FRANK VIEWS
ON LITERACY LEARNING AND THE COMMON CORE
ELFRIEDA H. HIEBERT
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During a conference, my daily summaries of previous presentations were dubbed Frankly Fred-dys by Francie Alexander, Chief Academic Officer at Scholastic. I adopted the designation for those reports and subsequent commentaries on literacy topics. My goal: to present frank, clear, and honest evidence-based reflections on critical issues in literacy education.

This volume is an amalgam of the Frankly Fred-dys posted at TextProject.org from 2005 to 2014. Each column was intended to stand alone. However, when clustered topically, the columns coalesced into five topics in literacy learning and instruction that have been central to my work.

**Text complexity:** With Common Core writers including a standard devoted to assessing the increases in students’ capacity with complex text during their school careers, many questions, views, and interpretations about text complexity have arisen. Text complexity has been a central focus of my work since my co-authors and I cautioned against the overuse of readability formulas in Becoming a Nation of Readers. The essays in the section on Text Complexity argue against the use of single measures (omnibus systems) of text complexity, regardless of whether those measures derive from human judgments (e.g., guided reading levels) or quantitative systems (e.g., Lexiles).

**Vocabulary and morphological awareness:** As the single best predictor of comprehension, vocabulary has always been of interest to literacy educators. With the digitization of texts, linguists and educators have gained access to large corpora or banks of words. Examinations of these data banks have meant new understandings about features of vocabulary in texts for students at different levels. The essays on vocabulary
draw attention to new perspectives and understandings about vocabulary.

**Beginning reading, automaticity & fluency, & core vocabulary:** Children can get meaning from texts through read-alouds, but proficient reading requires that students become automatic in recognizing a core group of words. The way to initiate young children into proficient reading is often thought to involve memorization of highly frequent words (e.g., the, of, a) or exposure to decodable texts (e.g., Dan had a bad fan). The essays in this section describe an alternative approach where young children begin with words that represent concrete objects (e.g., cat, dog, car, bus, truck) and are also phonetically regular and frequent.

**Reading volume, stamina, & silent reading:** Whatever the domain of human endeavor (e.g., playing the piano, skateboarding), the amount of time that individuals devote to an activity influences their levels of proficiency. Reading is no different. The essays in this section describe how the amount of reading matters and that reading silently matters most.

**Comprehension, knowledge building, & assessment:** Texts are the primary place where information has been and continues to be stored. For that reason, the focus of English/Language Arts (ELA) classrooms is on comprehending what is read and building knowledge. The commentaries in this section examine ways of ensuring that the focus of ELA classrooms is on building knowledge.

Since e-books are easy to reissue, there likely will be new editions of Frank Views produced periodically. I’d love to hear about questions or issues that you believe should be a focus of the Frankly Freddy columns at textproject.org and, subsequently, part of future editions of Frank Views.

I dedicate this edition and future versions of this book to Jaime Kvaternik—the graphic designer, editor, and production manager of this volume. Jaime has been tenacious in keeping my attention on this project—a task that makes herding cats easy. Jaime has also shown incredible insight about the author and the topics in his selection of photos for the volume. The design is superior from any vantage point. When the vision, design, and production of the volume are viewed from Jaime’s chronological age (early teens), the effort is beyond phenomenal. Jaime—you are an inspiration and a source of keeping me at least somewhat connected to the digital world.

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TEXT COMPLEXITY
Standard 10 of the Common Core State Standards (CCSS) evaluates students’ ability to read increasingly more complex texts across the grades to ensure proficiency with texts of college and careers by high school graduation. The content of Standard 10 is based on several claims that need to be unpacked to determine the strength of research evidence for this standard.

An overview of three claims and their evidence follow. A claim that is not examined pertains to the presentation of correlations of metrics such as Lexiles and ATOS and levels of text as “new research on text difficulty” (CCSS, Supplement to Appendix A). Research to refute the claim that the findings are new and/or appropriate as a basis for state policy is long-standing and substantial (e.g., Anderson, Hiebert, Scott, & Wilkinson, 1985; Klare, 1984).

**There is a need for more challenging text because “K-12 reading texts have actually trended downward in difficulty in the last half century” (CCSS Appendix A, p. 8).**

A re-examination of the two studies cited as evidence for this claim refutes this conclusion for the primary-grades (Hiebert & Mesmer, 2013), showing that third-grade texts were hardest in the latest period studied (1980s). Further, studies not included by CCSS writers show that first-grade texts have gotten substantially harder over the past 50 years (e.g., Foorman, Francis, Davidson, Harm, & Griffin, 2004).

**Growth-curve analyses based on an historical dataset from a single cohort in a single state can be used to establish an accelerated staircase of text complexity for all students (Williamson, 2006).**

Currently, there is no evidence that the reading proficiencies of all students can be accelerated at the rate outlined in the CCSS (CCSS Appendix A-Supplement, 2012). In the historical database, only students at the top of the top quartile read at the “high end of the range” (Williamson, 2012)—the level at which all students are to be reading in the final year of a grade band, if they are to be proficient in the standard.

**Giving students challenging texts will result in improved reading levels.**

No references are given for this assumption but several writers subsequently have referred to studies by Morgan, Wilcox, and Eldredge (2000), O’Connor, Swanson, and Geraghty (2010), and Stahl and Heubach (2005) as evidence that instruction with challenging texts produces higher reading performances. A reanalysis of these studies indicates that struggling readers did not attain adequate levels of proficiency with challenging texts (Mesmer & Hiebert, 2013). At the same time, there is no evidence for the validity of Betts’s (1946) criteria for independent, instructional, and frustrational levels (Halladay, 2012). Appropriate reader-text
matches as a function of student proficiency, background knowledge, and instructional context is an area where research is urgently needed.

References


Posted on TextProject.org on March 3, 2014
Robert Cumming and John Guarino

Michael Pollan based his best-selling book, Food Rules, on a seven-word mantra, broken into three phrases: “Eat food. Mostly green. Not too much.” I’m taking a similar tack to support teachers, students, and parents in attending to what underlies proficient reading of complex text. Here are my Reading Rules:

**Read Often. Mostly Silent. Focus On Knowledge.**

**Read Often**

Getting good at cognitive-motor processes such as playing the piano, golfing, doing surgery, and reading is a function of practice. Think about two fourth graders, Alex and Alice. Alex reads for 7.2 minutes daily in school. Alice reads for 15 minutes. If both read 100 words per minute, Alex will have read about 129,000 words over the school year. Alice will have read about 267,000 words. By reading more than twice as much as Alex, Alice will have encountered twice as many rare words—all of which represent new distinctions and concepts.

These two students, while hypothetical, illustrate the amount that two groups of American fourth graders have reported reading in school. Alex represents the third of a national age group that falls below the basic standard on the National Assessment of Educational Progress (NAEP); Alice represents the third of an age group nationally that is at proficient or higher on the NAEP.

The texts and tasks of the two Common Core State Standards assessment consortia will be similar to those of the NAEP. That is, students (from third grade on) will need to read silently and respond to questions for half-hour periods or longer as on the NAEP. But, in addition, students will also participate in performance tasks where they will be asked to write essays based on what they have read.

To engage in inquiry with complex texts, students need to have read many complex texts. And, if students don’t get to read in the classroom, they are unlikely to develop a habit of reading. How much you read in schools is tied to how much you read at home. Most students, like adults, don’t practice what they aren’t good at in school (or, in the case of adults, their day jobs) in the evenings.

**Mostly Silent**

Proficient reading primarily occurs as an internal process—that is, silently. Just because the end-goal is for students to read silently doesn’t mean that we ask beginning readers to read silently. And, even if we do ask them to read silently, silent reading among beginners is whispering the words to themselves. Developmentally, this pattern is to be expected. Most adults, when confronted with an unknown word, will pronounce a word in a whisper or even aloud.

As reading proficiency increases, however, silent reading needs to increasing be the dominant mode for reading texts. Over the past decade of No Child Left Behind (NCLB), both practice and
assessment emphasized oral reading through the primary grades and even beyond. Oral reading assessments form an informative window into students’ reading throughout the elementary grades but the goal of reading instruction is to steadily move students into silent reading. Discussions follow silent reading and, in these discussions, students will locate sections of texts to read aloud as they share evidence from the text to support particular responses. But, by the end of the primary grades, students are spending more time reading silently than they are reading orally.

When school programs support students in becoming proficient silent readers, students are developing the stamina to persevere when they encounter challenging text and when the tasks of assessment and instruction require them to pursue a task on their own. When students have not read often and have not read silently, their encounters with the tasks that ask for them to read for a half-hour (or even more) independently and then to respond with evidence to what they read are less than successful. It is in classrooms where students have opportunities to read often and silently that they develop the stamina that underlies proficiency with complex text.

**Focus on Knowledge**

The reason for reading is to acquire the knowledge that resides in texts. Texts are the place where humans share and store what they have learned. As never before, the knowledge of humankind can be gained from the library that is open 24-7: the Internet. Yes, we now store information in video and audio files. One only has to think of the TED series to recognize how much information we can get from videos and audios. But text is essential in accessing this information and it was also essential in creating the information that appears on the videos or audios. The raison d’etre of reading is to gain knowledge—knowledge about the natural world as well as the social world. Through informational texts, students learn about how the natural world works. Through narratives, students learn about people’s experiences and choices as they deal with the contexts of the physical and social world, including people from many different eras.

**Read Often**

To truly become proficient readers of complex texts, students need to be immersed in learning—some topics about which they are curious, some topics about which communities deem to be important, and some topics that are simply for enjoyment of language and human interaction. Citizens of the digital-global age of the 21st century have knowledge and know how to acquire knowledge. Knowing how to negotiate texts is fundamental to the process of knowledge acquisition and engagement. Membership in the knowledge generation depends on schools involving students in extensive amounts of reading independently in the pursuit of knowledge.

**References**


*First Posted at TextProject.org on August 30, 2013*
Increasing students’ capacity with complex text—the aspect of the Common Core State Standards (CCSS) which distinguishes it from previous standards documents—is causing considerable confusion, misinterpretation, and worry. The seven actions which follow illustrate ways in which literacy leaders can support teachers in ensuring students’ increased capacity with complex text. Literacy leaders can enact these actions in a variety of settings—schools, districts, state departments of education, and professional and community organizations.

1. Interpret readability information cautiously. The staircase of text complexity is implicit within the Standards with statements that students should read at the upper end of the text complexity band for a grade span independently or with scaffolding. An extensive literature calls into question over-use of readability formulas for instructional purposes. These problems are exacerbated with digital reading formulas. Through guidance and sharing of information, literacy leaders can ensure that readability formulas do not drive text selection and evaluations of students’ proficiencies.

2. Design a fund of information initiative. Many American students have reasonable reading proficiency but they don’t like to read. One explanation is that school tasks involve students in reading short texts on disparate topics and with little autonomy in selecting texts. Teachers can engage students’ interest in reading by giving them opportunities to read deeply, thereby gaining funds of information. Literacy leaders can be the liaison between school and community librarians as they identify texts and guidelines for encouraging students to develop areas of expertise or “funds of information.”

3. Share resources on vocabulary learning. Vocabulary is the single best predictor of comprehension and the resources for supporting rich, vigorous vocabulary learning in classrooms are many. Through short book talks in school settings or at professional meetings, literacy leaders can give teachers the resources for giving students the vocabulary foundation needed for success with complex texts.

4. Identify reputable and reliable sources for articles. There are many reasons for increasing students’ exposure to articles, including the fact that article reading (in print and the internet) is the primary form of reading among adults. Articles can also engage students in content in ways that textbook selections often do not. Further, current assessments often use magazine articles. By giving teachers reputable and reliable sources (i.e., ones that remain available on the internet), literacy leaders can contribute to the breadth and depth of students’ reading experiences.

5. Give teachers ideas for increasing students’ in-class reading. In many American classrooms, students read for only a small percentage of a reading period. Students who are successful
with complex texts read frequently and extensively. Literacy leaders can assist teachers in gathering baseline information on their students’ reading and then can demonstrate ways of increasing in-class reading.

6. Conduct mini-workshops on increasing students’ reading stamina. Getting students to read more is part of the solution but the amount of reading which students do in a given reading event also needs to increase. A primary reason why American students do more poorly on the National Assessment of Educational Progress (NAEP) than on state assessments has to do with the length of texts on assessments (short passages on the latter; longer ones on the former). Literacy leaders can share ways of increasing the length of reading events, including chunking of texts and strategies for monitoring comprehension.

Organize a book benchmarking event. The CCSS writers provided lists of exemplary texts for grade spans. Some educational agencies have interpreted these texts as the mandated curriculum which is an inaccurate view of exemplars. Exemplars are illustrative, not compulsory. Literacy leaders can support local groups in identifying their own exemplars—texts with content that represents the community and demonstrates increasing complexity of content.

First posted at TextProject.org on February 27, 2013
The English language has an incredibly rich vocabulary, and yet we use only about 2% of it in the bulk of our typical written texts. This core vocabulary accounts for about 90% of our narrative texts (including literary texts) and at least 85% of our informational texts (including scientific and technical texts).

The Teacher’s Word Book first brought this disparity to the attention of educators (Thorndike, 1921). Yet, there is an additional disparity even within the core vocabulary. The 25 most frequent words (e.g., the, of, to, a) alone account for 33% of all the words in typical texts. This realization led to the creation of Dick-and-Jane-style readers (Gray, Baruch, & Montgomery, 1940). However, many of these most frequently used words are functions words, the glue that holds our thoughts together.

Beyond the first 100-200 basic words, the core vocabulary is stocked with general concept words—words such as mysteries, property, and interior. These words are highly versatile—many of them are polysemous, or multiple-meaning words. Many of them can also function as different parts of speech. Approximately 4,000 root words in this core group form approximately 5,600 unique words (Zeno, Ivens, Millard, & Duvvuri, 1995). When simple endings are added to these words (inflected endings, possessives, plurals, ly, y, er, est), their numbers approach 9,000 words (see Figure 1).

Words outside the core vocabulary—words such as zebra, zipper, and dirigible—make up the remaining 10% of narrative texts and 15% of informational texts. Approximately 300,000 to 600,000 words belong to the pool of infrequent words, and I refer to them as the extended vocabulary. The English language is a trove of these rare words because the vast majority of our vocabulary (98%) is infrequently used.

Extended vocabulary words tend to stand out in texts because they add specificity and because they are beloved by people who value the richness of the English language. These words also make up the grist of the Common Core State Standards (CCSS; CCSS, 2010) with regard to content area and literary vocabulary. So attention will continue to be paid to them. But as educators, a sole focus there may be misplaced. A student who learns dirigible as part of a vocabulary lesson may not encounter it for years, if ever again. Words such as chief, condition, and resource, however, can be expected to appear fre-
quently in many different subject areas and with a variety of meanings.

The extended vocabulary needs to be a focus of elementary classrooms, too. Such words are the essence of literary and content-area instruction. Lessons attend to what it means for a character to be enigmatic and how this trait may influence the outcome of the story. Inquiry into the meaning of terms such as radiation and convection drives science instruction.

But, in addition to strategic and intensive instruction that develops extended vocabulary1, an elementary program also needs to ensure that students are facile with the core vocabulary that forms the foundation of text. For decades the general rule of thumb in reading pedagogy has been that a fundamental grasp of approximately 90% of the words in a text is needed for the reading experience to be meaningful for students. If students can understand 90%, they can figure out the other 10% without a breakdown in meaning. This makes a strong argument for using valuable classroom time on the heavy-lifting words in our core vocabulary.

In fact, students need to be facile with the core vocabulary by the end of fourth grade. This is the point at which students begin reading to learn. Those who cannot read well enough to do so are quickly left behind. Those who have learned the root words in the core vocabulary can use them to unlock 85%-90% of all written text. Because the core vocabulary is based on essential concepts, knowledge of these words is also tied to content knowledge. So there is a large advantage beyond reading to be gained.

