the Grades 1–4 texts.

Table 3. Word domain difficulty analysis: Grades 1–4

| Criteria | Grade 1 | | | Grade 2 | | | Grade 3 | | | Grade 4 | | |
|-------------------------------|---------|-----|------|---------|-----|------|---------|-----|------|---------|-----|------|
| | Easy | Med | Diff |
| Word Domain Difficulty | 100% | 0% | 0% | 70% | 30% | 0% | 65% | 35% | 0% | 65% | 35% | 0% |

According to USAID (2013) Levels 1–5 of book readability contain for the most part familiar vocabulary, objects, and actions including pictures that are also recognizable. In the higher levels, new words and concepts are slowly introduced, but new vocabulary is repeated often so that it becomes familiar, and only in Level 10 do we see much more difficult vocabulary with more unknown words per page as students now have the skills to decode and use context to determine the meaning.

(4) Word length: Measures the length of words in terms of the number of letters.

- *Short:* Word includes two to three letters.
- *Medium:* Word includes four to six letters.
- *Long:* Word includes seven or more letters.

Table 4 below shows the analysis of word length in the Tajik textbooks for Grades 1–4. A progression in word length from Grade 1 to Grade 4 is clear with 50% of the words containing only two to three letters in Grade 1 and only 34% in Grade 4. The number of medium words also increases from Grade 1 to Grade 3 starting at 40% of words including four to six letters in Grade 1 to 55% in Grade 3. The number of medium words actually decreases in Grade 4, but they are replaced with difficult, long words consisting of seven or more letters (45%). This progression seems a tad steep as it goes from only 15% long words in Grade 3 to 45% long words in Grade 4. The starting point for this progression in word length, however, may be a bit beyond students’ grade-level ability. For example, 10% of the sampled words in the Grade 1 textbook contained seven or more letters. For a new reader just starting to decode text, this can be extremely challenging and demotivating.

Table 4. Word length analysis: Grades 1–4

| Criteria | Grade 1 | | | Grade 2 | | | Grade 3 | | | Grade 4 | | |
|--------------------|---------|-----|------|---------|-----|------|---------|-----|------|---------|-----|------|
| | Short | Med | Long |
| Word Length | 50% | 40% | 10% | 37% | 51% | 12% | 30% | 55% | 15% | 34% | 21% | 45% |

(5) Word frequency: Measures how often a word is repeated on the page in the first 10 pages in the beginning and middle of the book.

- *Frequent:* Word is used often on the page.
- *Medium:* Word is sometimes used on the page.
- *Rare:* Word is rarely used on the page.

Table 5 below shows the analysis of word frequency in the Tajik textbooks for Grades 1–4. It seems that for Grades 1–4 a great majority of the words are used often on the page. The scores for word frequency are practically identical from Grade 1 to Grade 4 with only a small increase of 3–4% for medium words (used sometimes, but not often) from Grade 1 to Grade 4.

Table 5. Word frequency analysis: Grades 1–4

| Criteria | Grade 1 | | | Grade 2 | | | Grade 3 | | | Grade 4 | | |
|-----------------------|---------|-----|------|---------|-----|------|---------|-----|------|---------|-----|------|
| | Freq | Med | Rare |
| Word Frequency | 80% | 15% | 5% | 75% | 19% | 6% | 75% | 18% | 7% | 76% | 18% | 6% |

(6) Phonological complexity: Measures the number and complexity of consonant and vowel combinations.

- *CV*: Word that is made up of a consonant and a vowel (e.g., to, he, do)
- *CVC*: Word that is made up of a consonant, a vowel, and a consonant (e.g., pen, him, sit, not)
- *CC Blend*: Word that contains two combined consonants (e.g., cr, st, pl, gr)
- *CC Digraph*: Word containing a pair of letters representing a single speech sound (e.g., ph, th, ch, sh)
- *Diphthong*: Word containing a sound made by combining two vowels (e.g., right, eight, fear, round)

Table 6 below shows the analysis of phonological complexity in the Tajik textbooks for Grades 1–4. Any progression in phonological complexity from Grade 1 to Grade 4 does not appear to be strong. The simple consonant/vowel combination (CV) accounts for 50% of the words sampled in the Grade 1 textbooks, decreases to 45% in Grade 2, then increases to 55% in Grade 3 and decreases to 44% in Grade 4. CVC and CC blends follow a similar progression of increasing in frequency and then decreasing without apparent rhyme or reason in successive years. Neither CC digraphs nor diphthongs were present on any of the sampled pages, which was not surprising given that these are not found in Tajik.

Table 6. Phonological complexity analysis: Grades 1–4

| Criteria | Grade 1 | | | | | Grade 2 | | | | |
|--------------------------------|---------|-----|----------|------------|-----------|---------|-----|----------|------------|-----------|
| | CV | CVC | CC blend | CC Digraph | Diphthong | CV | CVC | CC blend | CC Digraph | Diphthong |
| Phonological complexity | 50% | 45% | 5% | 0% | 0% | 45% | 46% | 9% | 0% | 0% |

| Criteria | Grade 3 | | | | | Grade 4 | | | | |
|--------------------------------|---------|-----|----------|------------|-----------|---------|-----|----------|------------|-----------|
| | CV | CVC | CC blend | CC Digraph | Diphthong | CV | CVC | CC blend | CC Digraph | Diphthong |
| Phonological complexity | 55% | 40% | 5% | 0% | 0% | 44% | 46% | 10% | 0% | 0% |

In addition to the textbooks, supplementary teaching materials for only Grade 1 are as follows:

