How Will the Curriculum Help Me Accelerate Literacy Learning and Excellence for All of My Students?

Research has helped us learn a great deal about the problem of the literacy achievement gap. Thankfully, it also offers many strategies to attack the problem and find solutions. In Table 1.1, we look at the five elements of literacy instruction most critical for addressing the literacy achievement gap—vocabulary, knowledge-building, syntax, fluency, and decoding—and how our curriculum addresses each.

Table 1.1: Research and Strategies to Close the Literacy Achievement Gap²

Vocabulary

Students need to know a lot of words. In Grades K–2, they need to learn 1,000 to 2,000 words per year (Biemiller, 2010; Anderson and Nagy, 1992) to stay on track. They particularly need to learn academic vocabulary (or "Tier 2 words") (e.g., community, relate) that they'll encounter across contexts and content.

What We Know from the Research

Students don't know enough words:

- » Nearly a century of research shows that word knowledge is critical for reading comprehension (Whipple, 1925; National Center for Education Statistics, 2012).
- » When reading complex text, unfamiliar words are the feature with which students typically have the most difficulty (Nelson, Perfetti, Liben, and Liben, 2012).
- » Students' scores on first-grade vocabulary assessments predict 30 percent of Grade 11 comprehension (Cunningham and Stanovich, 1997).
- » Reading or listening to a series of texts on the same topic can yield as much as four times the vocabulary growth (Landauer and Dumais, 1997; Adams, 2009; Cervetti, 2015).

How Our Curriculum Addresses It

- » Lessons at all grade levels feature a heavy focus on volume of reading and close reading of complex text (in Grades K-2 this is done primarily through teacher read-alouds and close readalouds, which are equally critical for primary-age students' literacy development).
- » Students read multiple texts on a topic. At least half of the texts students read are related to the specific topic of study.
- » Students learn to analyze the morphology of words (i.e., roots, affixes, suffixes), which is taught explicitly in earlier modules and becomes a habit in later modules. This helps them learn word-learning strategies, rather than just learning specific words.
- » Explicit vocabulary instruction occurs in almost every K-5 lesson (e.g., unpacking academic vocabulary in a learning target, focusing on vocabulary words in text).
- » In addition to addressing specific standards related to vocabulary, we paid as much, if not more, attention to choosing rich texts and designing meaningful activities that build students' knowledge and academic vocabulary.

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² Based on a presentation by David Liben, Student Achievement Partners, July 2015; adapted with permission

Knowledge-Building

Students need not just "word" knowledge but also "world knowledge." They must develop knowledge about important topics in science, social studies, arts, and technology.

What We Know from the Research

- » Reading or listening to a series of texts on the same topic can yield as much as four times the vocabulary growth (Landauer and Dumais, 1997; Adams, 2009; Cervetti, 2015).
- » Knowledge builds knowledge. The more one knows about a topic, the more one is able to read and understand about that topic (e.g., children who have been dinosaur fanatics from age two and who have read many increasingly complex texts on that topic over the years can read really sophisticated texts about dinosaurs by age six) (Adams, 2009).
- » In a research study, seventh- and eighth-grade students were asked to read a text about baseball. Students reading at "lower reading ability" (approximately third- to fourth-grade reading level) who had some knowledge about baseball did better than students with "high reading ability" but low knowledge about baseball (Recht and Leslie, 1988).

How Our Curriculum Addresses It

- **»** The curriculum is based on topics (rather than "themes" or "skills"). Students read multiple texts on a topic.
- **»** Structures are built in for independent reading on the same topic.
- **»** Students study the same topic over many weeks in many ways (e.g., reading, writing, drawing, drama, investigations).
- **»** Students have many opportunities to talk about the topic.

Syntax

Syntax is the grammatical structure of a sentence. Research has shown that the ability to parse complex syntax is a critical skill for proficient readers to develop.

What We Know from the Research

- » Hart and Risley's research (2003) showed that in addition to being spoken to with *more* words, students from high-income families were spoken to with *different types* of words, in particular more questions that invite students to think, talk, and make inferences.
- w Much research has shown that the ability to parse complex syntax is a critical skill for proficient readers to develop. For example, only students who obtained nearly perfect scores (35 out of 36) on the 2006 ACT tests did as well on complex text as they did on the less challenging text, indicating that a significant number of students who met the benchmark still scored relatively poorly on complex text (ACT, 2006).

How Our Curriculum Addresses It

- **»** Students are exposed to complex sentence structures in written and spoken language.
- » Across Grades K-5, the amount of time students work with complex text increases. In Grades K-2, this happens primarily through read-alouds; by the second half of second grade, students are reading complex text increasingly independently, including scaffolded partner reading.
- » Students do close, careful reading of complex text; they don't just read it once. Students work not only with the text's meaning (basic comprehension), but also its vocabulary, syntax, and author's craft.

Cont.

What we know from the research

" Text that students read in school has become less complex. Between 1963–1991, the average length of sentences in K–8 reading textbooks (basals) was shorter than in books published between 1946–62 (Hayes, Wolfer, and Wolfer, 1996); in seventh- and eighth-grade "readers" (usually anthologies, which are widely used), the mean length of sentences decreased from 20 to 14 words. Vocabulary also declined. The vocabulary level of eighth-grade basal readers after 1963 was equivalent to fifth-grade readers before 1963; 12th-grade literary anthologies after 1963 were equivalent to seventh-grade readers before 1963.