Table 1 illustrates how bands of core words can systematically be emphasized over second through fourth grade2. Extensive reading of accessible texts helps in building a strong foundation, in addition to lessons that attend to the shared meaning across a morphological family (e.g., develop, developing, developed) and the unique meanings of core words with multiple meanings (e.g., force, energy).

Despite the lure of attending exclusively to infrequently used words because of their specificity and richness, we must remember what is at stake. In the face of demands for higher reading levels from the CCSS (CCSS, 2010), we must be clear about what it means to be a proficient reader. Proficient readers need to apprehend 90% of the text. This is attainable when students are facile with the meanings of this highly versatile group of 4,000 words that make up the core vocabulary. Let’s work to give all students this important foundation before dressing their vocabularies up in the frippery of rare and specialized terminology.

References


Hiebert, E.H. (2005). In pursuit of an effective, efficient vocabulary curriculum for the elementary grades. In E.H. Hiebert & M. Kamil (Eds.), The teaching and learning of vocabulary: Bringing
scientific research to practice (pp. 243-263). Mahwah, NJ: LEA.


**Table 1: Creating the Foundation with the Core Vocabulary: Grades 2-4**

<table>
<thead>
<tr>
<th>WordZone 3</th>
<th>Associated Grade Level</th>
<th>Predicted Occurrence per Million Running Words of Text</th>
<th>Number of Word in WordZone (or portion thereof) (#)</th>
<th>Number of words with morphological relatives (simple endings &amp; words with frequencies of 1 or more per million) (#)</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td>68,000 - 1,000</td>
<td>107</td>
<td>177</td>
<td>do, then, which</td>
</tr>
<tr>
<td>2</td>
<td></td>
<td>99 - 300</td>
<td>203</td>
<td>478</td>
<td>example, word, united</td>
</tr>
<tr>
<td>3.1</td>
<td>2</td>
<td>299 - 200</td>
<td>143</td>
<td>316</td>
<td>public possible, surface</td>
</tr>
<tr>
<td>3.2</td>
<td></td>
<td>199 - 100</td>
<td>477</td>
<td>1022</td>
<td>develop, service, necessary</td>
</tr>
<tr>
<td>4.1</td>
<td>3</td>
<td>99 - 65</td>
<td>439</td>
<td>844</td>
<td>determine, influence, evidence</td>
</tr>
<tr>
<td>4.2</td>
<td></td>
<td>64 - 44</td>
<td>553</td>
<td>924</td>
<td>function, standard, quality</td>
</tr>
<tr>
<td>4.3</td>
<td></td>
<td>43 - 30</td>
<td>685</td>
<td>1059</td>
<td>conflict, internal, maintain</td>
</tr>
<tr>
<td>5.1</td>
<td>4</td>
<td>29 - 20</td>
<td>936</td>
<td>1296</td>
<td>severe, confidence, resistance</td>
</tr>
<tr>
<td>5.2</td>
<td></td>
<td>19 - 14</td>
<td>974</td>
<td>1272</td>
<td>tendency, accompany, recommend</td>
</tr>
<tr>
<td>5.3</td>
<td></td>
<td>13 - 10</td>
<td>1070</td>
<td>1212</td>
<td>precede, adjustment, component</td>
</tr>
</tbody>
</table>
Footnotes

1 Strategic instruction of the extended vocabulary takes different forms with the words prominent in narratives and those in informational texts. These different treatments for these words have been described elsewhere (Hiebert & Cervetti, 2011; Hiebert, 2011).

2 The words of the first two zones include many function words that have small morphological families and are best learned through extensive reading.

3 This version of the WordZones represents a modification of the original presentation in Hiebert (2005). The first wordzone is now 1, rather than 0, which affects the numbering of all subsequent zones.

First posted at TextProject.org on 7 June 2011
TextProject has just launched FYI for Kids—a collection of engaging and high-quality magazine articles designed to enhance the Common Core classroom’s reading repertoire. The objective of this project is to demonstrate a type of text that is essential for increasing students’ engagement in and proficiency with complex texts—short, engaging articles that communicate critical information. Many magazines for children and young adolescents have yet to be digitized (and, even when they are, past issues may not be available on the Internet)—so we want to be clear that the volume of articles offered through FYI for Kids is a small drop in the bucket of what is needed in classrooms. And magazine articles, of course, are not the only type of texts that need to be ramped up in Common Core classrooms. These articles illustrate a form of text that is often missing from classrooms and have great potential to build students’ capacity for complex texts.

Why Magazine Articles Are an Important Part of the Classroom Reading Repertoire

There are at least five reasons why magazine articles are so critical in a curriculum:

¥ The style and content of magazine articles engages students.

¥ Magazine articles cover a range of topics, supporting students in acquiring funds of information that are critical for reading complex texts.

¥ Magazine articles can demonstrate to students that they can read complex texts since many magazine articles have challenging vocabulary.

¥ Magazine articles form a primary component of the reading diet of adults, so students need to be able to read these texts critically.

¥ And finally, magazine articles are represented heavily in many assessments, such as the National Assessment of Educational Progress (NAEP). I present this feature last because the underlying purpose for magazine articles is not test preparation. The previously discussed reasons are compelling enough to demonstrate the benefits of including magazine articles in the reading repertoire of Common Core classrooms. Yet at the same time, students need the chance to get facile with a style of texts before being confronted with them on assessments.

The Features of FYI for Kids

Length and Style: The articles that make up FYI for Kids are on the short range of length for magazine articles—around 350 words long. The articles that have appeared on the assessments of the NAEP are typically 750 words or more. We keep the articles short so that they could be on a single page and include pictures. A first priority in many classrooms is to get students engaged in reading articles, and pictures can go a long way toward whetting curiosity in reading. We also want the texts to be easy for teachers to project onto a whiteboard or to photocopy.
**Vocabulary Levels:** The articles featured in FYI for Kids are different in one important way from most magazine articles in that, while complex in content, the texts are presented with differing percentages of rare (and likely unknown) vocabulary.

A prominent part of TextProject’s message is the 90-10 rule of vocabulary distribution: 90% of the words in most texts comes from a group of 4,000 simple word families, while the other 10% (the extended vocabulary) comes from the remaining words in English (as many as 300,000 additional words). Being facile with the 4,000 simple words families is essential for students to be able to read complex texts.

The FYI for Kids texts are at five complexity levels: These levels are based on a range of 1% to 5%, indicating the portion of the words in a text that fall into the “10” category—the extended vocabulary. That is, these percentages represent the number of words that are not in the 4,000 simple word families. For instance, “Bird Nests” is a magazine article in the first volume of FYI for Kids (the volume numbers indicate the text complexity level). There are four potentially challenging words in “Bird Nests”: auks, penguins, tailorbirds, and cuckoos. Students should be able to recognize the word auks after an appearance or two since it’s monosyllabic. Multisyllabic words can often present more challenge than monosyllabic words.

**Table 1: Levels of difficulty in FYI for Kids.**

<table>
<thead>
<tr>
<th>Issue 1</th>
<th>Volume 1</th>
<th>Volume 2</th>
<th>Volume 3</th>
<th>Volume 4</th>
<th>Volume 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bird Nests</td>
<td>Text contains 1% extended vocabulary</td>
<td>Text contains 2% extended vocabulary</td>
<td>Text contains 3% extended vocabulary</td>
<td>Text contains 4% extended vocabulary</td>
<td>Text contains 5% extended vocabulary</td>
</tr>
<tr>
<td>Issue 2</td>
<td>Going With the Flow</td>
<td>Fractured Fairy Tales</td>
<td>Putting Two Words Together</td>
<td>Louis Braille</td>
<td>Counting Animals</td>
</tr>
<tr>
<td>Issue 3</td>
<td>Posters Over Time</td>
<td>Totem Poles</td>
<td>Bats in Sports</td>
<td>Standing on Your Own</td>
<td>The Tides</td>
</tr>
<tr>
<td>Issue 4</td>
<td>Nesting Dolls</td>
<td>Moles</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Domains:** We’re still generating texts for FYI for Kids, but the content falls into five main content areas. The content areas vary in the number of themes that fall within them, as shown in Table 2 below.
Table 2: Content Domains and Themes in FYI for Kids.

<table>
<thead>
<tr>
<th>Content Domain</th>
<th>Themes</th>
<th>Example of a Magazine Article in FYI for Kids</th>
</tr>
</thead>
<tbody>
<tr>
<td>Art and Music</td>
<td>Art; Music</td>
<td>&quot;Nesting Dolls&quot;</td>
</tr>
<tr>
<td>Human Interest</td>
<td>Fashion &amp; Crafts; Young Heroes; Sports &amp; Games; Young Inventors</td>
<td>&quot;A Birthday Wish: Rachel Beckwith&quot;</td>
</tr>
<tr>
<td>Language Studies</td>
<td>Text Study; Word Study</td>
<td>&quot;Putting Two Words Together&quot;</td>
</tr>
<tr>
<td>Science</td>
<td>Earth Science; Life Science, Physical Science</td>
<td>&quot;Counting Animals&quot;</td>
</tr>
<tr>
<td>Social Studies</td>
<td>Civics; Culture; History; Geography &amp; Economics</td>
<td>&quot;Totem Poles&quot;</td>
</tr>
</tbody>
</table>

Every single topic won’t have texts for every difficulty level. But there is enough to get started—especially for the last quarter of the school year when students often make their greatest learning gains. And don’t forget TextProject’s SummerReads! Summer reading is critical to sustain if students are to keep the gains that they have gotten over the school year.

*Posted on TextProject.org on April 12, 2013*
Acquiring knowledge is the raison d’etre of the Common Core. In the digital-global world, the “haves” are the ones who have knowledge and know how to acquire more knowledge. When you know something, you can build on this knowledge and in this way knowledge grows. Knowledge begets knowledge. The “have nots” are the ones who depend on others to filter their knowledge through talk radio, television shows, and conversation.

Reading is a critical component in knowledge acquisition since much of knowledge is recorded in texts. True, there are now video clips of momentous world events and there are numerous films and videos of almost any topic. But, at least with noteworthy films, all began as scripts and, to identify video clips, information is needed to locate them—information in the form of texts.

When it comes to content area texts, the nature of knowledge is clear. If a book is about horses or tree kangaroos, we expect to learn about these species. If we are using these books for instruction, we have extensive guidance from content-area specialists who have described the underlying ideas and the connections between ideas. We can learn about the world in more complex ways as a result of these content-area maps and curriculum guides.

But when it comes to narrative texts, we are often rudderless. We teach narrative from the standpoint of personal connections. When students read Birchbark House (Erdich, 2002), we emphasize students’ responses to how Omakayas felt when her baby brother died. When reading M.C. Higgins the Great (Hamilton, 1974/2006) we ask students about MC’s plans to get his family off the mountain. We do not ask students why the protagonists in these stories had the problems that they did.

We have not had content-oriented ELA curriculum equivalent to the curriculum of content areas. Evidence for this observation comes from a comparison of key vocabulary in Marzano’s (2004) inventory of terms from numerous standards documents in Table 1. The ELA vocabulary represents terms used to teach reading and writing, not the content of what is read or written. It is rare, for example, to read a story about a verb or capitalization. The words that would be expected to appear in stories—oppressive heat, anxiety, despair, embarrassment—all critical concepts to stories such as M.C. Higgins the Great and The Birchbark Tree—do not appear in the vocabulary within ELA standards documents.
Table 1: Vocabulary in Content Areas and ELA Standards (Marzano, 2004)

<table>
<thead>
<tr>
<th>Content Area</th>
<th>Sample Words</th>
</tr>
</thead>
<tbody>
<tr>
<td>Civics</td>
<td>abuse of power, campaign, elected representative, geographical representation, individual liberty, Labor Day, national origin, patriotism, school board, Uncle Sam, welfare</td>
</tr>
<tr>
<td>English Language Arts</td>
<td>abbreviation, capitalization, e-mail, genre, illustration, learning log, paragraph, reading strategy, table, verb</td>
</tr>
<tr>
<td>Geography</td>
<td>billboards, discovery, fall line, harbor, Japan, land clearing, national capital, Pacific rim, rain forest, technology, vegetation region</td>
</tr>
<tr>
<td>Mathematics</td>
<td>addend, capacity, equation, gram, improbability, mass, obtuse angle, quotient, sample, unit conversion</td>
</tr>
<tr>
<td>Science</td>
<td>bedrock, Earth's axis, gases, inherited characteristic, magnetic attraction, ocean currents, recycle, technology, water capacity</td>
</tr>
</tbody>
</table>

The content might not be stated explicitly within ELA standards documents but within genre of ELA programs, content is present and vibrant. Good literature addresses the themes of language, philosophy, psychology, history, and the arts. The underlying message is always there. Sometimes, those messages are not recognized in instruction when the surface level meaning is the focus. When Omakayas’s grief at losing her baby brother is likened to students’ contemporary contexts, the historical context of the story is lost. Omakayas’s situation reflected a larger societal change, as Europeans challenged the indigenous culture. M.C.’s coming of age is an important part of M.C. Higgins the Great but, similar to Omakayas’s situation, M.C.’s life is strongly influenced by cultural and historical events. Literature allows for examination of the influences of culture and history on individuals, not simply on our personal responses to texts. Guiding students in understanding how culture and history influences individual development and agency is part of the bigger picture.

I am not going to suggest that every single story has an underlying meaning that is profound and worthy of discussion. You could spend considerable time attempting to understand why Dan the flying man was flying in the predictable text, Dan the flying man (Cowley, 1990). But for most narratives—and definitely those of substance—simply asking students to express what characters are feeling or to find the main idea trivializes the text. The Common Core is about addressing the underlying knowledge in these texts.

**Illustration how a text is treated within a Common Core classroom: Symphony of Whales**

As my description shows, I have become passionate about the story of the Chukchis and the ice-breaker boat, the Moskva. I want to emphasize that, two weeks ago, when I looked for a selection for this presentation, it was a random selection from the Table of Contents of a core reading program.
It turns out that there is an enormous amount of information available to all of us today—and I learned what I learned about the Chukchis and their rescue of the beluga whales in about two hours of research on the internet. The world of information is available 24-7 on the internet. The Common Core is a mandate to open this world of knowledge to our students.

Let me illustrate how the multiple levels of meaning within a text can be the focus of knowledge acquisition with a text offered as part of a third-grade program in a Common Core edition of a core reading program: Symphony of Whales (Schuch, 2002). The synopsis of the story is given in Table 2.

**Synopsis of Symphony of Whales**

The story centers around a young girl named Glashka in a village in the far north. The old ones in the village say that Glashka has a gift, which is to hear the song of the whale—Narna.

Glashka hears the song of Narna in a dream just before setting out on a trip to the next village. On the trip, the sled dogs pick up some eerie sounds that they follow. They find a bay full of a thousand beluga whales that are trapped because the ice has come earlier than usual. Glashka’s father says that there is no help—that when the last of the water freezes over, the whales will die.

Glashka's mother remembers that an icebreaker had rescued a Russian freighter trapped in the ice several years before. They use an emergency radio to put out a distress call, which is picked up by a Russian icebreaker that radios back that it will come but the trip may take several weeks. The villagers need to keep the whales alive until then. The villagers and people from surrounding villages work at chipping back the edges of the ice, giving the whales room to come up to breathe.

Glashka sings to the whales when she works and she gives some of the fish from her lunch to the whales. Other villagers notice her doing that and they begin to feed their stored fish to the whales too.

Finally the icebreaker comes and makes a path through the ice. When the path has been made, the icebreaker turns around with the aim of guiding the whales to the sea. But the whales don’t follow the boat.

The ship’s captain plays recordings of the sounds of whales but that doesn’t work. Then Glashka has another dream and hears other music along with the sound of Narna. The villagers radio the ship and the crew play other music including rock and roll. None of it works and Glashka radios the ship to ask for other music. Finally, a recording of classical music is played and the whales begin to follow the boat.