- Alifbo cards: ABC cards for learning letter names and letters sounds
- Word cards: Flash cards with commonly used words
- Picture cards (with sentences in Tajik and Russian)
- Vegetable cards (with words in Tajik, English, and Russian)

Supplementary teaching materials such as those listed above support the teaching and learning of language by making the process visual and more active. The cards can be used for games and other fun and engaging learning activities that support student participation and involvement. They also can be used for assessing student learning. Any learning material, however, is only as good as the teacher who uses it. Teachers must have a repertoire of activities to incorporate the cards into their teaching and learning and know how to use them to teach and support different skills. What kind of instructions or guidance has been provided to teachers on how to use these materials to support the teaching and learning of language is unclear from the materials. Ideally the curriculum itself would indicate specific lessons regarding when and how teachers should incorporate the materials. If not clearly spelled out in the curriculum, teachers often will not use the materials at all because they are trying to follow the prescribed lesson plans.

Although this snapshot analysis of the textbook is quite insightful, due to the considerable length of the textbooks even at the elementary grade level and the need for a Tajik speaker to conduct the review, we were could not conduct a full textbook analysis. Instead, we selected a sample of pages from the beginning and end of the text, which may not fully represent the entire text.

What are education stakeholders' perceptions regarding the TLM?

We triangulated the information from the analyses above with the KII data from the stakeholders, the TFG meeting, and the classroom observations, and this reiterated the following main findings: (1) the stakeholders, in general, were encouraged to see increased incorporation of evidence-based general pedagogical practices (e.g., child-centered, knowledge-application focused, inquiry-based learning); and (2) were satisfied with the new directions for teachers on how to *teach* the new competencies. Two main concerns were consistent themes in the interviews: (1) the need for better understanding of how to *apply* and *assess* the new standards; and (2) a complete mismatch between the new standards and the current text materials.

Key Informant Interview Findings

According to Mr. Sharifmurod Isrofilniyo, Director of the Academy of Education, one of his main priorities is to have detailed information on how teachers and other education stakeholders can and should implement the standards. In line with this, he also stated that currently no alignment exists between the new standards that are being developed and the text materials, which still rely heavily on the Soviet system of education. He also stressed a need for change from simply “acquiring knowledge” to a focus on “applying knowledge” and reiterated a need for more space for “inquiry-based learning.” His final priority is to put more effort into cross-grade as well as cross-subject, within-grade integration of topics and skills.

The Methodological Center is responsible for mapping the new competencies into teacher training and support, and as such, it is the crucial connective tissue in ensuring the successful implementation of the new competencies. Mr. Shermahmad Yormahmadov also voiced positive feedback for the direction of the new competencies, especially the provisions of teaching methods for each competency. Given the challenges of preparing for teaching every day in resource-strapped environments, developing daily lesson plans is a major challenge for teachers—one that the new Mother Tongue competencies and accompanying teacher guides are seeking to overcome. However, Mr. Yormahmadov also highlighted the gap between the competencies and current text materials.

Mr. Yormahmadov also brought up the willingness of parents to support children's learning, and even pay for additional hours of time in the classroom. Given that time on task is a crucial component for learning to read, if there are developmentally appropriate materials and more opportunities to train and incentivize teachers, this is a potentially important resource to harness.

Teacher Focus Group Findings

The TFGs clearly echoed one main sentiment: the lack of alignment between the new competencies and the TLM. This group of teachers had piloted the new competencies, and had positive reviews of them in their discussion. The TFG results are as follows:

Perceived TLM Positives:

- Strong Alifbo (ABC) level
- Promotes children's speaking skills
- Promotes child-centered methodological approaches (although teachers are still not sure about how to actually implement these approaches in the classroom)
- Includes detailed teaching guides
- Customized to various regions (eastern and western)

Perceived TLM Challenges:

- Need specific trainings on the new standards
- Difficulty assessing individual students due to large class sizes
- Fears about what will happen after Grade 4
- Concerns about introduction and transition to Russian literacy acquisition
- Concerns for Uzbek-speaking children
- Need for more resources (especially related to technology) in the classroom
- Need for more time than allocated to cover all of the competencies
- The focus on reading means less time available for other subjects
- The focus on reading and writing is not equal
- Teachers have little opportunity for teacher-to-teacher collaboration/sharing
- Need for more support and materials for out-of-school children

The TFG results clearly demonstrate a general positive feeling toward the new competencies. This positivity was perceived across the four grades and across teacher gender. The only subgroup participants who voiced concerns were those teaching mostly Uzbek-speaking children. The one resounding issue was that these competencies feel like a “stand-alone.” Questions continually arose on how they will be integrated with textbooks, supplementary reading materials, assessments, other subjects, and postelementary education.

Classroom observation results

Dr. Pooja Nakamura conducted both classroom observations. The schools for observation were selected by the writers of the Mother Tongue competencies from the pilot schools and as beneficiaries of the USAID Quality Reading Project In-Service Teacher Training program, and as such, as with any selected observations, there is the possibility of bias—bias of selection of the schools, bias of the researcher collecting information, as well as biased behaviors and practices due to the presence of observers. That said, however, the information gathered from these observations provides a much deeper look into what was happening in the classrooms in terms of use of the new standards and the current textbooks. This window into fidelity of implementation at the pilot stage would not have been possible without classroom observations. Below are brief descriptions of the information gathered through each classroom observation.

School A

School A was quite large with about 2,000 children enrolled. This school has no electricity, which poses a challenge during the very cold winter months as well as challenges regarding lack of light in the classrooms.