How our curriculum addresses it

» Students engage in frequent Language Dives: 10- to 20-minute conversations between teacher and students about the meaning and purpose of a compelling sentence from a complex text, followed by frequent practice using the language structures from the sentence. (See Chapter 2C for more on Language Dives).

Fluency

Fluency is defined as reading grade-level, complex text accurately, at a rate appropriate to the text, and with proper expression (Rasinski, 2004). Over 100 studies have connected fluency to comprehension at all grades (see achievethecore.org).

What We Know from the Research

- » Fluency does not guarantee comprehension, but lack of fluency guarantees lack of comprehension, especially with complex text.
- » Average scores of students not fluent were "below basic" on the Grade 4 National Assessment of Educational Progress (NAEP) (Chall, 2005).
- » 61 percent of urban ninth-graders are unable to read eighth-grade text fluently (Rasinski et al., 2005).
- » Fluency problems compound vocabulary and knowledge gaps.
- **»** Most vocabulary is learned by reading after second grade and especially after fifth grade (Nagy and Anderson, 1984; Nagy, Anderson, and Herman, 1987).
- » Reading is the most efficient way to grow knowledge.
- » If you comprehend less of what you read, you will gain less knowledge and will learn fewer new words.
- » Disfluent readers are less motivated to read.

How Our Curriculum Addresses It

- » Students are supported in decoding with automaticity, since this is the greatest cause of disfluency. They learn to decode increasingly complex texts (e.g., reading the same text multiple times and reading decodable texts).
- » Students follow along in the text while a fluent reader reads aloud.
- » Students read the same text multiple times until they can read it fluently and with expression.
- » Students learn specific criteria for fluent reading.
- » Students practice reading a text fluently, receive peer or teacher critique, and then perform or record that text for a broader audience.
- » K-2 students hear the same complex text read aloud multiple times. In Accountable Independent Reading they may explore that text on their own and be able to "read" more of it, since they in effect have it memorized.
- » K-2 students recite poems and songs across multiple lessons. Repeated reading has been shown to dramatically improve students' fluency and confidence.
- » The K-2 Reading Foundations Skills Block (Skills Block) teaches and assesses the behaviors of a fluent reader: reading smoothly, with expression and meaning, and at just the right speed.

Cont.

What we know from the research	How our curriculum addresses it
	» The Skills Block builds students' automaticity with decoding words, leading to fluent reading of connected text.

Decodina

Decoding is the ability to recognize words automatically without effort. Failure to decode automatically hinders comprehension.

What We Know from the Research

» Students who come from language-rich homes, where they are frequently asked questions or encouraged to look for patterns in language and elsewhere, are more likely to make inferences about spelling-sound patterns in the early grades (Liben, personal communication, July, 2015).

- » Decoding skills help proficient readers retain words in memory and support the development of automatic word reading skills (Adams, 1990).
- » Hundreds of studies have shown the benefit of structured phonics programs. The report of the National Reading Panel reviewed the best of these studies. The research is so strong and so consistent that the IES (Institute for Educational Science, the research wing of the Education Department) has decided that there is no further need to review what the evidence shows about the effectiveness of structured phonics programs. They are convinced.

How Our Curriculum Addresses It

- » In the Skills Block teachers directly teach letter recognition, phonological awareness, and a sequence of grapheme/phoneme patterns in and out of context, using phonetically controlled readers.
- » Decodable readers are paired with engagement texts (both/and) in the Skills Block.
- » In K-2 Module Lessons, students regularly apply the letter-sound patterns they have learned in the Skills Block as they work to read and comprehend grade-level text (e.g., "We learned the sound an 's' makes last week; do you see an 's' in this page we are reading about toys?")
- » Because phonics and fluency are necessary, but not sufficient, students also build knowledge, vocabulary, and syntax through complex texts, read-alouds, investigations, and play.
- » The 3–5 curriculum does not include explicit instruction on decoding. For struggling readers in this grade band, teachers may want to consider using aspects of the Skills Block as an intervention.

Addressing Decoding and Fluency with Structured Phonics

The research in Table 1.1 highlights the need for a "both/and" approach to literacy instruction: Students need *both* content-based literacy *and* explicit skills-based instruction on decoding and fluency. Curricula that provide both build students' ability to comprehend text and build knowledge of the world.

A compelling body of evidence indicates that a structured phonics approach is the most effective way to help students crack the alphabetic code. Simply defined, structured phonics directly teaches the spelling-sound patterns of English in a clear sequence. Not all students need a structured phonics approach, but many do, particularly those who enter school farthest behind. Our K–2 curriculum includes one hour per day—the Reading Foundations Skills Block (Skills Block)—when students learn to crack the alphabetic code. They read "decodable texts" that are controlled for taught spelling patterns and high-frequency words and engage in Accountable Independent Reading (during differentiated small group time) so that teachers can confer with them and track their progress.

Many educators, particularly veterans trained in guided reading, often ask us, "Where is guided reading in your program?" Our curriculum does not include designated time for a typical guided