Level 1: On the surface level, this is a story of a girl’s special gift and her tenacity. In some lessons around this text, helpfulness is emphasized. How was Glashka helpful? Have you ever been helpful? How did Glashka’s gift help to save the whales? Have you ever been in a situation like Glashka? But within a Common Core classroom, students’ interpretation of the story—even that of third graders—does not have to stop with these personalized questions. There are additional levels of meaning.
Level 2: The author has used Glashka and her magical gift to make the story palatable for children. Even within the current form of the story, there is evidence that there were numerous advocates for the whales other than a single child (i.e., Glashka). Close reading, as advocated by the CCSS writers, gets students to examine the text closely to find evidence that the event was a community effort. Everyone was involved. Students can be supported in doing a close reading of the text to determine the role of different groups in saving the whales.

Level 3: There is another layer to the story that some might call a backstory—it communicates the author’s interest in the sounds of whales. What might explain the author’s choice to have a character like Glashka who hears the sounds of Narna? A close reading can be done about the author to answer the question, “why did the author focus on Glashka’s ability to hear the sounds of Narna?” In the description of the author that accompanies this selection, the text indicates that he had been interested in whale sounds for a long time. In fact, before writing the story, Mr. Schuch recorded a composition where he plays his violin accompanied by whale sounds. That recording can be found on the Internet but it never received the publicity that Mr. Schuch’s book received. This is, in fact, Mr. Schuch’s only book to date.

Level 4: The final level of the text lies in the real event that the author fictionalized. The real story of a tiny community working hard to save 3,000 beluga whales—not 1,000 as stated in the story—is one of the major successes of conservation of the 20th century. A close reading of the texts can encourage students to consider why the world’s news media wasn’t at the event. Why weren’t there helicopters and planes flying in with support for the rescue effort?

A book that can support students in reading “beyond the lines” is Humphrey the Lost Whale (Tokuda & Hall, 1992). Exactly a year after the Chukchis in Russia worked to free 3,000 beluga whales, much of the world followed the story of Humphrey, a humpback whale that moved through the Golden Gate in San Francisco Bay and then down the Sacramento River into its delta. Enormous rescue efforts were coordinated to rescue Humphrey, including the world’s most powerful amplification system from the U.S. Navy. Numerous agencies—fish, wildlife, and the U.S. Army’s 481st Transportation Company—collaborated to lure Humphrey back down the Sacramento River and beyond the Golden Gate into the Pacific Ocean.

Just a year before, a small indigenous group of people—the Chukchis—in an area larger than Texas (but where the population is 1/500 the size) managed to free 3,000 beluga whales. Why was Humphrey’s story publicized and the Chukchis’s low-tech successful evacuation of 3,000 beluga whales limited to a fictionalized story of a girl who had the ability to hear the sound of Narna?

References


*Posted on TextProject.org, on September 12, 2012*
This past Monday, I gave a workshop for teachers about to start the academic year and the emotions surrounding the Common Core State Standards (CCSS) were palpable. There was hope for higher levels of student proficiency and awareness that CCSS offers new opportunities for an emphasis on acquisition of knowledge. But there was also worry and nervousness. Topics such as text complexity, in particular, generated concern, especially for students who are English Learners (and I was speaking in an area with a large population of English Learners).

We are embarking on huge changes in English/Language Arts. Unlike the No Child Left Behind legislation of 2001, these changes have not been legislated. That’s good news. But it also means a substantial amount of professional interpretation and implementation at a time when there aren’t many professional development resources. There are so many interpretations and so many suggestions about what the Standards mean—including terms that are not in the CCSS but which have been equated with it (e.g., the term close reading).

Whenever a new document comes out, such as Preventing Reading Difficulties in Young Children in 1998, Teaching Children to Read (report of the National Reading Panel) in 2000, and now CCSS, in 2010, my thoughts turn to the first national project in which I was involved—as the director of the staff that worked with the Commission of Reading and produced the report Becoming a Nation of Readers in 1985.

Becoming a Nation of Readers continues to be a summary of a vital era of research on reading processes and texts—the 1970s and early 1980s. On some topics such as the use of text difficulty systems for selecting and teaching texts, a substantial amount of research has not been gathered subsequently and Becoming a Nation of Readers remains a summary of critical evidence. Because of the relevance of the message of Becoming a Nation of Readers for the current educational context, TextProject is providing an ebook version of this important document, which has been out-of-print for over a decade.

The section on “School Textbooks” within the chapter “Extending Literacy” of Becoming a Nation of Readers illustrates just one of the areas of this report that merits revisiting. In particular, I encourage educators to read the first section—“Controlling the difficulty of schoolbooks.” This section deals with readability formulas. The term “readability formulas” may seem like an archaic term in the current CCSS context where text complexity is the focus. But the summary of research in this section is very relevant to text complexity, especially when quantitative systems are used to identify bands of text complexity at different grades in Appendix A of the CCSS and the 2012 supplement to the CCSS entitled “Measures of Text Difficulty.” Today’s quantitative systems may be called text difficulty systems but they function...
in a similar way to the readability formulas described in this section of Becoming a Nation of Readers by algorithmically establishing text difficulty on the basis of sentence length and vocabulary frequency. The name may have changed but quantitative systems of text difficulty/complexity are forms of readability formulas.

Becoming a Nation of Readers cautioned against overreliance on readability formulas and the evidence it summarized prompted a reduction in their use. Following Becoming a Nation of Readers, the nation’s two largest states—California and Texas—initiated policies against the use of readability formulas as one of the criteria for adoption of reading and English textbooks in their states. Educators who are being introduced to quantitative systems in the CCSS era and weren’t in classrooms or universities at the time of Becoming a Nation of Readers should be aware that readability formulas have not been a driving force in American core reading programs since then. The reliance on quantitative measures of text difficulty for the staircase of text complexity within CCSS Appendix A and its supplement represents a return to practices that research of several decades ago had challenged.

The summary of research in Becoming a Nation of Readers and the recommendations of the Commission are worthy of attention, even if some terms are out of fashion and the cover of the report in the ebook looks worn. The truth of the matter is that the cover is worn. The ebook is a scanned version of my last copy of Becoming a Nation of Readers—a volume to which I have turned many times, as some important features of American reading education fall by the wayside (e.g., well-organized and monitored independent reading), new policies and demands surface (formal reading instruction in kindergarten), and old practices reappear with new labels (e.g., readability formulas become text difficulty or complexity systems).
For the first time in a standards document, the Common Core State Standards (CCSS) has a standard—Standard 10—devoted solely to ensuring that students increase ability to read complex texts. The Common Core used Lexiles to identify a quantitative staircase of text complexity through which students need to pass.

How are teachers supposed to use this information? Lexiles, like most readability systems, are good for sorting large groups of texts. But that isn’t what teachers do. Teachers typically have particular texts that they need to teach. What does it mean for a teacher to teach a text with a 700 Lexile? And why do Grapes of Wrath¹, a text taught in high school, and Where do Polar Bears Live², a text for early readers, have a similar Lexile—around 700—which is toward the end of the CCSS second-third grade step in the text complexity staircase. These Lexiles don’t make sense until you examine what makes up a Lexile—sentence length and word frequency.

This information helps to explain this strange sorting of text. Grapes of Wrath has shorter sentences, on average, than Polar Bears. This makes sense. After all, there is a great deal of dialogue in a novel like Grapes of Wrath, while Polar Bears is an informational book without dialogue. Sentences in dialogue are usually short. But when it comes to vocabulary, Grapes of Wrath is harder. The lower the word frequency score, the harder the vocabulary in the text.

The information on sentence length and word frequency is a great way for teachers to start zooming into what makes text complex. That is why—in teachers’ guides in Scott Foresman Reading Street Common Core³—this information is given for each focus text. Teachers use this information to begin delving into what makes a text more or less complex for students. Both parts of a Lexile—sentence length and word frequency—are important. But word frequency or vocabulary is especially critical, since it is one of the strongest indicators of a text’s difficulty.

And that is precisely why word frequency information is included in the Reading Street Common Core edition at the front of every unit on a page like the one below. The word

<table>
<thead>
<tr>
<th>Text Complexity</th>
<th>Lexile</th>
<th>Sentence Length</th>
<th>Word Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grapes of Wrath</td>
<td>680</td>
<td>9.2</td>
<td>3.46</td>
</tr>
<tr>
<td>Where do Polar Bears Live?</td>
<td>700</td>
<td>10.4</td>
<td>3.53</td>
</tr>
</tbody>
</table>
frequency measure gives a sense of how many rare words are in a text. Rare words are ones that occur once or a few times for every million words of text. The word frequency measure doesn’t tell you exactly what the rare words are or exactly how many there are. But it does serve as a road sign—either “caution ahead” or “ok to maintain the speed limit.”

The range in word frequency is given in the table below. High numbers mean fewer rare words; low numbers mean more rare words in texts. Let me illustrate how a teacher would use this information with two texts from the Common Core exemplars (from Appendix B of the CCSS): Telescopes from the end of the scale where texts have many rare words and The Treasure from the top end with few rare words.

Telescopes, a text identified by the CCSS as an exemplary informational text for Grades 4–5, has a Lexile of 1070. Sentence length is 12.7 (moderate for elementary text). But the word frequency is 3—which indicates that the amount of rare vocabulary is great. A sample of the text illustrates the kind of vocabulary in the text:

“Non-optical telescopes are designed to detect kinds of electromagnetic radiation that are invisible to the human eye. These include radio waves, infrared radiation, X rays, ultraviolet radiation, and gamma rays.”

As this illustration shows, there are numerous technical, complex words. In fact, the number of rare words is so great and their meanings so complex, a teacher might decide that this text is simply not appropriate for fourth or fifth graders. But if the text is a mandated one in a curriculum, the teacher might decide to design a lesson specifically around the vocabulary. For this lesson, a handful of pictures of telescopes gotten from different websites could be especially useful.
<table>
<thead>
<tr>
<th>Word Frequency</th>
<th>Description</th>
<th>A Common Core Exemplar</th>
</tr>
</thead>
<tbody>
<tr>
<td>Few rare words</td>
<td>3.9–4.0+</td>
<td>A handful of rare words in entire text—often synonyms for words students know.</td>
</tr>
<tr>
<td></td>
<td>3.7–3.8</td>
<td>Approximately 2 rare words per every 100 words in a text.</td>
</tr>
<tr>
<td></td>
<td>3.5–3.6</td>
<td>2–3 rare words per every 100 words, some synonyms for known concepts, some representing new concepts/places/people.</td>
</tr>
<tr>
<td></td>
<td>3.3–3.4</td>
<td>3–5 rare words per every 100 words—some representing unknown concepts.</td>
</tr>
<tr>
<td>Many rare words</td>
<td>3.1–3.2</td>
<td>4–6 rare words per 100 words—almost all representing unknown concepts.</td>
</tr>
<tr>
<td>(Usually very technical)</td>
<td>3.0 and below</td>
<td>A large number of rare words (as many as 7 or more words per 100 words), usually highly technical words in sciences.</td>
</tr>
</tbody>
</table>

At the opposite end of the scale is a text in the category with fewest rare words: The Treasure with a word frequency of 3.9. This text is a CCSS exemplary narrative text for the grade 2-3 step on the text complexity staircase, with a Lexile of 650 and average sentence length of 11.9. Looking at the book confirms a sprinkling of rare words—not many, but a handful, as illustrated in this sentence:

“In thanksgiving, he built a house of prayer, and in one of its corners he put an inscription: Sometimes one must travel far to discover what is near.”

For many second graders, the level of vocabulary will be manageable. A word such as inscription can be explained easily (e.g., a label with writing). But this sentence is a reminder of another piece that goes into making up a Lexile: sentence length. An average of 12 words per sentence means that there are some long sentences in the texts. This sentence also reminds the teacher that a text’s genre, in this case, a fable, contributes to text complexity. The vocabulary may not be a problem for proficient second graders but the complex sentences and the type of text might be. Such information is located in the qualitative analysis that is part of the Reading Street Common Core summary. Here teachers can consider the background knowledge and other text features. But the process of zooming in on what is critical to teach in texts can begin with
the quantitative information—especially on vocabulary or word frequency. By providing this information, Reading Street Common Core aids teachers in knowing how and what to teach to increase students’ capacity with complex texts.

References


Posted on TextProject.org on June 21, 2012
There is a long history of research that identifies the manner in which text complexity as measured by readability formulas can be manipulated through changes in syntax and/or vocabulary. In the current generation of readability formulas—ATOS, DRP, and Lexile—the complexity of the vocabulary in a text is established by computing an algorithm on the average frequency of the words in a text (with a word’s frequency established relative to all of the words in the database).

The vast discrepancies in the frequencies of words in written English—90% of the total words in texts in the Common Core exemplars is explained by 4,000 words and simple derivatives (e.g., help, helped, helping, helps, helper)\(^1\). The other 10% of the words come from a group of approximately 280,000 or more words. Even with statistical procedures to “normalize” the distribution, the differences in word frequency averages for texts are small. For example, the word frequency averages for The Gettysburg Address\(^2\)—an exemplar text for grades 9–10—and Henry and Mudge\(^3\)—an exemplar text for grades 2–3—are the same: 3.6.

With only small differences in the word frequency average, the role of syntax looms large. \(^4\) Gettysburg Address, with a Lexile of 1230, has an average sentence length of 22.08 words, while Henry and Mudge, with a Lexile of 460, has an average sentence length of 7.89 words. The word frequency averages, however, are similar.

The following example illustrates how a text—a portion of The Wind in the Willows\(^5\)—can be manipulated to fit into all of the grade bands of the Common Core State Standards’\(^6\) staircase of text complexity. What is critical to note is that all of the changes were at the level of syntax. None of the rare or infrequent vocabulary was changed—penetrating, imperiously, gaveled, residences, divine, discontent. In the final excerpt (with a Lexile equivalent to the third trimester of grade one), all of these words appear. The only changes that have been made are to the length of sentences. Kenneth Grahame’s long sentences have been made into shorter sentences—with enormous changes to the “readability” of the text.
Illustration of Readability Changes: Syntax Changes Only

**CCSS Grade Band:** 11–CCRR

**Lexile (Sentence Length, Mean Word Frequency):** 1370 (28/3.68)

**Text:** The Mole had been working very hard all the morning, spring-cleaning his little home. First with brooms, then with dusters; then on ladders and steps and chairs, with a brush and a pail of whitewash; till he had dust in his throat and eyes, and splashes of whitewash all over his black fur, and an aching back and weary arms. Spring was moving in the air above and in the earth below and around him, penetrating even his dark and lowly little house with its spirit of divine discontent and longing. It was small wonder, then, that he suddenly flung down his brush on the floor, said “Bother! and O blow!” and also “Hang spring-cleaning!” and bolted out of the house without even waiting to put on his coat. Something up above was calling him imperiously, and he made for the steep little tunnel which answered in his case to the gavelled carriage-drive owned by animals whose residences are nearer to the sun and air. So he scraped and scratched and scrubbed and scrooged and then he scrooged again and scrubbed and scratched and scraped, working busily with his little paws and muttering to himself, “Up we go! Up, up we go” till at last, *pop!* his snout came out into the sunlight, and he found himself rolling in the warm grass of a great meadow.