The Grade 2 classroom had 30 students with equal numbers of boys and girls. All students had their own copy of the old textbook, and teachers in this school were piloting the new standards. During the observed lesson, the teacher began with a review of phonologically similar words (therefore targeting phonological awareness). Next she reviewed selected poems from the textbook with students and asked general questions about the poem to test for comprehension. It seemed from the translation that these questions did not go from questions meant to elicit facts about the poem to questions that would lead to critical thinking about the poem. Much of the lesson was then focused on the sounds of different words. For example, the teacher would write a word on the board and then ask students to identify similar sounding words.

The Grade 3 classroom had 34 students. The main activities observed during this lesson were the teacher reading out loud and children listening, and choral reading and repetition as a group of 3 students per table. Occasionally the teacher asked a few probing comprehension questions, but the focus was mostly on repeating what was read. Motivation appeared strong on the part of the students and teachers.

The Grade 4 classroom had 36 students. The class began with the recitation of information about the “golden rule” or manners. Then the teacher gave each group of students a different question related to a topic of discussion. Students then had to look at their textbooks (there was a 1:1 ratio of students to textbooks) to find answers and interact with their group members to discuss their response before sharing with the teachers (show-tell-do). In addition, the students were asked to draw a picture about the topic they were discussing and to write two sentences about it as well. After this activity, the class practiced oral reading, and the teacher began by providing an example of fluent reading using a passage from the textbook.

School B

School B was much smaller with only 282 children. This school also did not have any electricity.

The Grade 2 class had 30 students, most of whom had textbooks. On the board was information on grammatical structure, identifying nouns and verbs, as well as topics for the day: recipes, sayings, poems, and news. During the class, the teacher called on many of the students and student–teacher interaction was good. The teacher made an effort to talk to all students and was very clearly positive, smiling, and made eye contact with students. The lesson consisted of three activities: (1) the teacher asked students questions about a story, which they seemed to be answering from memory (perhaps it was a story read the previous day); (2) students read a passage about a recipe aloud from the textbook in groups of 3 each, with seemingly relative ease and fluency; and finally (3) students practiced capital letters by looking at books to identify different capital letters.

The Grade 4 class was working on developing vocabulary. The teacher put up a picture and word in the middle of the board and then asked students to come up with several other words that related to this word. For example, the teacher put up a picture of a winter scene and the word “winter” and then the students brainstormed additional words like “snow,” “Santa,” and “ice.” This is a great example of a vocabulary development strategy (August et al., 2005). Teacher–student interaction in this class was very positive with plenty of active participation by students.

In sum, the classroom observations made it clear that the new competencies and teaching practices were being implemented with fidelity. There was a sufficient number of strong, general pedagogical practices that focused on the child’s interaction with language and print. Instruction included the application of three of the five “Big Skills,” namely phonological awareness (the overarching umbrella for phonemic awareness), vocabulary, and fluency. Naturally, within such a short time frame we did not expect that we would see all five skills. As mentioned above, the presence of observers may have influenced what happened in the classroom, but steps were taken to be as inconspicuous as possible during the observation period.

4.0 Conclusions

In conclusion, major strides have been made to strengthen the Tajikistan Mother Tongue standards that are better aligned with research in key ways, namely:

- A clearer match with reading research, in that there is a general, increasing complexity of reading skills through the grades and explicit mention of the five Big Skills
- A focus on comprehension skills that are in line with the transparent orthography
- Incorporation of significantly more general evidence-based pedagogical practices for how children learn best (in general, not reading specific), such as child-centered pedagogies, and this was apparent in the classroom as well
- Several teaching methods and practices outlined in the Mother Tongue competency guides
- A positive attitude toward the new competencies across all levels of education stakeholders

That said, key areas still exist where the implementation of these standards may fall short in producing the intended results. Primary among these is that a gap exists between the new competencies and all other TLM, including the textbook and assessment protocols (both summative and formative). In an ideal situation, which rarely exists in limited resource contexts, the process begins with the development of high-quality learning standards that inform the development of the curriculum and that guide the development and delivery of instructional materials, which are then used in in-service teacher training programs to train teachers in the use of instructional materials to deliver the curriculum and ensure that students are meeting the standards. Second, issues still remain in the confounding of certain variables (“fluency” and “comprehension” for instance). Simply mentioning them in the competencies does not do justice to the various subconstructs that underlie the acquisition of each of these. And, finally, the use of these competencies is only as good the training and continuous support teachers and educators receive on how to implement them.

Several authors have emphasized that learning standards must be part of an effective system of TLM, or their use will be entirely limited (Finn, Gerber, Achilles, & Boyd-Zaharias, 2001; Hamilton, Stecher, & Yuan, 2008; Linn & Herman, 1997). To effect change in student’s reading outcomes, standards must not only be reflective of learning science (Briars & Resnick, 2000; Ginsburg & Tregunno, 2005; Goertz, Floden, & O’Day 1996), they must also be implemented in the classroom through the curriculum, instruction materials, teacher training and support, and student assessments (Martone & Sireci 2009; McClure, 2005). They must also support instructional planning and program decisions at various levels of education, including school, district, state, province, and national.

The Tajikistan Mother Tongue standards serve as an essential basis upon which the entire teaching and learning system can be built. The content of these standards has improved in many significant ways; however, for optimal effectiveness in improving children’s reading outcomes—both fluency and comprehension outcomes—the standards need further refinement, and need to be well-integrated into teaching support (pre-service and in-service), development of materials that are closely aligned with them, and stakeholder understanding and buy-in on how they can be implemented with ease and efficiency. Finally, if and when the use of these standards is rolled out, they must be rigorously and continually evaluated to bring empirical evidence to their effectiveness in improving children’s outcomes.