**Number & Nature of Changes:** Elimination of exclamation marks (combining sentences); elimination of word *pop*; substitution of *came* with *popped*

**CCSS Grade Band:** 9–10 (Original Text)

**Lexile (Sentence Length, Mean Word Frequency):** 1200 (22.5/3.71)

**Text:** The Mole had been working very hard all the morning, spring-cleaning his little home. First with brooms, then with dusters; then on ladders and steps and chairs, with a brush and a pail of whitewash; till he had dust in his throat and eyes, and splashes of whitewash all over his black fur, and an aching back and weary arms. Spring was moving in the air above and in the earth below and around him, penetrating even his dark and lowly little house with its spirit of divine discontent and longing. It was small wonder, then, that he suddenly flung down his brush on the floor, said “Bother!” and “O blow!” and also “Hang spring-cleaning!” and bolted out of the house without even waiting to put on his coat. Something up above was calling him imperiously, and he made for the steep little tunnel which answered in his case to the gavelled carriage-drive owned by animals whose residences are nearer to the sun and air. So he scraped and scratched and scrubbed and scrooged and then he scrooged again and scrubbed and scratched and scraped, working busily with his little paws and muttering to himself, “Up we go! Up we go!” till at last, *pop!* his snout came out into the sunlight, and he found himself rolling in the warm grass of a great meadow.
The Mole had been working very hard all the morning, spring-cleaning his little home. First with brooms, then with dusters; then on ladders and steps and chairs, with a brush and a pail of whitewash; till he had dust in his throat and eyes, and splashes of whitewash all over his black fur, and an aching back and weary arms. Spring was moving in the air above and in the earth below and around him, penetrating even his dark and lowly little house with its spirit of divine discontent and longing. It was small wonder, then, that he suddenly flung down his brush on the floor. He said “Bother!” and “O blow!” and also “Hang spring-cleaning!” and bolted out of the house without even waiting to put on his coat. Something up above was calling him imperiously, and he made for the steep little tunnel which answered in his case to the gaveled carriage-drive owned by animals whose residences are nearer to the sun and air. So he scraped and scratched and scrabbled and scrooged and then he scrooged again and scrabbled and scratched and scraped, working busily with his little paws and muttering to himself, “Up we go! Up we go!” till at last, pop! his snout came out into the sunlight, and he found himself rolling in the warm grass of a great meadow.
busily with his little paws and muttering to himself, “Up we go! Up we go!” till at last, pop! his snout came out into the sunlight, and he found himself rolling in the warm grass of a great meadow.

**Number & Nature of Changes:** Same as for grade band 6–8 above plus: Eliminate till (forming 2 sentences); Insert It (forming 2 sentences); Eliminate and (forming 2 sentences); eliminated and (forming 2 sentences); Inserted he; changed working to worked (forming 2 sentences)

**CCSS Grade Band:** 2-3

**Lexile (Sentence Length, Mean Word Frequency):** 740 (12/3.70)

**Text:** The Mole had been working very hard all the morning. He was spring cleaning his little home. First with brooms, then with dusters; then on ladders and steps and chairs, with a brush and a pail of whitewash. He had dust in his throat and eyes, and splashes of whitewash all over his black fur, and an aching back and weary arms. Spring was moving in the air above and in the earth below and around him. It penetrated even his dark and lowly little house with its spirit of divine discontent and longing. It was small wonder, then, that he suddenly flung down his brush on the floor. He said “Bother!” and “O blow!” and also “Hang spring-cleaning!” and Then he bolted out of the house without even waiting to put on his coat. Something up above was calling him imperiously. He made for the steep little tunnel which answered in his case to the gaveled carriage-drive owned by animals whose residences are nearer to the sun and air. So he scraped and scratched and scrabbled and scrooged. Then he scrooged again and scrabbled and scratched and scraped. He worked busily with his little paws and muttering to himself, “Up we go! Up we go!” At last, pop! His snout came out into the sunlight. He found himself rolling in the warm grass of a great meadow.

**Number & Nature of Changes:** Same as for grade band 4–5 above plus: Inserted He was (forming 2 sentences); Replaced and with Then he (forming 2 sentences); eliminated and (forming 2 sentences)

**CCSS Grade Band:** Middle to end of Grade 1

**Lexile (Sentence Length, Mean Word Frequency):** 360 (7.13/3.70)

**Text:** The Mole had been working very hard all the morning. He was spring cleaning his little home. First with brooms, then with he used brooms and dusters. Then he got on ladders and steps and chairs, with a brush and a pail of whitewash. He had dust in his throat and eyes. He had splashes of whitewash all over his black fur. He had an aching back and weary arms. Spring was moving in the air above and, It was moving in the earth below and around him. It penetrated even his dark and lowly little house with its spirit of divine discontent and longing. It was small wonder, then, that he suddenly flung down his brush on the floor. He said “Bother!” and “O blow!” and
also: “Hang spring-cleaning!” Then he bolted out of the house without even waiting. He did not even wait to put on his coat. Something up above was calling him imperiously. He made for the steep little tunnel which answered in his case to the gaveled carriage-drive owned by animals whose residences are nearer to the sun and air. So he scraped and scratched and scrooged. Then he scrooged again and he scrooged and he scratched and scraped. He worked busily with his little paws and muttering. As he worked, he muttered to himself, “Up we go! Up we go!” At last, pop! His snout came out into the sunlight. He found himself rolling in the warm grass of a great meadow.

Number & Nature of Changes: Same as for grade band 2–3 above plus: 12 sentences made out of 6 by adding pronouns, simple verbs (used, had, got, moving, did not, have); and phrase “As he worked”

References


Posted on TextProject.org on June 26, 2012
Standard 10 defines a grade-by-grade “staircase” of increasing text complexity that rises from beginning reading to the college and career readiness level. Whatever they are reading, students must also show a steadily growing ability to discern more from and make fuller use of text, including making an increasing number of connections among ideas and between texts, considering a wider range of textual evidence, and becoming more sensitive to inconsistencies, ambiguities, and poor reasoning in texts. (Common Core State Standards Initiative, 2010, p. 8).

A standard that emphasizes capacity with increasingly more complex text is a first in a national or state standards document. Text complexity, according to the CCSS/ELA is a function of three factors: qualitative (e.g., levels of meaning, structure, knowledge demands), quantitative (e.g., readability measure and other scores of text complexity, and matching reader to text and task (e.g., reader variables such as motivation, knowledge, and experiences; task variables such as purpose and questions). Of the measures that the CCS proposes for establishing text complexity, only data on one type of quantitative measure—lexiles—is explicitly presented and easily obtained.

Similar to the readability formulas that have been used in American schools for almost a century, the lexile of a text is established through an algorithm that considers sentence length and word frequency. The computation produces a lexile that can be placed on a scale which spans 0 (easiest texts) to 2000 (most complex texts). A single number is typically presented as the lexile for an entire text—including a full-length text. For example, the lexiles for a well-loved children’s book, Sarah: Plain and Tall is 430, while that of Stories Julian Tells is 700. As a single number, a lexile gives a general indicator of difficulty.

Green Eggs and Ham has a lexile of 30, while that of Pride and Prejudice is 1030L. These texts fall a general direction that makes sense to most educators acquainted with these texts. Green Eggs and Ham is easy; Sarah: Plain and Tall somewhat harder; and Pride and Prejudice is the most complex of the three.

When an individual text is examined for purposes of instruction and independent reading, particular features of a text can make the lexile difficult to predict. For example, Harry Potter and the Chamber of Secrets and Old Man and the Sea have the same lexile: 940. While the Rowlings book is by no means a simple one, it has a style and content that likely make it more palatable to a fifth grader than the Heminway text.

Information on sentence length and word frequency gives more specific information for the lexile rating. Often, the lexiles of texts vary considerably because of big differences in the lengths of sentences. When authors use complex sentence structure, students’ comprehension can be affected. But, sometimes, authors
have a style where they use the word “and” to join ideas. That’s the case with example 1 in Table 1. That text and the one in Example 2 have the same average word rating—3.8. But the first text has an average of 3.5 words more per sentence than the second text. The difference in sentence length affects the Lexile: 700 for The Stories Julian Tells and 430 for Sarah, Plain and Tall.

Short sentences do not necessarily make a text easy to read. In the text segment from Sarah: Plain and Tall, Caleb keeps begging his older sister to retell the story of his birth (followed by their mother’s death). The text is more complex conceptually than the description of what Julian and his brother have chosen to plan in their garden.

It is the average word frequency that is even more critical to consider than the average sentence length. A low average word frequency means that the text likely has a number of words that many students may not have seen in the past. Teachers should especially be aware of big differences in the average word frequencies. The One-Eyed Giant (example 3) has a lexile of 680 but it has a word frequency score of 3.47. Sentences are about the same length as The Stories Julian Tells but there are more infrequent words. Vocabulary such as Cyclopes, savage, and devour will likely make The One-Eyed Giant more challenging for third graders than The Stories that Julian Tells.

Children’s reading performances are heavily influenced by the vocabulary in a text. Typical word frequency ranges for different grades are given in Table 2. When word frequency averages are substantially lower than typical grade ranges, teachers should know that students might need some extra vocabulary support.

And, always remember: There are big differences in the styles and vocabulary of stories (narratives) and informational texts (content-area texts). Readability formulas like lexiles often underestimate the difficulty of stories and overestimate the difficulty of informational texts. Why is that? In stories, authors often use dialogue. Typically statements in conversations are short. Short sentences lend themselves to lower lexiles.

In informational texts, authors often use fairly infrequent words (e.g., degrees, frigid, Arctic, blubber in a text on polar bears). Infrequent words have lower ratings than the more frequent words that are found in stories and these words are repeated often in an informational text. But the repetition of the infrequent words can be an aid to comprehension. Further, the words in an informational text usually relate to a theme that also can make words easier to comprehend.

When the average for sentence length is substantially beyond the typical range, teachers should check the author’s style. Usually, long sentences won’t be much of a problem in stories. However, long sentences that have important ideas in phrases or clauses can be a problem for students when they are reading content-area texts.

Teachers should use the lexile rating as an initial piece of information, much like a check of someone’s temperature. A temperature can be high or low for lots of different reasons. The average sentence length and average word frequency gives teachers more specific information that is useful for decision-making.
References


Table 1: Examples of Texts & General and Specific Information

<table>
<thead>
<tr>
<th>Example</th>
<th>Source &amp; Author</th>
<th>General Lexile</th>
<th>Specific Lexile Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>My father said he wasn’t sure he wanted either giant corn or a flower house, and if we wanted them, we would have to take care of them all summer by pulling weeds.</td>
<td>The Stories Julian Tells, Ann Cameron</td>
<td>700 Lexile</td>
</tr>
<tr>
<td>2</td>
<td>“Every-single-day,” I told him for the second time this week. For the twentieth time this month. The hundredth time this year? And the past few years?</td>
<td>Sarah—Plain and Tall, Patricia MacLachl</td>
<td>430 Lexile</td>
</tr>
<tr>
<td>3</td>
<td>He was the most savage of all the Cyclopes, a race of fierce one-eyed giants who lived without laws or leader. The Cyclopes were ruthless creatures who were known to capture and devour any sailors who happened near their shores.</td>
<td>The One-eyed Giant, Mary Pope Osborne</td>
<td>680 Lexile</td>
</tr>
</tbody>
</table>
Table 2: Typical Averages for Word Frequency and for Sentence Length¹

<table>
<thead>
<tr>
<th>Gr. Band</th>
<th>Narrative Texts</th>
<th>Informational Texts</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Word Frequency</td>
<td>Sentence Length</td>
</tr>
<tr>
<td>2</td>
<td>3.7-3.9</td>
<td>8-10</td>
</tr>
<tr>
<td>3</td>
<td>3.6-3.8</td>
<td>9-11</td>
</tr>
<tr>
<td>4</td>
<td>3.5-3.8</td>
<td>10-12</td>
</tr>
<tr>
<td>5</td>
<td>3.4-3.7</td>
<td>11-13</td>
</tr>
</tbody>
</table>

¹Based on an analysis of the exemplars presented in Appendix B of the Common Core State Standards by Elfrieda H. Hiebert (December 9, 2010). The view of text complexity within the Common Core Standards: What does it mean for struggling Readers? Plenary address at the annual conference of the American Reading Forum, Sanibel, FL.

Posted on TextProject.org, February 8, 2011
There is a long history of educators recognizing how text complexity affects the success of beginning and struggling readers, as well as of devising systematic methods for evaluating and controlling text complexity. These have had varying levels of basis in or validation by research.

Elfrieda Hiebert’s Text Elements by Task (TExT) model advances the state of the art by focusing on the multiple tasks involved in successful reading, including:

- recognizing familiar words
- decoding unfamiliar words
- obtaining meaning and comprehension from the text

Research shows that beginning and struggling readers benefit when the number of unfamiliar words in a text is kept low enough to permit the tasks of meaning and comprehension to occur. When readers are overwhelmed by the task of decoding too many new words, their cognitive capability to also extract meaning is diminished and their overall proficiency suffers.

**How TExT Measures Text Difficulty**

The TExT model evaluates text difficulty by considering both linguistic content and cognitive load.

**How TExT Measures Linguistic Content**

Left Degree to which phonetically-regular words (shown in red) appear

Right Degree to which high-frequency words (shown in purple) appear

**How TExT Measures Cognitive Load**

- Ben get the vet!
  - No, you get the vet for the pet!

- Ben has a pet hen.
  - Ben’s pet hen goes “Cluck, cluck, cluck.”

- Nat, bat the rat.
  - What can you do?

- So he made a scarf of it.
  - And sang in the men’s chorus.
Rate of introducing new words (shown in blue), and repetition of new words. TExT accounts for new words across a series of passages.

For linguistic content, the TExT model calculates the percentage of words in a text that conform to a specific curriculum, which is expressed as a combination of:

- phonetically-regular words
- high-frequency words

The curriculum used for the analysis is adjustable to each reading level, so the same text will score a different level of difficulty when analyzed against a different curriculum.

For cognitive load, the TExT model examines the introduction of new words in a text, as well as the repetition of new words. New words are those that fall outside of the specified curriculum. The TExT model scores a text to be more difficult if it contains a large percentage of new words, but repetition of those words reduces the overall difficulty.

**The TExT Model in QuickReads**

In addition to its use in analyzing existing texts, the TExT model may be used to help create texts and entire reading programs such as QuickReads. In constructing the QuickReads program, a curriculum was established for each of six levels based on an analysis of texts promoted as standards and those used in standardized tests at those levels (see table). Texts in the QuickReads program are designed so that 98% of words are within the curriculum for that level. New words are repeated several times through the course of a QuickReads topic.

<table>
<thead>
<tr>
<th>QuickReads Level</th>
<th>Grade-Level Curriculum</th>
<th>Phonics &amp; Syllable Patterns</th>
<th>High-Frequency Words</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level A</td>
<td>Early Grade 2</td>
<td>All long and short vowel patterns in single-syllable words</td>
<td>300 most frequent words</td>
</tr>
<tr>
<td>Level B</td>
<td>Grade 2</td>
<td>All long and short vowel patterns, and r-controlled vowels in single-syllable words</td>
<td>400 most frequent words</td>
</tr>
<tr>
<td>Level C</td>
<td>Grade 3</td>
<td>All vowel patterns in single-syllable words</td>
<td>1,000 most frequent words</td>
</tr>
<tr>
<td>Level D</td>
<td>Grade 4</td>
<td>Two-syllable words</td>
<td>1,000 most frequent words</td>
</tr>
<tr>
<td>Level E</td>
<td>Grade 5</td>
<td>Multi-syllable words with inflected endings</td>
<td>2,500 most frequent words</td>
</tr>
<tr>
<td>Level F</td>
<td>Grade 6</td>
<td>Multi-syllable words with inflected endings</td>
<td>5,000 most frequent words</td>
</tr>
</tbody>
</table>
The TExT model is augmented in the QuickReads program to help promote fluency and to provide interesting and important content to allow readers practice in reading for comprehension.

To promote the objective of enhancing fluency, the length of QuickReads texts are controlled to help readers become more efficient over time. Each QuickReads passage is designed to be read with meaning in about one minute. The length of the passages increases within each level, and across levels, with the ultimate objective of meaningful reading at more than 130 words per minute, a level shown to correlate with overall reading proficiency among fourth graders.

Fluency Targets for Each QuickReads Level

<table>
<thead>
<tr>
<th>QuickReads Level</th>
<th>Grade-Level Curriculum</th>
<th>Target Number of Words per Minute</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Book 1</td>
</tr>
<tr>
<td>Level A</td>
<td>Early Grade 2</td>
<td>80 words</td>
</tr>
<tr>
<td>Level B</td>
<td>Grade 2</td>
<td>90 words</td>
</tr>
<tr>
<td>Level C</td>
<td>Grade 3</td>
<td>100 words</td>
</tr>
<tr>
<td>Level D</td>
<td>Grade 4</td>
<td>110 words</td>
</tr>
<tr>
<td>Level E</td>
<td>Grade 5</td>
<td>120 words</td>
</tr>
<tr>
<td>Level F</td>
<td>Grade 6</td>
<td>130 words</td>
</tr>
</tbody>
</table>

Reading for meaning requires interesting content, and the QuickReads program features non-fiction standards-based content in science and social studies (the QReads adaptation for older students adds arts/culture and literature/language). In addition to providing a comprehensive program of useful background knowledge, the non-fiction content in QuickReads enhances the program’s reading objectives. The unfamiliar words in QuickReads are the content words that are central to the meaning of the texts. These words are repeated several times, just as they would be in similar texts at the middle- and high-school levels.

Summary of the TExT Model as Used in QuickReads

The TExT model as used in QuickReads fosters the development of oral reading skills through the independent practice of reading short, 1-minute informational text in print or on the computer, featuring:

¥ 98% high-frequency words and words with a grade-appropriate set of phonic/syllabic patterns.

¥ 2% content-area vocabulary with repeated exposure.

¥ Multiple thematically linked passages.

¥ Informational text content that correlates to national standards in social studies and science.

Posted on TextProject.org on February 7, 2012.
Theoretical models of reading acquisition are based largely on empirical studies of alphabetic writing systems, most notably English. The implicit assumption in the past was that findings from the acquisition of English would generalize to other languages (Vaid & Padakannaya, 2004). This assumption has been tested over the past two decades by a considerable body of cross-linguistic literature that has compared reading processes in English to other alphabetic and non-alphabetic systems, such as, Spanish, German, Italian, Portuguese, Hebrew and Chinese (Leong & Tamaoka, 1998; Wimmer & Goswami, 1994; Zoccolotti, et al., 1999). However, considerably less is known about reading processes in syllabic and semi-syllabic writing systems, such as those used by a sizeable proportion of the world’s population. In this column, we consider the generalizability of features of the TExT model to alphasyllabic languages, such as those in use in India.

Perfetti and Liu (2005) distinguish among three levels of analysis of a written language that are applicable to this analysis. The broadest level is that of the writing system, which reflects the principles of the fundamental writing-language relationships, for example, an alphabetic versus a syllabic system. The next level is that of orthography, which, by contrast, express differences within a writing system. Thus, even though English and German are both alphabetic writing systems, they have different orthographies. Certain orthographies may be more or less shallow or deep, even within a given writing system (for example, German has a more transparent orthography than does English). The third level is that of the script, which is sometimes used to refer to one or the other of the broader levels; however, in Perfetti and Liu’s classification, a script refers only to the graphemic aspects of the symbols used to represent the language. Each of these levels can contribute independently to the reading process by influencing different factors related to it.

There are 29 different languages that are each spoken by more than a million speakers in India, of which 22 are recognized officially by the government (Census of India, 2001). These languages belong to at least four different language families, of which the two largest groups are the Indo-Aryan languages spoken in the North of India, and the Dravidian languages of the South. These two languages families are linguistically distinct; however, the writing system used is common, and descended from the Brahmi writing system.

The Indic scripts, as they are sometimes called, are alphasyllabaries or semisyllabaries that combine aspects of the syllabic and alphabetic systems. Like syllabic languages, the basic symbol unit, the akshara, maps on to phonology at the level of the syllable. At the same time, the akshara also has phonemic vowel markers (diacritics) that can transform the schwa vowel sound inherent in the consonant symbols, rendering it...
somewhat akin to alphabetic systems. Korean Hangul is another example of an alphasyllabary. There are several crucial features of the Indic alphasyllabaries that distinguish them from English. First, there is no difference between letter name and letter sound, such that akshara knowledge requires the mastery of a single akshara name-sound (Nag, 2007). Second, because there is a one-to-one correspondence between akshara and sound (at the level of the syllable), most Indian languages have symbols for approximately 35 consonants and between 12-16 primary vowel symbols. Each vowel sound also has symbols for secondary diacritics that are combined with consonants to produce unique sounds (e.g., /gu/, /sai/, /ko/, etc.). The orthography is very regular, highly transparent and rule-bound. Third, the visuo-spatial arrangement of syllables in the akshara script is very complex. The secondary vowel diacritics can be placed above, below, to the left, or to the right of the base consonant, and does not always follow the left-to-right linear sequencing of English.

The script might, therefore, lend itself to visual processing to a greater degree than the largely phonological processing of English, because syllabic boundaries are often visually apparent. In some of the Indo-Aryan languages of the North that use the Devanagiri script, a horizontal line is placed on top of each word, so that even word boundaries are visually apparent. The final feature of Indic languages that potentially influences reading acquisition is at the morphemic level of the spoken language. Several Indian languages, especially the Dravidian languages of the South, are extremely inflected and agglutinative, that is, a single word may be made up of several smaller morphemes, with each morpheme carrying its own unit of meaning. Thus, Indic languages differ from English at all three levels identified by Perfetti and Liu (2005): at the levels of writing systems (alphabetic versus alphasyllabaries); at the level of orthography (deep and irregular, versus shallow and transparent); and at the level of script (phonological versus visuo-phonological). Further, morphemic aspects of the spoken language may also influence the manner in which words are represented and acquired in the written scripts.

The TExT model identifies two dimensions of significance to the early acquisition of reading: linguistic content and cognitive load (Hiebert, 1999; Hiebert & Mesmer, 2005; Menon & Hiebert, 2005). How well do these dimensions generalize to reading acquisition in the Indic languages? There are barely a handful of studies on reading processes in these languages (see Vaid & Padakannaya, 2004), even fewer on reading acquisition (Nagy, 2007), and none on features of text that could support reading acquisition. Given the paucity of empirical studies related these topics we will use two strategies to fill in the gaps in our knowledge-base. First, we will borrow evidence from studies of the Korean language where available (since Korean Hangul is also an alphasyllabary). Second, we will make theoretical speculations where empirical evidence is not available.

**Linguistic Content**

The first dimension of the TExT model – linguistic content – identifies critical word-level content that texts can model to support beginning readers (Hiebert, 1999; Menon & Hiebert, 2005). Two features of significance are discussed here – rimes and high frequency words.
**Rimes.** Studies of reading in English have repeatedly established the utility of the rime unit (vowel plus coda of the syllable) during reading acquisition (Bowey, Vaughn & Hansen, 1998; Goswami, 1993; Goswami, 1995; Juel & Solso, 1981; Treiman, 1992). However, there is some evidence that in more transparent orthographies like Dutch (an alphabetic language), rime units are less useful to novice readers — raising the question of whether a more predictable orthography might be less reliant on rime units, than a less predictable one, like English (Perfetti & Liu, 2005). Moving to alphasyllabaries, the evidence is even more interesting. Summarizing a line of empirical work on Korean Hangul, Perfetti and Liu (2005) report that not only did Korean children not display a rime preference while reading; they actually displayed a preference for the syllable body (onset + vowel), in tasks that involved reading. Even when reading was not involved, and Korean children were orally presented with words, they judged both words and nonwords with shared syllable bodies (e.g. koon and koop) as more similar than stimuli with shared rimes (koon and poon). While there is no direct evidence about the utility of rimes in Indic languages, we can hypothesize that similar findings would hold for them. There are a couple of possible reasons for this. First, the orthography is more transparent than English, so that readers are less reliant on the rime unit for recognizing the vowel sounds within syllables. Second, the onset has a primary place in the akshara based writing system, with the vowels represented as diacritics that are visuo-spatially organized around the onset. For example, the consonant /g/ (which has an inherent schwa sound in it) would be transformed by the accompanying vowel diacritics into /ga/ /gi/ /gu/ /gai/ and so on. This would give salience to the syllable body in the reader/speaker/listener’s mind, especially if the speaker/listener has already received some instruction in the akshara-based system.

**High frequency words.** Rapid recognition speeds with familiar, high frequency words is viewed as critical to reading acquisition in the English language (Ehri & Wilce, 1983; Juel & Roper/Schneider, 1985; McCormick & Samuels, 1979; Perfetti, Finger & Hogaboam, 1978). Given the emergent stages of scholarship on Indic languages, we were able to locate only a single empirical study that directly addressed the utility of word frequency for the acquisition of these languages. Karanth, Mathew and Kurien (2004) examined the effect of word frequency effects on 15-45 year old, proficient readers of the Kannada script – a Dravidian language. These researchers did not see word frequency effects for orthographically simple words; however, word frequency did matter for orthographically complex words, of the CCVCC type. Would this result be generalizable to beginning readers? In the absence of reliable evidence we are hypothesizing that it would — that acquiring logographic representations of “whole words” might not be as critical or as efficient a way to acquire new words in a transparent and regular orthography, as it is in English. Nevertheless, it would seem commonsensical to assume that orthographic representations of highly frequent words stored in the memory of proficient readers would be more stable than those of low frequency words, and hence would have shorter Reaction Times. However, this study failed to find any indication of stability of orthographic representations of the more highly frequent words when the orthography of the words was simple. We are speculating that the highly inflected and agglutinative nature of
Dravidian languages might play a part in this. Kannada (the language used in this study) is not as inflected as some of the other Dravidian languages, but it is more so than Indo-Aryan languages, and English. In such languages, it might be challenging to store stable orthographic representations of whole words, given the number and variety of forms that each “root” word can acquire, depending on the context, and the number of morphemic units that get attached to it. The results might be different for less inflected languages.

Cognitive Load

The second dimension of the TExT model – cognitive load – attends to text features that determine its difficulty level for the reader (Menon & Hiebert, 2005). The cognitive demands of the akshara writing system are insufficiently understood. A promising line of research that is currently underway examines a variety of phonological, visual, oral, and spelling skills in 8-12 year old children learning to read and write in the Kannada language (Nag, 2007; Nag, Trieman, & Snowling, 2010). Preliminary findings from this line of research reveal that the basic challenge in acquiring literacy in Kannada lies in acquiring the extensive akshara set that has 474-476 symbols that combine consonants with specific vowel sounds. Akshara acquisition entails learning the rules of ligaturing the vowels to the consonants, and sometimes, the consonants to each other, in complex visuo-spatial arrangements. The acquisition of the writing system continues well into Grades 4 and 5, and moves from learning the CV, to the CCV akshara set. The key points of difficulty for young/poor readers are: (1) acquiring a firm knowledge of the extensive set of aksharas; (2) remembering the appropriate diacritic marks for different vowel sounds; (3) assembling all phonemes in a consonant cluster into an akshara based on ligaturing rules, with CV clusters being easier to acquire than CCV clusters; and (4) longer words. It is likely that these difficulties are not specific to the Kannada language alone, but might generalize across Indic languages. Evidence obtained from the reading of dyslexic children in Hindi (an Indo-Aryan languages) echo some of these patterns (Vaid & Gupta, 2002; Gupta, 2004) with word length, errors related to ligaturing rules of CC and CCV clusters, and vowel substitutions and deletions occurring more frequently among dyslexic, as compared to normal readers. The majority of these errors was graphemic rather than phonological in nature, and involved vowels more often than consonants.

Implications for a Language Specific TExT Model

The question addressed here is whether the features of the TExT model developed on readers of English are generalizable to the Indic languages. From this brief review of an emergent and patchy literature base, it would appear that both linguistic content and cognitive load have potential in elaborating critical scaffolds for reading acquisition in Indic languages. However, the specific features included in each of these dimensions might vary across these languages.

Linguistic Content in Indic Languages. In writing systems that use the akshara, the syllable body, rather than rimes could be the crucial units for repetition and instruction. Automaticity with orthographic representations is a robust predictor of reading ability across languages (Georgiou, Parrila, & Liao, 2009). Perhaps, the primary
unit for acquiring automaticity in the Indic languages is not the whole (high frequency) word, or even high frequency rimes, but stable, highly frequent CV and CCV akshara configurations. It would appear that young and poor readers of these languages need systematic and repeated exposure to the extensive set of aksharas, the diacritic marks, and to the ligaturing rules before they can acquire them to the point of automaticity.

**Cognitive Load in Indic Languages.** Word length appears to be consistently related to difficulty with decoding text in both the languages examined here – Kannada and Hindi. In addition, the available literature seems to suggest that word decodability shows a progression from CV to CCV words in these languages. It is also highly probable that word decodability is influenced by visually more versus less complex configurations.

In conclusion, we concur with Perfetti (2003) that all languages share certain universal rules and constraints for their acquisition, even though their specific manifestations might vary. In Indic languages, texts with shorter words, more CV words, fewer unique akshara configurations and vowel diacritic marks, may make the task of reading less challenging for young and poor readers. Further, sets of texts that model certain linguistic content consistently (such as highly frequent akshara configurations and ligaturing rules) may support the acquisition of reading in these languages, as in English. In the absence of a critical body of empirical evidence, the suggestions presented here should be interpreted cautiously as theoretical speculations that warrant empirical examination. Differences among the Indic languages also deserve further attention and study.

**References**


*This post was written by Shailaja Menon of Jones International University and published at TextProject.org on 6 October 2010.*
School texts, especially those in content areas, have a special register called academic language. Within the academic language of content area textbooks, distinctions can be made in vocabulary. While words such as geography and affect may be equally challenging for students unfamiliar with academic language, Nation (1990) has distinguished between words specific to a content area (e.g., geography) and words that appear in numerous content area (e.g., affect). This distinction, Nation has observed, is an important one to consider in the design of instruction. Words within the former group are likely to be addressed by content area specialists teaching a course. Words of the second type—which Nation has called general academic words—are unlikely to be addressed by either teachers of content area courses or textbook writers. These words are used to communicate the content of the topic and are not in themselves a focus of attention.

One of Nation’s colleagues, Coxhead (2000) has identified a group of 570 words that represent approximately 3,130 words. These words have what Carroll, Davies, and Richman (1971) called “high dispersion indices.” That is, these words appear in numerous content areas, not a single one. The 570 key words (called headwords) are presented in the Academic Word List (AWL) (Coxhead, 2000). The AWL was developed on the basis of textbooks used in different university disciplines. The specific focus of this list was in the words that university students who are learning English as a Foreign Language need to know in reading across different content areas in universities.

Snow and her colleagues (Snow, Lawrence, & White, 2009) have been using words from the AWL to create a program called Word Generation for students in middle grades. The focus words for a week are presented in the homeroom period at the beginning of a week. Content area teachers in the middle school have information on the words and how these words might take special forms in their content area. Over the course of a school week, students read the target words in a text, discuss the words in different content areas, and write an essay where they have the opportunity to use the target words.

General academic words have not been a focus of either English/language arts instruction or content area instruction. General academic words are present and important in content area texts. Coxhead’s (2000) list and the Word Generation that Snow and her colleagues are pursuing illustrate the focus that is required, if struggling readers are to gain the proficiencies they need to become competent content area readers.
References


*Posted on TextProject.org, on August 30, 2007*
Phoneme and phonological awareness have had a center place in education over the past decade especially. To close the vocabulary gap, morphological awareness is also critical. Morphological awareness refers to recognizing the presence and of morphemes (the smallest meaning units in language) in words. An example of morphological awareness is knowing that the meanings of the following words are related: create, creation, creative, creator, recreate.

Kuo and Anderson (2006) summarize research that shows that morphological awareness makes a difference in decoding of morphologically complex words and to comprehension of text. As students move through the grades, morphological awareness increasingly predicts students’ reading.


Posted on TextProject.org on March 14, 2007
What are cognates?
In linguistics, cognates are words that have a common origin. Since English has its roots in the Germanic language family, there are many English words that are similar in sound and orthography to German words such as heart/Herz, house/Haus, and bear/Bär. Few native German speakers are currently entering U.S. schools so these connections are of less interest than the Romance-based words that make up another important chunk of English vocabulary.

What role do Romance-based cognates have in written English?
Romance-based cognates came into English in two ways: (a) from French words that resulted from the Norman invasion of England in 1066 and (b) from the Latin words that have been used, since the Renaissance, to label scientific products and processes. During the approximately three centuries that the Normans dominated the English court, French was the language of the ruling class—legal, ecclesiastical, fashion, and cuisine. The last three words are examples of French loan words in English and can be contrasted with German-origin words that have similar meanings; ecclesiastical/church, fashion/clothes, and cuisine/food.