References

- Adams, M. A. (1990). *Beginning to read*. Cambridge: MIT Press.
- Briars, D. J., & Resnick, L. B. (2000). *Standards, Assessments... and what Else?: The Essential Elements of Standards-based School Improvement*. Center for the Study of Evaluation, National Center for Research on Evaluation, Standards, and Student Testing, Graduate School of Education & Information Studies, University of California, Los Angeles.
- Catts, H. W., & Weismer, S. E. (2006). Language deficits in poor comprehenders: A case for the simple view of reading. *Journal of Speech, Language, and Hearing Research, 49*(2), 278–293.
- Clay, M. M. (1991). *Becoming literate: The construction of inner control*. Heinemann Educational Books.
- Davidson, M. (2013). *Books that children can read: Decodable books and book leveling*. Washington, D.C.: United States Agency for International Development.
- Finn, J., Gerber, S., Achilles, C., & Boyd-Zaharias, J. (2001). The enduring effects of small classes. *The Teachers College Record, 103*(2), 145–183.
- Florit, E., & Cain, K. (2011). The simple view of reading: Is it valid for different types of alphabetic orthographies? *Educational Psychology Review, 23*(4), 553–576. doi: 10.1007/s10648-011-9175-6
- Fry, E. (2002). Readability versus leveling. *The Reading Teacher, 56*(3), 286–291.
- Ginsburg, L., & Tregunno, D. (2005). New approaches to interprofessional education and collaborative practice: Lessons from the organizational change literature. *Journal of Interprofessional Care, 19*(sup1), 177–187.
- Goertz, M. E., Floden, R. E., & O’Day, J. A. (1996). *The bumpy road to education reform*. Consortium for Policy Research in Education, University of Pennsylvania.
- Gough P. B., Hoover W. A., & Peterson C. (1996). Some observations on the simple view of reading. In C. Cornoldi & J. Oakhill (Eds.), *Reading comprehension difficulties*. Hillsdale, NJ: Erlbaum.
- Gough, P. B., & Tunmer, W. E. (1986). Decoding, reading, and reading ability. *Remedial and Special Education, 7*(1), 6–10.
- Hamilton, L., Stecher, B., & Yuan, K. (2008). *Standards-based reform in the United States: History, research, and future directions* (No. RP-1384). Rand Education Santa Monica, CA.
- Hoover, W. A., & Gough, P. B. (1990). The simple view of reading. *Reading and Writing: An Interdisciplinary Journal, 2*, 127–160.
- Joshi, R. M., & Aaron, P. G. (2000). The component model of reading: Simple view of reading made a little more complex. *Reading Psychology, 21*(2), 85–97.

- Joshi, R. M., Tao, S., Aaron, P. G., & Quiroz, B. (2012). Cognitive component of componential model of reading applied to different orthographies. *Journal of Learning Disabilities, 45*(5), 480–486. doi: 10.1177/0022219411432690
- Lervåg, A., & Aukrust, V. G. (2010). Vocabulary knowledge is a critical determinant of the difference in reading comprehension growth between first and second language learners. *Journal of Child Psychology and Psychiatry, 51*, 612–620. doi:10.1111/j.1469-7610.2009.02185.x
- Linn, R. L., & Herman, J. L. (1997). *A Policymaker's Guide to Standards-Led Assessment*. Los Angeles, CA: National Center for Research on Evaluation, Standards and Student Testing.
- Martone, A., & Sireci, S. G. (2009). Evaluating alignment between curriculum, assessment, and instruction. *Review of Educational Research, 79*(4), 1332–1361.
- McClure, J. W. (2005). Preparing a laboratory-based thesis: Chinese international research students' experiences of supervision. *Teaching in Higher Education, 10*(1), 3–16.
- Mesmer, H. A. (2008). *Tools for matching readers to texts: Research-based practices*. New York: Guilford Press.
- National Institute of Child Health and Human Development (NICHD). (2006). *Teaching children to read: An evidence-based assessment of the scientific research literature on reading and its implications for reading instruction. Report of the National Reading Panel*. Washington, DC: U.S. Department of Health and Human Services.
- Ouellette, G., & Beers, A. (2010). A not so simple view of reading: How oral vocabulary and visual-word recognition complicate the story. *Reading and Writing, 23*, 189–208. [doi:10.1007/s11133-010-9111-1](#)
- Proctor, C. P., Carlo, M., August, D., & Snow, C. (2005). Native Spanish-speaking children reading in English toward a model of comprehension. *Journal of Educational Psychology, 97*, 246–256.
- Teale, W. H., & Sulzby, E. (1986). *Emergent Literacy: Writing and Reading. Writing Research: Multidisciplinary Inquiries into the Nature of Writing Series*. Ablex Publishing Corporation, 355 Chestnut St., Norwood, NJ 07648.
- Verhoeven, L., van Leeuwe, J., & Vermeer, A. (2011). Vocabulary growth and reading development across the elementary school years. *Scientific Studies of Reading, 15*(1), 8–25. doi:10.1080/10888438.2011.536125

Appendix A. Teacher Focus Group Protocol for Textbook Alignment Research

TEACHER INFORMATION:

Region:

District:

School:

Class:

Grade:

School type:

Level of education:

Class composition language:

Class composition gender:

TRAINING: (9–10)

1. What was your preservice reading and language teaching training?
2. Have you received any in-service teaching reading and language training?
3. If so, was the training related to the use of the new competency-based standards?
4. When was your training?
 - a. Have you started using the new standards and materials? Were you using the old standards and methods before that? Until when?
5. At the training did you:
 - a. Receive information on all the competencies that are required to be taught?
 - b. *Probe:* What are the main competencies that you are required to teach in your grade?
 - c. Are you aware of who developed these standards, and on what basis?
 - d. Receive the curriculum, syllabus, and lesson plans for all the classes for the year?
 - e. Receive any particular training on methods and approaches to teach each of the competencies?
 - f. Receive the materials to match the new standards and curriculum?
 - g. Receive example assessments to match the new standards and curriculum?
(*Probe:* What are some of the ways you have used assessments to make decisions in the classroom?)

- h. See the trainer's model pedagogical practices they want teachers to use? (*Probe:* For example, did the trainers lecture the whole time about how to use active learning or did they conduct the training in an active manner [i.e., getting participants into groups, holding interactive learning activities, and so forth]?)
 - i. See any videos or models of teaching?
 - j. Have any time to practice using new skills learned during the training and receive constructive feedback? (*Probe:* For example do you have mini teaching sessions where you present a lesson and get feedback?)
 - k. Get a chance to share experiences and knowledge with your colleagues about the old and new standards and curriculum?
6. Have the new competency-based standards helped you in teaching language? In teaching reading? (*Probe:* Has they caused you to change your teaching? What is one change you made a result of the new standards and curriculum?)
 7. What skills or competencies do you believe are appropriate or inappropriate in relation to what you have been trained to teach?
 8. Did you receive any follow-up (mentoring) after the training?
 9. Have you been presented with or studied the research behind reading?
 10. Have you been presented with data about reading from your region/country? If so, from where/how? What were the results? What are your reactions to the research?
 11. What skills do you feel you need more training or support in specifically about teaching reading? (*Probe:* If you could pick the topic for the next in –service training, what would it be? What kinds of things would you want to learn more about?)

STANDARDS AND CURRICULA: (10–11)

1. Are you aware of the new competency-based standards and curriculum?
2. Can you tell me the main reading competencies for your grade?
3. Are there differences between grades? (*Probes:* What kinds of differences? More competencies? More complexities with a particular competency? Do you think the competencies are well aligned across grades?)
4. Would you change any competencies if you could?
5. Do you feel the competencies are appropriate for teaching Tajik and Russian? (*Probe:* Or will you change the competencies depending on the language?)
6. Are the standards clear? What does it take for a child to achieve a particular standard?
7. Are the standards levels appropriate in your view? Too hard? Too easy? Not measurable?
8. How much do you deviate from the standards and curriculums in teaching in your classroom?
9. Are the teaching materials and textbooks aligned with the standards?
10. Is there a relationship between your standards and international assessment competencies (e.g., the Early Grade Reading Assessment EGRA)?

- a. What are your thoughts on this alignment/misalignment? Appropriate for your kind of language situation?
- 11. Do you focus on words-per-minute reading fluency in your standards/assessments?
- 12. How many words per minute should children be reading in your grade?
- 13. Do you focus on comprehension competencies in your grades? What kinds of comprehension skills?
- 14. What is the best thing about the new standards?
- 15. What would you change in the standards if you could change something?

ASSESSMENTS (11–11:30)

- 1. Is there a national standardized reading assessment?
 - a. If yes, do you get the results? When do you get the results? Are you instructed to use the results? (*Probe: By whom?*) How do you use the results?
- 2. Have you seen the results of any international reading assessment (e.g., EGRA)?
- 3. What is your opinion about these tests and their results? Would you do anything differently to get an idea of students' reading levels?
- 4. Have you received training to use testing to align with the new competency-based standards?
- 5. How do you determine if students have mastered a particular skill before moving on to new content?
- 6. Do you currently use classroom-based assessment for reading? How?
 - a. If yes, who develops the assessments?
 - b. How are they developed? (*Probe: Are they directly from textbooks?*)
 - c. What reading standards, criteria, and norms do you use for assessment?
 - d. What do you assess?
 - e. How often do you assess students?
 - f. Do you provide feedback to individual students?
 - g. Do you provide assessment results to parents?
 - h. Do the results change how you teach? How?
 - i. Do you have summative (end-of-school-year) reading assessments?
 - i. If yes, are they based on reading standards?
 - j. What are your greatest challenges in assessing students' reading ability?

READING MATERIALS 11:30–12:30)

- 1. What is your opinion on the textbooks? (*Probe: If you could change anything what would you change? Are the teaching materials well aligned with the new competency based standards?*)
- 2. What if any aspects of the book you would change or improve?
- 3. Do all children usually get a copy of the book?

4. Do you use nontextbook reading materials during your lesson?
 - a. If yes, what materials?
 - b. Where are those materials kept?
 - c. Where did these materials come from? (*Probe*: Prepared by teachers? Are they shared with other teachers?)
5. Have you had any training on producing your own nontextbook reading materials for your classroom?
 - a. If yes, by whom?
 - b. What kinds of materials were used?
6. What kinds of materials would you be interested in adding to your set of materials? What materials do you think you would remove from your current set of materials?

MENTORING/METHODIST SUPPORT (12:30–1)

1. Please describe the mentoring/methodist system at your school. (*Probe*: Who are the mentors/methodists? How often do they work? Are there lesson observations? If yes, how often? Do they provide feedback to the teachers?)
2. Do you think it's an effective mentoring program? (*Probe*: Why/why not? Provide examples.)
3. What type of materials, if any, do the mentors/methodists use?
 - a. If yes, are these materials helpful?
4. Are these materials left with the teachers for future use?