As these examples show, Romance words are often the words that are used in written language—the vocabulary of content areas and literature. Romance words are also important in that they often belong to morphological families that share similar meanings (e.g., origin, original, originality, unoriginal). As the complexity of content and text increases, the number of words that belong to Romance-based morphological families increases. Nagy, Anderson, Schommer, Scott, and Stallman (1989) estimated that, in the middle grades and beyond, “more than 60% of the new words that readers encounter have relatively transparent morphological structure—that is, they can be broken down into parts.” (p. 279). Many essential academic process words like compare (comparar), connect, (conectar), process (proceso), and investigate (investigar) are cognates as well as content words.

Like French (and Italian, Portuguese, Romanian, and Catalan), Spanish is a Romance language that is derived from Latin. This shared heritage means that the forms of many Spanish words are similar to the French-origin words in academic texts. Rose Nash (1997) in NTC’s Dictionary of Spanish Cognates presents 20,000 cognates. (Keep in mind that there is also a NTC Dictionary of False Spanish Cognates—not as many but it’s important to remember that every apparent similarity isn’t a cognate).

Do Spanish speakers learning to read in English automatically transfer their knowledge of cognates?
Recognizing the connections between academic English and Spanish helps the comprehension of native Spanish speakers who can make the connection. But native Spanish speakers will not nec-
necessarily make the links if these relationships are not made explicit. Without such guidance, making these links will be especially difficult for native Spanish speakers who do not read in their native language. The pronunciation of most cognates is usually different enough that children may not realize that word that they typically use in conversations (e.g., facil or frío) share meanings with facile or frigid in their schoolbooks. Without guidance in understanding the similarities—and expecting to encounter these similarities in content area texts and literature, Spanish-speaking students may never know that they have a foundational vocabulary on which they can draw.

**Will instruction in cognates confuse for students who are native English speakers or speakers of non-Romance languages?**

Native English speakers and speakers of non-Romance languages need to become adept with the Romance system of English if they are to become proficient readers and writers of literary and academic English. Information about cognates can be a useful way to communicate this information in that cognates typically are members of rich morphological word families and—in the process—connect to meaningful ideas.

**What form should instruction of cognates take for native Spanish speakers and their classmates?**

Truly understanding and owning an aspect of language to the point where individuals use that knowledge in reading can take a long time. This observation applies whether that aspect is the existence of Spanish-English cognates or the features of morphological word families. Becoming facile with cognates and/or in the morphology of Romance-derived words does not necessarily result from a single lesson or even a series of lessons, especially for students who have spent several years in reading instruction where the phonology of the Anglo-Saxon words of English has been the focus.

The first principle, then, is that teachers of students from the middle grades through high school need to view cognate and morphological instruction as an essential and consistent part of their instruction.

At the same time, there are many ways in which teachers can support students in understanding the Romance system of English that can and should be taught to students in the middle grades and beyond. I can't develop the entire curriculum for this instruction in this column but I can give you some illustrations of how a fundamental stance toward cognates and Romance-derived words can be developed.

¥ One illustration is the consistency within the Exceptional Expressions for Everyday Events of attention to “the Spanish connection.” The Spanish connection is the foundation for generating words that share a Romance root word. Consistency in discussing whether there are cognates—and how those are expressed in a morphological family—is central to the goal of developing an academic and literary vocabulary.

¥ Another illustration is focusing on particular groups of words in lessons. I’ve identified a group of words that are common words in Spanish but are, typically, literary or scientific words in English. The list can be found at: [http://textproject.org/assets/library/resources/Spanish-EnglishCognates.pdf](http://textproject.org/assets/library/resources/Spanish-EnglishCognates.pdf)
References


Posted on TextProject.org on November 7, 2009
Over the last decade, a term has entered the lexicon of scholars who study vocabulary development—word consciousness. Word consciousness is characterized by knowledge of words. For example, recognizing that many words have different meanings (i.e., that they are polysemous) is evidence of word consciousness. But word consciousness is much more than knowing about words or even knowing many words. Word consciousness is also a disposition—an appreciation of words and an interest in them. The ears of students who are conscious of words perk up when they hear as their teacher reads aloud “His long chin faded into an apologetic beard.” (Tuck Everlasting, Babbitt, 1975, p. 17) or “The house felt as lifeless as a tomb.” (The Half-A-Moon-Inn, Fleischman, 1980, p. 10).

Researchers have shown that word consciousness is something that develops in classrooms where teachers themselves are conscious of words. Judith Scott (Scott, Skobel, & Wells, 2008), in collaboration with a group of teacher-researchers, implemented a project called the Gift of Words. The emphases of teachers in the project varied. Some used literature circles as the context for developing word consciousness, while others concentrated on their students’ use of rich vocabulary in writing. While the emphases differed, several processes were similar. Trade books written by authors who use unusual and picturesque vocabulary were prominent in the classrooms. Further, these phrases and words were the source of group and class discussions. Discussions might focus on the various synonyms that an author uses for a known concept (e.g., apologetic rather than sorry; idle or languid rather than lazy). Words and phrases were posted in classrooms to remind students of interesting vocabulary.

After viewing artifacts of student work and achievements, Scott and her colleagues concluded that teachers were able to influence their students’ word consciousness. Students developed in understanding about the appropriateness of words in different registers such as an academic setting relative to a conversational one. Teachers also reported that their students were more willing to take risks with new words. In writing and in speech, students experimented with words that they had not used before the project. Students increased in their interest and use of vocabulary. These teachers had truly given their students the gift of words.

**References**


*Posted on TextProject.org on March 7, 2008*
If I told you that “I’m not hanging noodles on your ears” (Bhalla, 2009), you’d look at me in puzzlement. If an English speaker said to a Russian, “I’m not pulling your leg,” the Russian would think the same about the speaker. In both languages, the phrase means, “I’m telling the truth.” Both phrases are examples of idioms.

An idiom is a phrase whose meaning cannot be established by a literal translation of the words in the phrase. The word idiom, like the word idiosyncratic, has the Greek “idio” which means private, personal, or peculiar. A group of people uses an idiom in a peculiar fashion that indicates membership in a culture or cultural sub-group. For example, the adolescent users of a language often have a wealth of idioms that, when known by adults in the culture, no longer maintain their cachet.

For someone learning a new language, idioms are especially challenging. It’s not that English Language Learners don’t know idioms. They know the idioms of their own culture. But they don’t know the idioms of English and each idiom is unique.

In this school year’s installment of Exceptional Expressions for Everyday Events (E4), we have added idioms. We’ve included the idioms as part of E4s because idioms are especially prevalent in conversations. Idioms occur in narrative text or stories but they are much less frequent in informational texts where language is more precise and less colloquial.

How should the idioms in the E4 be used? The intent is to support students in becoming aware of the many special phrases that are used in language. All idioms can’t be taught. The basic instructional procedure is to use the idioms that are part of the E4s to assist students in becoming aware of idioms—in English and in their native languages.


This post was published on TextProject.org
Students, especially English Learners, may have the concepts of a topic but simply give the concepts different labels than the English ones. In a unit on the human body, native Spanish speakers know about a skeleton. When the teacher is talking about “skeleton,” they may not connect it with the word they know — esqueleto (a cognate—but not as transparent as some). Showing an illustration of a skeleton may get ELLs onto the page a lot more quickly than a long explanation. As the aphorism goes, “A picture is worth a thousand words.” [In truth, the original statement was: “One picture is worth ten thousand words. (Barnard, 1927).]

There is a substantial amount of evidence that pictures aid in learning. This research base has been the basis for foreign language instruction of both adults and adolescents. In programs where adults are taught English, pictures are a staple. But I’ve found that, at least in the core reading programs into which many English Language Learners are transitioned, this aid is not provided. In an analysis of a fourth-grade reading unit of the newest copyright of a core-reading program, 12 of the 44 focus, instructional words were very pictureable. But, not only did the publisher not provide pictures for the ELLs (or other students who may never have seen a wharf or frost), the same set of activities was recommended for all 44 words—define, describe, write, and so forth.

Diane August and colleagues (August, Branum-Martin, Cardenas-Hagan, & Francis, 2009) have designed an intervention called Project QUEST that addresses middle-grade students’ science learning. Lessons within the intervention ensure that, whenever possible, definitions and discussions are derived from visuals. For example, a lesson in a unit on geology with sixth-graders begins with a presentation of several photos of erosion. Students are reminded that the Spanish word for erosion is spelled the same (with the addition of an accent). A topic of discussion between peers is what evidence they can detect in the photos that erosion has occurred.

Illustrations and photos are also used consistently during the introduction of critical vocabulary. Three words from a lesson—microscope, concept, and organ—are each accompanied with an illustration. Concept was accompanied by an illustration of a person with a bubble by his head that contained a question mark that reinforced the definition, “A concept is a general idea or understanding of something.” In the case of organ, the illustration was of a lung.

With digital technology, the use of visuals can go beyond pictures. Research evidence that ELLs benefit from video clips and animations is also accumulating. Sharon Vaughn and her colleagues have conducted an intervention in social studies, a content area where textbook treatments of critical content can leave students disinterested and uninformed. This intervention
makes consistent use of videos. But a critical feature of this intervention is that the videos don’t take up a whole class period (which was the case in the comparison classrooms that the researchers studied). The video clips that are part of the lessons for seventh-grade social studies were short: 2-3 minutes. The video clips were not intended to carry the weight of the lesson. Rather, the video clips served to as an “anchor” for students—to help them get a grasp of the fundamental content. These video clips were shown after the teacher introduced the big ideas of the content and they were followed by discussions where students talk about critical questions (that were raised before students watched the video clips). While the video clips weren’t the only component of the project, Vaughn and her colleagues report that they did generate discussion and supported students’ active involvement in content. The project showed significant differences in favor of the students who participated in the treatment classrooms that included the video clips.

The use of visuals in Diane August’s project and the use of video clips in Sharon Vaughn’s project demonstrate the importance of multimedia experiences for ELLs. As a result of this research, a feature has been added to TextProject.org—a vault of pictures for critical concepts in social studies and science called Word Pictures. Pictures are clustered according to topics and can be found at:

http://textproject.org/teachers/textproject-word-pictures/

References


Posted on TextProject.org on November 14, 2009
Learning the stories behind words can be intriguing. The creation of Word Stories can be a way to involve students in the adventure of language. Here is one of my favorite Word Stories.

A Word Story: Alligator

The English word alligator comes from Spanish: el lagarto (the lizard). English speakers didn’t understand that “el” meant “the.” They thought it was part of the word. Instead of “ligator,” the word became alligator. When we say “the alligator,” we are saying “the the”!

It would be the same as if, when other languages use English words, they added the word “the” to the original word. They would talk about “the thespace shuttle” and “the thefrying pan.”

It’s not only English speakers that have made the mistake of including “the” or “a” with the original word. The Spanish did it too. When words from Arabic came into Spanish over a thousand years ago, the Arabic al or a was put in with the original word. With the al or a added, the Spanish word was alcoba (alcove or bedroom) rather than coba and azucar (sugar) rather than zucar. Other words that came to English from Spanish and are from Arabic (and where the al or a was thought to be part of the original word) are algebra, admiral, and alcohol.

(Concept from Suzanne Kemmer, http://www.ruf.rice.edu/~kemmer/Words/wordstories.html)

Here are some interesting words to use as the basis of word stories:

¥ salary
¥ denim
¥ ketchup
¥ magazine
¥ monster

[NOTE: If you or your students go onto the internet, don’t use “Word Stories” in a search engine; you’ll get one of the many groups that write specialized stories (e.g., the 6-word story genre based on Hemingway’s “For sale: Baby shoes, never worn.”). Instead, use the word “etymology” in your search.]

Posted on TextProject.org on March 20, 2007
Vocabulary is one of the topics that Cassidy and Cassidy listed as hot in Reading Today. Vocabulary should always be a hot topic in that it forms the foundation of knowing and learning anything. A typical direction that educators take when a topic is hot is to think of lessons and materials and curriculum. These things are part of the solution but an additional resource lies in the everyday talk of classrooms. Language is the medium of human interaction and, like any human context, language fills classroom life.

As teachers, we are the ones who control the language in classrooms. In this capacity, we often overuse particular words—“listen up,” “clean off your desks,” “check that your name is on your paper.” A linguist named Zipf (1935) described a phenomenon that you’ll notice is true, if you were to get a transcript of the talk in your classroom over a day: Most of the words that people use in their conversations over and over again are short and come from the same, very small layer of the 606,000 words in English. Overall, this vocabulary is much less rich and varied than the vocabulary of writing. When teachers use a rich vocabulary in everyday events, students have a model and resource that they may not have in other life contexts.

In presentations to teacher groups, I’ve often commented on the availability of everyday events in classrooms as a source for enriching the quality of language—alternative words for lining up (e.g., form a queue) and check that your name is on your paper (e.g., scrutinize). I got a great response from teachers for this idea but many wanted more examples, not only of the events in classrooms but also of the alternative words that could be used. Out of these requests, Exceptional Expressions for Everyday Events (or E4), was born.

E4 is a series of 32 flexible vocabulary development lessons, each focusing on an everyday concept and brainstorming other words that describe the concept. Each activity can be used for a few minutes a day over the course of a week.

The heart of each E4 vocabulary lesson is the word web, describing in detail various meanings of each word and showing other words with similar meanings, plus idioms, common phrases and a unique E4 feature called the Spanish Connection that shows English-Spanish cognates relating to each word. Each lesson also includes a morphology web that summarizes word changes such as inflected endings, prefixes, suffixes and compound words. We provide two versions of the webs for each lesson, one filled-in and one with blank boxes. These can be projected using an interactive whiteboard or as overheads (they're even simple enough to redraw on a blackboard), making possi-
ble a variety of flexible use scenarios. You can also adapt the blank form for use by students individually or in pairs.

A one-page description provides teachers with the background of each E4 word, with suggestions for how to structure classroom activities. The all-new E4 introduction provides even more detailed suggestions about how to use E4 in the classroom and make the most of its vocabulary-enhancing potential. Designed for maximum flexibility, E4 provides opportunities for meaningful vocabulary lessons that take just a few minutes at a time, with enough breadth to last the entire school year. E4 is made available under a Creative Commons license and is completely free to download and use.

Posted on TextProject.org on September 9, 2009
An activity for developing content vocabulary is the “Vocabulary Visit.” Vocabulary Visits have been described as “virtual field trip” (Blachowicz & Obrochta, 2005). In many schools and for the many topics that are part of a school curriculum, field trips aren’t possible. A Vocabulary Visit serves as a viable alternative, providing students with a multitude of experiences with the core words related to a topic. The components of a Vocabulary Visit identified by Blachowicz and Obrochta are:

- At least 5 selected books on the focal topic selected by the teacher,
- A core group of words on the topic identified by the teacher,
- A poster with pictures related to the topic to stimulate discussion, and
- A series of activities in which the books are read and discussed and the words are discussed and used in writing.

References


Posted on TextProject.org on March 27, 2007
3
BEGINNING READING, READING AUTOMATICITY & FLUENCY, & CORE VOCABULARY
“K–12 reading texts have actually trended downward in difficulty in the last half century”

( Common Core State Standards (CCSS), Appendix, A, page 2).

In the case of kindergarten texts, this statement is blatantly false. In fact, quite the opposite is true. Kindergarten texts were added to core reading programs as a result of Reading First mandates in the first decade of the 21st century. How the writers of the CCSS came to the conclusion that kindergarten texts—which had been nonexistent until a decade ago—had decreased in difficulty over a 50-year period is perplexing. The explicit assumption that kindergarten texts have been dumbed down over the past 50 years and that their difficulty levels need to be accelerated has consequences for how young children begin their formal reading experiences, especially the children who depend on schools to become literate.

The inclusion of kindergarten in this blanket statement about text difficulty represents an implicit assumption about beginning reading that also requires consideration—that earlier is better. Does beginning reading in kindergarten truly ensure that high school graduates are better at reading the complex texts of careers and college? In this essay, I review research on both the explicit and implicit assumptions within the CCSS regarding formal reading instruction in kindergarten: the dumbing down of kindergarten texts and the pushing down of reading instruction to kindergarten.