COMMUNITY: (1–1:15 or if pertinent, if time permits)

1. To what extent do children have reading support outside classrooms? Literate parents? Books at home?
2. Do the schools have libraries?
3. Does the community have libraries?
4. What is your engagement with the parents? How often do you meet the parents?
5. Are parents seemingly content with the reading lessons? If yes, what do they particularly like? If not, what are their main complaints?
6. Does the school hold reading events?
7. Does the community hold reading-related events?

PUBLIC MESSAGING/ADVOCACY:

1. Do you see any public messages about reading? For example, advertisements supporting reading?
 - a. If yes, what messages have you heard or seen about improving reading?
 - b. Through what media types do you hear these messages?
 - c. How often?
 - d. When?
 - e. What do you think of these messages?

GENERAL/CONCLUDING (OPTIONAL):

1. Do you feel supported in your effort to teach children to read?
2. What else do you need to feel supported? (*Probe: What is the hardest part of teaching reading?*)
3. What do your students struggle with most in learning how to read?
4. What do your students struggle with most when it comes to using reading comprehension to learn other subjects?

Appendix B. Classroom Observation Protocol

Classroom Observation Protocol

Observer name: _____

Observation: Date _____ Time started _____ Time ended _____

School: _____

Grade: _____

Subject/class:

Does the school have a library?

What language books?

Print environment?

Teacher background:

How long at this school?

What subjects he/she teaches?

Has she/he seen the new standards?

Does he/she have the textbook?

Does he/she have a lesson plan for the day?

Any thoughts on new standards?

What was the teaching goal for the day?

Number of students in the classroom: _____ Total _____ male _____ female

Students have textbooks: None Some Most All

Fixed seats in rows Moveable seats in rows Moveable seats in alternative arrangements

Posters, charts, and other written language are present in the classroom (e.g., on the walls)
 None Some Ample

Describe any printed material visible to pupils in the classroom. What is on the walls? What is on the chalkboard?

Students' work is displayed in the classroom. Yes No

CLASSROOM OBSERVATION:

Language and Engagement:

Primary language of instruction: Tajik Russian

Language usage: What percentage (approximately) of what the teacher says is in Russian, in Tajik or in a mix of both languages? _____% Russian _____% Tajik
_____ % Mix

Language usage: What percentage (approximately) of what the children say is in Russian, in Tajik/, or in a mix of both languages? _____% Russian _____% Tajik
_____ % Mix

Can you identify any patterns for when teachers or children use one language or another (e.g., when teachers discipline or praise children, instruction versus class management, when children talk to other children)?

Students were engaged in the lesson and class activities: All of the time Most of the time Some of the time Hardly ever Not at all

Which of the following activities did you witness students participating in? (*check all that apply*)

_____ Listening to teacher read out loud

_____ Reading out loud together (choral reading)

_____ Reading out loud to another student (paired reading)

_____ Reading independently (by him/herself)

_____ Repeating/recitation

_____ Answering teacher's questions

_____ Writing on blackboard (by students)

_____ Writing on paper, in exercise book or slate (by students)

_____ Working on group projects (by students)

_____ Participating in activities like learning games, sketches, or songs organized by teacher

Which of the following teaching methods did the teacher use? (*check all that apply*)

_____ Introduces lesson by explaining what students will learn

_____ Reads aloud to students

_____ Demonstrates reading or writing skills

- _____ Asks students questions about lesson
- _____ Responds to student questions
- _____ Provides explanation if student(s) don't understand
- _____ Gives classwork for students to practice
- _____ Concludes lesson with summary of what was learned
- _____ Praises or compliments students
- _____ Criticizes, scolds, or punishes students
- _____ Uses explicit translation when teaching a language the child doesn't understand

Teacher's position: During the lesson the teacher is: *(check all that apply)*

- _____ Sitting or standing in front of class or at blackboard
- _____ Walking throughout the classroom
- _____ Not paying attention to students or doing own work
- _____ Away from the classroom

The teacher focused attention on: All students Most students A few students
 One or two students None of the students

Reading and Writing Skills:

Phonological/Phonemic Awareness:

Teacher clearly and accurately pronounces individual sounds that are the focus of the lesson with enough volume for students to hear. Yes No

Teacher guides students to identify differences and similarities of sounds. Yes No Unable to determine

Teacher uses oral activities that include segmenting, blending, and manipulation of sounds in words. Yes No Unable to determine

Teacher uses engaging activities and materials to support instruction (e.g., hand motions, clapping, flash cards, other manipulatives to represent sounds) Yes No If yes, please describe.

Phonics:

Teacher uses manipulatives, such as letter tiles or flash cards, to help make the connection between phonemes (sounds) and graphemes (letters).

Yes No If yes, please describe.

Teacher introduces an explicit decoding strategy to sound and blend simple words.

Yes No Unable to determine

Students are applying letter/sound knowledge in reading and writing activities.

Yes No Unable to determine

Vocabulary:

Teacher contextualizes unfamiliar words in stories read orally to students by using student-friendly explanations.

Yes No Unable to determine

Explicit vocabulary instruction is purposeful and ongoing as evidenced by lists of vocabulary words, graphic organizers, word walls, word sorts, etc.

Yes No Unable to determine

Teacher relates new vocabulary to prior knowledge through questioning and other instructional activities.

Yes No Unable to determine

Students are actively involved with thinking about and using words in multiple contexts.

Yes No Unable to determine

Teacher explicitly teaches word parts (e.g., past tense, plural marker)

Yes No Unable to determine

Fluency:

Teacher models fluent reading (i.e., speed, accuracy, and prosody) during read-aloud and shared readings.

Yes No Unable to determine

Teacher and students are academically engaged in shared reading activities (e.g., big books, choral reading, charts, poems, songs).

Yes No Unable to determine

Oral reading takes place in whole and small groups; the teacher provides immediate scaffolded feedback.

Yes No Unable to determine

Students are reading orally (e.g., choral reading, partner reading, repeated reading).

Yes No Unable to determine

Comprehension:

Teacher models and encourages students to make predictions about text content using pictures, background knowledge, and text features (e.g., title, subheading, captions, illustrations).

Yes No Unable to determine

Teacher models and encourages students to use prior knowledge and supporting details from text to make connections with the reading selection. Yes No Unable to determine

Teacher models and encourages students to retell the main idea, identify supporting details (e.g., who, what, when, where, why, how), and arrange events in sequence.

Yes No Unable to determine

Students and teacher are discussing answers to higher level questions (e.g., inferential, analytical) about shared readings and selections read.

Yes No Unable to determine

Writing:

Teacher asks students to create or write their own texts.

Yes No Unable to determine

Teacher asks students to write words or sentences as dictated.

Yes No Unable to determine

Anything on spelling/dictation?

Assessment:

The teacher assesses student learning by: (*check all that apply*):

_____ Asking questions during the lesson

_____ Monitoring students as they work to check understanding

_____ Listening to individual students read aloud

_____ Using a reading assessment tool

_____ Other: _____

What strategies did the teacher use to assess oral language? (*check all that apply*)

_____ Called on individual pupils to repeat phrase/word/sound

_____ Choral response with signal to repeat phrase/word/sound

_____ Called on individual pupils to give brief (e.g., yes/no) response

_____ Choral response to give brief (e.g., yes/no) response

_____ Called on individual pupils to give free expression response

_____ Other: _____

_____ None

What strategies did the teacher use to assess reading? (*check all that apply*)

- Asked children to read aloud individually
- Choral reading on signal
- Asked comprehension questions
- Other: _____
- None

What did the teacher do when a child gave the wrong response or did not respond at all? (*check all that apply*)

- Called on another child
- Provided feedback
- Provided remediation-modeling the complete sequence
- Provided remediation-analysis (breaking down the task)
- Criticized the child
- Encouraged the child to try again
- Ignored the error
- Other: _____

Availability and Use of Classroom Resources:

Fill in the appropriate response (V, N, U, or A). Check with teacher if you are not sure.

V = visible but not used U = used in this lesson

N = not visible but available A = not available

- prescribed textbooks
- visual teaching aids
- exercise books
- other reading materials
- wall charts/posters
- teacher guide
- chalkboard, duster, and chalk

Appendix C. Textbook Analysis Rubric

MATERIALS IN TAJIKISTAN

Title of Material: _____

Intended Grade Level: _____

Part 1: Please review **four to five pages** of the textbook randomly selected. Please reselect a page if the selected page has only instructions for the teacher, consists of a table of contents, or is otherwise not primarily teaching material. For each characteristic of the materials in the tables below, enter an approximate percentage (%) of the materials that can be described by the terms given in parentheses below. Please see the glossary for definitions and examples of all terminology.

| |
|--------------------------------|
| Sentence complexity |
| Low (single clauses)— |
| Medium (at least two clauses)— |
| High (several clauses)— |

| |
|---|
| Pictures that supplement words and stories |
| Always— |
| Sometimes— |
| Never— |

| |
|--|
| Word domain difficulty |
| Easy (words related to simple topics)— |
| Medium (words outside immediate context)— |
| Difficult (outside general context of Tajik life)— |

| |
|---------------------------|
| Word length |
| Short (2–3 letters)— |
| Medium (4–6 letters)— |
| Long (7 or more letters)— |

| |
|--------------------------|
| Word frequency |
| Frequent (often used)— |
| Medium (sometimes used)— |
| Rare (rarely used)— |

| |
|---|
| Phonological complexity (C: consonant; V: vowel) |
| CV (to, he, do)— |
| CVC (pen, him, sit, not)— |
| CC Blend (cr, st, pl, gr, ng, sn, dr)— |
| CC Diagraph (ph, th, ch, sh)— |
| Diphthong (right, eight, fear, round, hair)— |