The Dumbing-Down of Kindergarten Texts

The CCSS writers cite two sources for the dumbing down conclusion: Chall (1967/1983, 1977) and Hayes, Wolfe, and Wolfer (1996). Chall analyzed first-grade texts from core reading programs of 1956 and 1962. Hayes et al. found that the first-grade texts from the 25-year period represented in Chall’s analysis were significantly easier than either the texts of the previous or subsequent 25-year periods. Further, massive changes occurred in first-grade texts in the decade after the Hayes et al.’s analysis (Foorman, Francis, Davidson, Harm, & Griffin, 2004). When California in 1988 and Texas in 1990 dropped controlled vocabulary in first-grade texts, the number of unique words and rare words increased substantially. These two features of texts challenge, and, all too often, overwhelm, beginning readers. Even with the move to decodable texts in 2000, the number of unique and rare words has stayed high.

Further, neither Chall’s nor Hayes et al.’s analyses included kindergarten texts. In Chall’s era and also in her stages of reading (Chall, 1985), formal beginning reading instruction began in first grade. Kindergarten was not even provided in some school districts and, where it was provided even in the late 1980s, kindergarten teachers believed that their students should not be in-
volved in formal reading instruction (Durkin, 1989).

In 1990, two independent analyses verified the absence of kindergarten textbooks in core reading programs (Hiebert & Papierz, 1990; Morrow & Parse, 1990). Kindergartners worked in reading readiness workbooks. These workbooks included a handful of pages that could be folded into booklets. The booklets were composed of a small group of highly frequent words (e.g., the, a, and) and labels for pictures (e.g., a with a picture of a cat).

Shortly after these reviews, publishers added "big books" to kindergarten components of core reading programs. These were intended for read-along and read-aloud sessions but it was not until the early 2000 programs that texts for kindergarteners were embedded within the core reading programs to comply with Reading First mandates. An analysis of the exit-level kindergarten texts in a 2007 core reading program showed them to be comparable in difficulty to the texts of the 1962 and 1983 copyrights of the same program (Hiebert, 2008). Not only have kindergarten texts not been dumbed down over the past 50 years, the literacy demands for kindergartners have increased immensely, particularly over the last decade.

The Pushing Down of Formal Reading Instruction

There are two fundamental assumptions related to the pushing down of formal reading instruction to kindergarten: (a) that 21st century American children are cognitively prepared to read at age five and (b) that pushing down the task of reading to kindergarten will aid in high school graduates' ability to read the complex texts of career and college.

Are 21st century American five-year-olds cognitively prepared to read? At least for children who live in homes above the poverty line, many literacy opportunities exist for young children—educational television, colorful and inventive books, and preschool. Even with all of the literacy stimulation that middle-class children experience, however, few read as kindergartners. The Early Childhood Longitudinal Study (Denton & West, 2002) shows that most children can recognize letters by the end of kindergarten and many can make the connection to the primary sound associated with a letter but few children are reading before first-grade. These data are not evidence that five-year-olds do not have the cognitive capacity or processes to read. Some five-year olds (and even younger children) learn to read when parents, teachers or a combination of the two groups plan to teach children to read (Durkin, 1966). Even in these contexts, however, many five-year-olds do not learn to read (Denton & West, 2002).

And for those children who do learn to read—two critical questions are: Is the instruction worth it? And what has been eliminated or diminished in children’s experiences to make time for formal reading instruction? I attend to the first question but not the second question in this essay. In the long run, the answer to the second question may be the most critical one in developing engaged, interested, and proficient readers. That topic merits its own essay.

Does pushing down result in higher reading performances? Substantial investments in literacy-related instruction of four-year-olds were made in
Early Reading First and even greater investments were made in primary-level instruction that included kindergarten. Despite these investments, gains have not been evident in higher grades (Gamse, Jacob, Horst, Boulay, & Unlu, 2008; Jackson et al., 2007).

Evidence on the effects of early reading instruction on later reading achievement also comes from analyses of international data. Suggate (2009) examined reading achievement as a function of school entry age of 15-year-old students across 55 countries, controlling for social and economic differences. Results showed no significant association between reading achievement and school entry age but, in countries with earlier starting ages, the achievement gap was larger for 15-year-olds. A few benefit from the early introduction. The students who depend on schools to become literate struggle even earlier—and longer.

**Potential for decreasing access for children of poverty**

Chall (1977) was the one who proposed that dumbing down of texts might be an explanation for lower performances of American high schoolers on college-board exams. In one of her last projects, Chall (1999) identified a staircase of text difficulty to support reading of complex texts at and after high school graduation. The CCSS also identified a staircase of steps with increasingly more complex text. The size of the steps in the two applications of the staircase model, however, differs substantially. At grade five, difficulty levels of the CCSS and Chall model were comparable. Prior to that, however, they were not. Chall advocated a more “gentle” perspective on when students should start on the stairway (grade one) and identified more moderate, although challenging, levels of text difficulty for grades one through five than those of the CCSS.

From Chall’s (1985) perspective, preschool and kindergarten were times when young children needed to be involved in listening to and retelling stories and writing with crayons, paints, and magnetic letters. The foundation that ensures capacity—and interest—in reading complex text is grounded in appropriate early childhood experiences. When the steps are too big and when the capabilities of students do not match the size of the steps, the progression up the stairway of text complexity will likely be fraught with missteps and injuries. The current policy initiative could well have the effect of making high levels of literacy even more inaccessible for the very students who depend on America’s public schools for academic learning—the children of poverty.

**References**


Common Core State Standards Initiative. (2010). Common Core State Standards for English Lan-


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At the outset, I want to make it clear that my expertise lies in the texts that facilitate the reading development of a particular group of students in American schools—the students who depend on schools to become literate. In the U.S., we have approximately a third of an age cohort that can be described as "depending on schools to become literate." The remaining students may learn to read in school but they have at least a modicum of literacy experiences/criterion knowledge when they arrive at school (according to the Early Childhood Longitudinal Study). Unfortunately, our national assessment indicates that we have not been particularly successful in bringing the third of our population that depends on schools to become literate to the levels that are needed in the global-digital economy. Answers, of course, are not simple ones but I would argue that the texts that we have been providing our most vulnerable students have not been as supportive as they can and should be.

Differences in the orthographies of languages are critical and, while I myself came to English as a second language learner, my work has been with children learning to read in English (including but not limited to children who speak English as a second language). Even so, I believe that there are some principles that can be generalized from our work to that of children in other cultures and with languages that differ substantially from English.

1. With young children who have not been immersed in print, meaningfulness is critical. There is a small but reputable literature on the role of concreteness in the word learning of children and adults. In my model of TExT (Text Elements by Task), the design of beginning texts involves simultaneous attention to decodability, frequency, and concreteness. The lists of concrete words will differ by culture. But in the TExT model, weight is given to words that have common orthographic patterns AND are concrete. In an American venue, for example, words such as mom, dad, grandma, and grandpa would be evaluated as appropriate (at least if repeated), even though only one of these words--dad--has consistent and regular grapheme-phoneme correspondences. I have identified a list of 1,000 concrete words for children in the U.S. that are part of the analysis of what makes a set of texts appropriate in the TExT analysis. This list would NOT be appropriate in particular parts of Africa or India. HOWEVER: the construct is applicable. Children new to literacy, as Sylvia Ashton-Warner argued after working with the Maori children in New Zealand 70 years ago, need to know from the get-go that written language is about meaning. Within the TExT model, concreteness is an early scaffold. It is not the picture-text match of the Reading Recovery/Guided Reading perspective. Concrete words need to be used frequently and a core group of them should have patterns that support decoding. And the weight of this factor on the model is gradually released.
2. It is also critical to give weight to words that are highly frequent in a language. Zipf’s (1935) law appears to apply to many languages beyond the European languages that he originally studied. Tian (2006) has stated that experiments prove that the word frequency distribution in Chinese complies with Zipf’s law. I have yet to locate data on African languages but it appears that a small group of words typically accounts for many of the words in a language. Hopefully (since the orthographies for some of these languages are newer than that of English), some of the languages in African cultures will not have the idiosyncratic high-frequency words that English does. I don’t know this but I suspect that this may be the case. Words that are highly frequent, highly decodable, and highly concrete are the ideal. But there are function words that won’t be highly concrete (although highly frequent and, hopefully, in languages other than English, highly decodable). Weight needs to be given to words that are part of highly populated “word” neighborhoods.

While orthographies may not have the strange history that English does--and thus, not the erratic orthography--I want to caution against too much nonsensical text for children who are new to text and are the children of poverty. The U.S. has a genre I call “extreme decodables.” The texts contain many of the archaic Anglo-Saxon words that are rarely used in conversation or even text (e.g., vex, wrench, tack). Beginning readers need substantial and consistent data about the code. At the same time, we need to remember why we are doing it (meaning) and function (frequency). Children of poverty are likely to treat school tasks seriously and without the humor that otherwise characterizes their lives. School is a “serious” and literal place. Texts that are silly may not be an appropriate point of departure. They have NOT proven to be so with American children who enter schools with languages and cultures other than those of the mainstream.

References


Posted on TextProject.org on May 25, 2011
A comment that I have heard at conferences or read in papers or reports is that we now know what to do to bring young children to successful literacy. In the report, Time to act (Carnegie Council on Advancing Adolescent Literacy, 2010), the statement is made:

“these results [early reading interventions] demonstrate that with a concerted effort we can indeed improve the literacy achievement of all our nation’s children.” (p. 8).

Early reading interventions such as those reviewed by Torgesen (2000) are identified as the source of this shift. In reviewing five intervention studies, Torgesen concluded that three-quarters of the students in the lowest 20 percentile could be moved to effective word reading above the 30th percentile. These early interventions, according to one school of thought, could serve as an inoculation to ensure that students had the skills that they needed for subsequent literacy tasks in school and beyond (Coyne, Kame’enui, Simmons, and Harn, 2004). Now the statement is made that these early immunization efforts, while successful, are not sufficient as Time to Act (Carnegie Council on Advancing Adolescent Literacy, 2010): “early improvements in literacy alone are not enough to guarantee excellent adolescent literacy achievement.” (p. 8).

Why policy-makers and scholars are surprised that the immunization was not enough could be the focus of an entire volume. The complexities of literacy in the digital age and the needs and strengths of adolescents call for literacy experiences for adolescents that are unique from those of young children. Had policy-makers and particular groups of scholars been willing to consider complex answers to profound problems in literacy, rather than to mandate simplistic responses, we might be well on our way to providing more adolescents with more of the relevant and engaging literacy experiences they need and want.

There are many reasons why many adolescents have low levels of literacy and/or are disengaged or disinterested in it. Many of these reasons have been iterated in the various reports on adolescent literacy (e.g., Biancarosa & Snow, 2006; Heller & Greenleaf, 2007). I offer an additional explanation—not as a sole explanation but as a strong contributing factor: problems with the im-
munization that was promoted in documents such as those of Coyne et al. (2004) and Torgesen (2000).

Before I describe some of the problems with the immunization, let me describe the primary stance of these interventions. All of the five intervention studies that Torgesen (2000) reviewed emphasized phonological awareness and decoding. There was a substantial amount of word learning outside the context of books and, when books were used, most fell into the category that I have described as “extreme decodables” (see, Hiebert, June 17, 2010). Extreme decodables are characterized by numerous infrequent words, many of which may have consistent grapheme-phoneme correspondences but often have unfamiliar, if not archaic, meanings for young children (e.g., vex, wrench). For young children, the texts that are created when these words are combined are often incomprehensible (e.g., He has a fan and a rat and a rag).

The perspective that there is a specific treatment that can be an immunization is itself problematic. But the immunization metaphor allows for several hypotheses about what may have gone awry.

First, the treatment might have been the wrong one. In medicine, it is entirely possible to treat young children for one illness (e.g., the flu) when, in reality, they have another illness (e.g., meningitis). In reading, children may be given a treatment of extreme decodables where characters such as Sip and Tip sit, tap, tip, and sip and where exercises and assessments are as likely to involve nonsense words as they are real words. For children who have never held books in their hands before, these words and experiences may be sufficiently alien that they fail to understand the function or the content. The extreme decodables may serve a function at some point. But what these students may really have needed initially was involvement with books that had stories that made sense and/or communicated information about the world around them.

There may have been a reaction to the immunization. It is not unusual for children to have a reaction to an immunization. Reactions can be fairly common when too much of a serum is given and an allergic reaction occurs. Similarly, too much of a particular literacy intervention (especially if given at the wrong time and to students with particular propensities) could result in precisely the opposite effect than the intended one. Children who are given extreme decodables day after day and year after year may learn to decode (and, yes, as the reports indicate, most children are able to decode by the end of second grade (see, e.g., Wise, Olson, & Ring, 1999)). They may, however, choose not to read or view reading as a very pleasurable or informative experience.

In the case of the treatment in California, a better metaphor than a reaction to an immunization is that students have been given an over-dose of a medication or the immunization. According to the state of California’s (California State Board of Education, 2006) textbook adoption guidelines, a treatment of extreme decodables is mandated for kindergarten, first grade, and second grade. Even though the report of the National Reading Panel (NICHD, 2000) stated that such treatments did not have evidence beyond first grade, the California mandates call for a set of two texts for each of the 44 phonemes for students who are not proficient readers in grades four through eight. California’s standing as the 48th state on
the National Assessment of Educational Progress (National Center for Education Statistics, 2009) cannot be attributed only to this policy. However, these mandates have not increased the percentage of students who are reading more proficiently.

¥ There is even the possibility that a treatment can cause a new disease. A treatment of aspirin has been known to contribute to Reyes syndrome. Certain medications can be the cause of meningitis. The new disease in the case of American students who have been treated by an overabundance of phonological and code-based instruction may be that a disinterest in reading. Evidence for the disinterest of American middle graders in reading is compelling. In international comparisons with students from comparable countries, U.S. students ranked 32nd of 35 nations on reading for their own interest outside of school (Mullis, Martin, & Kennedy, 2003). In a reanalysis of these data with a revised index of attitudes toward reading, U.S. students came in 35th (Twist, Gnaldi, Schagen, & Morrison, 2004).

Might it be that the immunization effort of the past decade in early reading education has contributed to problems that are far more serious than word recognition ever was? Might it even be that students’ word recognition is, in fact, quite good and that it is their background knowledge and engagement in reading that is the real problem? Answers to such questions are urgently needed. A new school year is about to begin where Response to Intervention (RtI) efforts will be applied with a vengeance. To date, I have seen nothing within the RtI literature that indicates that the immunization regimen is being challenged.

**References**


Heller, R., & Greenleaf, C.L. (2007, June). Literacy instruction in the content areas: Getting to the core of middle and high school improvement. Washington, DC: Alliance for Excellent Education.

Hiebert, E.H. (June 17, 2010). What exactly is a decodable text? [www.textproject.org/franklyfreddy/what-exactly-is-a-decodable-text](http://www.textproject.org/franklyfreddy/what-exactly-is-a-decodable-text)


Posted on TextProject.org on August 4, 2010
There are some children who come to school who officially learn to read in school but who have had hundreds of hours of experiences with books, print, and language play. Tobias, a 26-month-old in my acquaintance, is in this group. He was fascinated with his mittens this week (understandable in that he lives in Chicago which had arctic-like temperatures). He described his mittens as his “hand pants” and his pants as his “leg mittens.” Whatever the texts that Tobias is given when he enters kindergarten, he will transition to conventional literacy quickly (if he isn’t already reading when he’s three).