Appendix D. Table of Mother Tongue Competencies for Grades 1–4

Table D-1. Mother tongue competencies for primary education

| Grade 1 (Literacy development period— ABC period) | Grade 1 (Mother Tongue) | Grade 2 | Grade 3 | Grade 4 |
|---|--|---|---|--|
| Listening | | | | |
| A. 1.1.1. Follow simple communication conventions in narrow range of situations. | 1.1.1. Follow simple communication conventions in a wider range of situations. | 2.1.1. Follow common communication conventions in a wider range of situations | 3.1.1. Follow common communication conventions in a wider range of situations and understand their context. | 4.1.1. Follow communication conventions in a wider range of situations, understand their context and take active part in ensuring all can participate fully. |
| A. 1.1.2. Extract simple ideas and meaning from simple forms of speech commonly used at this age. | 1.1.2. Extract basic ideas and meaning from more complex narratives and forms of speech commonly used at this age. | 2.1.2. Extract ideas and meaning from a range of more complex narratives and forms of speech commonly used at this age. | 3.1.2. Extract more complex ideas and meaning to reflect upon a range of more complex narratives and forms of speech commonly used at this age. | 4.1.2. Extract meaning and reflect upon and evaluate a wide range of more complex narratives and forms of speech commonly used at this age. |
| Integration of speaking and listening competencies | | | | |
| A. 1.2.1. Value the opportunity to listen and respond to simple forms of oral speech. | 1.2.1. Value the opportunity to listen to and react to simple forms of oral speech. | 2.2.1. Value the opportunity to listen to and react to common forms of oral speech. | 3.2.1. Value the opportunity to listen to and react to a range of forms of oral speech. | 4.2.1. Value the opportunity to listen and emotionally react to a wide range of forms of oral speech. |
| Speaking | | | | |
| A.1.3.1. Follow simple communication conventions in narrow range of situations. | 1.3.1. Follow simple communication conventions in a wider range of situations. | 2.3.1. Follow common communication conventions in a wider range of situations. | 3.3.1. Follow common communication conventions in a wider range of situations and understand their context. | 4.3.1. Follow communication conventions in a wider range of situations, understand their context and take active part in ensuring all can participate fully. |

| Grade 1 (Literacy development period— ABC period) | Grade 1 (Mother Tongue) | Grade 2 | Grade 3 | Grade 4 |
|--|---|--|--|--|
| A.1.3.2. Ask recall questions and give simple spoken instructions for a narrow range of actions. | 1.3.2. Ask basic analytical questions and give spoken instructions for a growing range of actions. | 2.3.2. Ask analytical questions and give spoken instructions for an increased range of actions in different situations. | 3.3.2. Ask a range of question types and give multi-step spoken instructions for an increased range of actions in different situations. | 4.3.2. Ask a variety question types and give complex spoken instructions for a wide variety of actions in familiar and unfamiliar situations. |
| A.1.3.3. Convey simple ideas and meaning for a narrow range of purposes in simple short narratives and forms of speech. | 1.3.3. Convey basic ideas and meaning for a narrow range of purposes in simple narratives and other forms of speech of increasing length. | 2.3.3. Convey ideas and meaning for a range of purposes in different types of narratives and other forms of speech of increasing length. | 3.3.3. Convey complex ideas and meanings for a wider range of purposes in longer and more complex types of narratives and other forms of speech. | 4.3.3. Convey increasingly complex ideas and meanings for variety of purposes in longer and wide a range of types of narratives and other forms of speech. |
| Reading | | | | |
| A.1.4.1. Recognize and apply very basic print conventions. | 1.4.1. Recognize and apply basic print conventions of the text. | 2.4.1. Recognize and apply more print conventions of the text. | 3.4.1. Recognize and apply common print conventions of the text and begin to understand their implications. | 4.4.1. Recognize print conventions of the text and their implications. |
| A.1.4.2. Apply a very limited number of reading strategies with limited efficiency to unknown words. | 1.4.2. Apply a small number of reading strategies with some efficiency to unknown text. | 2.4.2. Apply a small number of reading strategies with increasing efficiency to unknown text. | 3.4.2. Apply an increasing number of reading strategies with efficiency to unknown text. | 4.4.2. Efficiently apply a range of reading strategies to unknown text. |
| A.1.4.3. Extract meaning from simple sentences containing vocabulary items such their names and the names of familiar objects and actions. | 1.4.3. Extract meaning from and simply respond to short simple predictable narrative texts with high frequency vocabulary. | 2.4.3. Extract meaning from and respond to a range of short to medium level narrative texts with medium frequency vocabulary. | 3.4.3. Extract meaning from and reflect upon a range of medium level narratives and other text types with medium frequency vocabulary. | 4.4.3. Extract meaning from and apply critical thinking to longer narratives and other text types with increasing number of lower frequency vocabulary. |

| Grade 1 (Literacy development period— ABC period) | Grade 1 (Mother Tongue) | Grade 2 | Grade 3 | Grade 4 |
|---|---|---|--|--|
| A.1.4.4. Value the opportunity to read and write very simple short texts. | 1.4.4. Value the opportunity to read and write short simple texts. | 2.4.4. Value the opportunity to read common narratives and some other text types from different mediums and write them. | 3.4.4. Value the opportunity to read range of narratives and some other text types from different mediums and write them. | 4.4.4. Value the opportunity to read a wide range of forms of narratives and other text types from different mediums and write them. |
| Writing | | | | |
| A.1.5.1. Slowly form letters in appropriate shape of model and apply very simple print conventions. | 1.5.1. More quickly form letters in more appropriate shape based on model and apply some print conventions. | 2.5.1. Mostly form text appropriately and with increasing speed and less dependent on models. Further print conventions applied. | 3.5.1. Form text accurately and with increasing speed and with very little dependence on models. Accurately apply a range of print conventions. | 4.5.1. Form longer text accurately and quickly with no dependence on models. Accurately apply a wide range of print conventions. Begin to be familiar with other means of writing. |
| A. 1.5.2. Based on their own simple idea/s form short written sentences. | 1.5.2. Based on their own simple idea/s form a group of linked two-three short written sentences. | 2.5.2. Communicate through writing basic linked ideas and meaning for a narrow range of purposes in simple narratives and other forms of speech of increasing length. | 3.5.2. Communicate through writing linked ideas and meaning for a range of purposes in different types of narratives and other forms of speech of increasing length. | 4.5.2. Communicate through writing complex and linked ideas and meanings for a wider range of purposes in longer and more complex types of narratives and other forms of speech. |