It is with the children who “depend on schools to become conventionally literate” that the content and style of textbooks matter the most. The texts of school provide the data on which they develop reading skills and an interest (or disinterest) in reading. The pace, content, and amount of texts of the typical beginning reading curriculum currently work for children like Tobias. They are not, however, working for the children whose conventional literacy occurs in school settings. I am not stating that these students will be illiterate. Even at mid-first-grade, students in the bottom quartile consistently recognize words on assessments such as DIBELS (Hiebert, Stewart, & Uzicanin, 2010). However, they cannot read the typical texts of first-grade and they leave first grade reading substantially less and slower than peers at and above the 50th percentile. Over the next years of school, they acquire some reading proficiency but they never attain the levels of literacy needed for full participation in the marketplace and communities of the 21st century. Evidence of this shortfall is the failure of a third of an American age group to attain even the basic standard on the National Assessment of Educational Progress. It is imperative that we explore alternatives for the students who depend on schools to become highly literate.

Posted on TextProject.org on June 24, 2010
Over the past decade, a central component of beginning reading programs in the U.S. consists of decodable texts. Any text written in English is decodable at some level in that the code never deviates from the alphabetic system. However, the degree to which the letter-sound correspondences within words are common or consistent can vary considerably. Extremes in the commonality and consistency of letter-sound correspondences are evident in the following two sentences: (1) I want one piece of bread and (2) Brad’s ram nabs his big hat. All of the words in Example 1 have at least one letter-sound correspondence that deviates from common, consistent associations. By contrast, all of the letter-sound correspondences in Example 2 are among the most common and consistent associations.

Jeanne Chall (1967), in the popular book, Learning to read: The great debate, identified the numerous variations in how texts offer opportunities for young readers to become more adept at decoding. In a future column, I will describe some of the differences in texts that support children’s facility with the code. My emphasis in this column is on the use of the single phoneme/grapheme(s) as the driving criterion for forming texts. It is the prominent one used in American reading textbooks today because of mandates of the nation’s two largest states, California and Texas. The program that provided the “gold standard” for California and Texas—the decodables of Open Court (2000)—had a unique interpretation of the phoneme/grapheme(s) association. All of the current core reading programs in 2010 (Scott Foresman’s Reading Street, MacMillan/McGraw Hill’s Treasures, Harcourt’s Storytown, and SRA’s Imagine it!) have sets of decodables modeled after those of Open Court (2000).

There had been previous beginning reading programs that had used the individual phoneme/grapheme(s) model for creating texts. However, in at least one important dimension, the texts differed from those of the current decodables. The data from this previous generation of reading programs is offered as scientific evidence for the current decodables. On one dimension, however, the current decodables differ substantially from old decodables. This difference has a substantial bearing on children’s learning experiences.

What is this difference? The current decodables introduce as many different words with the target phoneme/grapheme(s) as possible. There appears an underlying assumption that the word is not a significant learning unit in reading acquisition. The rationale, in all likelihood, is that current decodables are guarding against children’s memorization of words.

The linguists and psychologists who developed the old decodables were also highly critical of students’ memorization of words. Indeed, the developers of the old decodables were responding directly to the problems of the “look-say” method that was dominant during the period that they de-
veloped their texts. However, these earlier developers recognized that at least a modicum of repetition of words with shared and/or particular features is needed for children to learn to read.

To illustrate what this difference in philosophy means for children learning to read, I have taken a similar number of words from texts at the same point of four reading programs. Three of these programs are the “old” decodables; the fourth is a new decodable. [Note: While the Reading Mastery program has a 1995 copyright, the texts emanate from the 1970s.] An excerpt from each of the programs is provided in Table 1 and features of the texts are presented in Table 2.

The number of unique or different words per 100 words of running text is an index of the degree of repetition of individual words. The figures in Table 1 indicate that the old decodables had from 22 to 39% fewer different words than the current decodable.

The appearance of the single-appearing word is another indicator of difficulty for beginning readers. The third row in Table 2 shows that the old decodables had substantially fewer single-appearing words than the current decodable.

The final index is the number of words that come from the 300 most frequent words. This figure is an indication of how common or familiar words are to students. Less than half of the words in the current decodable are from this group with a heavy emphasis on words that are infrequent—words such as nabs, ram, and trim in the excerpt in Table 1.

Especially for students who are English learners (and at least in California they make up a sizable percentage of the districts that adopted Open Court as their core reading program—LA Unified, Oakland, and Richmond), infrequent, single-appearing words make a hard task (learning to read in a second language) even harder. For these students and many native English speakers, the task of current decodables becomes one of learning simply to decode without learning that meaning is at the core of reading.

### Table 1: Excerpts from Four Decodable Programs: Old and Current

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<tr>
<td>Don had a box with a lid. “What’s in your box?” Ted said. “Something brown,” said Don. “Something that can hop and fly. It can fly out of the box. And it can hop to the street.”</td>
<td>The little sled did not stop. It ran on and on. It ran into a red barn. The barn bent the little sled. And the sled dented the barn. Bob and Ben got wet.</td>
<td>A dog that could talk lived with a tall man. The dog took a book from the table. The dog said, “This book is what I need, need, need. I love to read, read, read.”</td>
<td>Brad is a trim man. Brad’s trim hat fits him. Brad has a fat ram. Brad’s ram spins and nabs his hat. Brad is mad. Brad nabs his hat. Brad pulls, pulls, puff and huffs.</td>
</tr>
</tbody>
</table>
### Table 2: A comparison of Text Features of Four Decodable Programs: Old and Current

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<tbody>
<tr>
<td>Unique Words per 100</td>
<td>14</td>
<td>16</td>
<td>18</td>
<td>23</td>
</tr>
<tr>
<td>Single-appearing words (%)</td>
<td>1</td>
<td>6</td>
<td>3</td>
<td>10</td>
</tr>
<tr>
<td>%<em>words high-frequency</em>(300)</td>
<td>63</td>
<td>59</td>
<td>69</td>
<td>46</td>
</tr>
</tbody>
</table>

*as percent of total words

### References for Programs


*Posted on TextProject.org on June 17, 2010*
The answer to this question, when it comes to texts for Grades K-2, is an unequivocal no. Conclusions about the dumbing-down of texts (i.e., Chall & Conrad, 1991; Hayes, Wolfer, & Wolfe, 1996), as in Appendix A of the Common Core State Standards, were based on analyses of reading textbooks published prior to the watershed changes of 1990. In their analyses of the dumbing-down of textbooks, Chall and Conrad (1991) used only textbooks for grades four through six and with copyrights from 1971 to 1980.

In fact, the texts that K-2 children see currently have become significantly more difficult since 1990. The answer may be a different one for grades 3+ and I hasten to add that Jeanne Chall was correct when she described first-grade texts as too easy in 1967. At that point, mainstream basal reading programs moved at a snail’s pace. The 1962 version of the first-grade Scott Foresman (SF) program in which Dick and Jane figured prominently had a vocabulary of 323 unique words that were repeated over 120 texts. That’s not very many unique words for 120 texts.

In the early 1970s, the responses of publishers to Chall’s criticisms with more difficult texts were not a success in the marketplace and publishers returned to even more tedious programs (Hiebert, 2005). But eventually, Chall’s conclusions influenced policies and practice. The turn-around time and the interpretations of research were not the ones that Chall might have anticipated in 1967 but, when they finally occurred, Chall’s observations of easy beginning reading texts were no longer apropos.

It was the 1985 national report, Becoming a Nation of Readers (Anderson, Hiebert, Scott, & Wilkinson, 1985), that served as the impetus for a change in beginning reading textbooks. Readability formulas, Anderson et al. concluded, were dumming down textbooks and students’ literacy levels and interests. The report called for an end to the pernicious stronghold of readability formulas on the content and style of American reading textbooks. Not a single study within this research base had been conducted with beginning readers. But the report hit a chord with American educators and within three years the nation’s two largest states—California and Texas—issued their mandates: No reading textbooks controlled by readability formulas would be adopted with state funds; texts had to have authentic literature at all levels.

Within grade-one texts, the leap in number of unique words was astronomical: from 5 new, unique words per 100 words of text in 1983 to 25 (or more) in 1993. A high number of unique words means that few words are repeated. Since a small group of words (e.g., the, of, and, to) account for 33% of the total words in written English, that means that many words didn’t appear very often. At least 40% of the words in the first-
grade texts in Texas appeared a single time (Hiebert, 2005; Foorman et al., 2004).

Texas (2000) and California (2002) replaced the “authentic text” mandate for beginning reading components with a decodable text requirement: 80% of the words in Texas’s first-grade programs needed to be “decodable” and 90% in California. Within these mandates, it was the phoneme (e.g., /b/, /i/) that was the unit of repetition. Texts were judged to be decodable if a phoneme had been introduced in an instructional lesson in the teacher’s lesson. The assumption was: “once taught, then learned.” Since it was the phoneme and not the word that needed to be repeated, the number of unique words has remained high in beginning reading programs. The “decodable” policy has meant that the number of rare, unique words has increased—words such as nab, sax, clan, nip, jig, sip, and yip.

Unlike 1967 when beginning reading texts were justifiably described as too easy (e.g.: 323 unique words), 2007 first-grade textbooks have around 2,000 unique words. In 2007, beginning first graders are introduced to more unique words in the first instructional unit than first graders in the 1960s had in the last unit. We don’t want dumbed-down textbooks but can young children learning to read assimilate so many words so quickly? The answer is, once more, an unequivocal no.

*Posted on TextProject.org on June 11, 2010*
WHATEVER HAPPENED TO DICK AND JANE?

See, Dick.
See Dick run.

—Elston, Runkel, and Gray (1930)

If you were 6 years old between 1930-1967 in the U.S., there is a high likelihood that this text was the first of your school career. If you were 6 years old between 1967-1988, there is a good chance that your first school text was similar in the kinds of words but without Dick and Jane.

One of the reasons for the longevity of the Dick-and-Jane genre may have been its imprimatur as a research-based program. William S. Gray drew on two lines of research in his work with Scott Foresman that resulted in the 1930 edition of the Elston Readers where Dick, Jane and their menagerie first appeared. The first line was Thorndike’s (1921) analyses of the frequency with which words occurred in written English. If a small number of words accounted for the majority of words in texts, Gray reasoned, learning to read should start with these words.

The second line of research was from Arthur Gates (1930) who made what he called “guesses” based on observational studies of how many repetitions children of different ability levels needed to learn a word (high-frequency words such as the, of, and, to, a). Average-ability children, Gates guessed, needed approximately 35 repetitions to learn a word. Gray guided Scott Foresman editors in engineering the Dick-and-Jane stories to have high-frequency words appear the requisite number of times.

Gray’s perspective was partly right in at least two ways: (a) repetition is important in learning to read (but 35 repetitions for every single word?) and (b) high-frequency words are important in reading connected text. Gray’s perspective was also seriously incomplete. As Jeanne Chall (1967) pointed out, English is an alphabetic language and, as such, requires knowledge of consistent, common letter-sound relationships to learn to read. Dick-and-Jane had not been without phonetically regular words but they had not been presented as systematically as Chall and Fries (1962) argued was necessary. Goodman (1967) and others identified several other ways in which the theory was incomplete. Specifically, reading, at its core, is a process of constructing meaning and learning to read needs to engage students in meaning-making, not simply word recognition. As a result of such critiques, Dick and Jane retired (they were, after all, 67 by then). It was not until the 1988 copyrights of the mainstream basal reading programs that responded to the mandates of the California textbook adoption, however, that the high-frequency model promoted by Gray and Gates was retired.

There is a legacy of the high-frequency model that is still alive and well in the form of books that were modeled after The Cat in the Hat (Dr. Seuss, 1957). The Cat in the Hat resulted from William Spaulding, head of Houghton Mifflin’s
education division, asking Dr. Seuss if he could write an engaging story with 300 high-frequency words. Dr. Seuss used 220 high-frequency words in writing The Cat in the Hat. Series modeled after The Cat in the Hat (e.g., I-can-read, Ready-to-Read) continue to show brisk sales to parents and libraries. Further, at least some of these texts (e.g., Little Bear, Frog & Toad, Henry & Mudge, Mr. Putter & Tabby, Arthur) appear in current first-grade books of core reading programs.

Other than such texts, there are few traces of the high-frequency model in current core reading programs. High-frequency words are NOT included in the vocabulary lists of current first-grade programs. Precisely which high-frequency words are taught at which levels of a core reading program is difficult to establish from scope and sequences. Most importantly, the repetition of key words—whether phonetically regular, conceptually central to themes, or high-frequency—is not evident.

*Posted on TextProject.org on June 4, 2010*
MANY USES: THE 100 MOST-FREQUENT WORDS IN WRITTEN ENGLISH

This list illustrates the multiple uses of words in the core vocabulary, especially the most frequent 100 words in written English. What these many uses mean for reading development is explained at http://textproject.org/topics/core-vocabulary/

**Homophones** are words that sound the same but have different spellings and meanings. (Examples are complete.)

**Multiple-meaning words** are words with the same spelling but with different origins and meanings (e.g., down, just). Many words are used as different parts of speech and vary in their meaning (call, may) but multiple-meaning words have more than one unique entry. (Examples are complete.)

**Idioms** are phrases that do not have a literal meaning. (Only a single example has been given per word. For some words (e.g., call, said), there are numerous idioms; for other words, there are none or only the example provided.)

**Compound words** are made up of two root words, which contribute to the meaning of the new word. However, often the precise meaning of the compound word needs to be inferred. For example, water-color does not refer to the color of water. (Only a single example has been given per word. Some words (e.g., up, one) are used in many additional compound words. For other words, the example is the only instance.)
<table>
<thead>
<tr>
<th>Homophone</th>
<th>Multiple Meanings</th>
<th>Idioms</th>
<th>Compound Words</th>
</tr>
</thead>
<tbody>
<tr>
<td>a</td>
<td></td>
<td>A parting shot</td>
<td></td>
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<tr>
<td>about</td>
<td>•relating to a particular subject (prep) •a little more or less than a number or amount (adv)</td>
<td>Up and about</td>
<td>about-face</td>
</tr>
<tr>
<td>after</td>
<td>•when a particular something has happened (prep &amp; conj) •later than something (adv)</td>
<td>After all is said and done</td>
<td>afterward</td>
</tr>
<tr>
<td>all</td>
<td>awl (tool) •whole of a thing (determiner, pro) •completely (adv)</td>
<td>All systems go</td>
<td>all-nighter</td>
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<td>an</td>
<td>Ann(e)</td>
<td>Cost an arm and a leg</td>
<td>another</td>
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<tr>
<td>and</td>
<td></td>
<td>And how!</td>
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<td>are</td>
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<td>As if</td>
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<td>as</td>
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<td>At once</td>
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<td>at</td>
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<tr>
<td>be</td>
<td>bee •Auxiliary verb •Linking verb</td>
<td>Be in the way</td>
<td>beside</td>
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<td>been</td>
<td>bin</td>
<td>Been all ears</td>
<td></td>
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<tr>
<td>but</td>
<td>butt •connect statements when 2nd statement adds something different from 1st (conj) •except for (prep)</td>
<td>It's all over but the shouting</td>
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<tr>
<td>by</td>
<td>buy •used with passive forms of verbs to show who did something (prep). •by (adv)</td>
<td>By the skin of one's teeth</td>
<td>bypass</td>
</tr>
<tr>
<td>call</td>
<td>caul •telephone (v) •action of telephoning (n)</td>
<td>Call it a day</td>
<td>Call Waiting</td>
</tr>
<tr>
<td>can</td>
<td>•able to (v) •metal container (n)</td>
<td>Bite off more than one can chew</td>
<td>Cannot</td>
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<tr>
<td>could</td>
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<td></td>
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<td>did</td>
<td></td>
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<td>do</td>
<td>dew •from high to low (adv) •soft feathers (n) •grassy field (n)</td>
<td>Do the trick</td>
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<tr>
<td>down</td>
<td></td>
<td>Down in the dumps</td>
<td>downbeat</td>
</tr>
<tr>
<td>each</td>
<td>•every one of two or more things (pro) •for or to every one (adv)</td>
<td>To each his own</td>
<td></td>
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<tr>
<td>find</td>
<td>fined</td>
<td>Find oneself</td>
<td></td>
</tr>
<tr>
<td>Homophone</td>
<td>Multiple Meanings</td>
<td>Idioms</td>
<td>Compound Words</td>
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<tr>
<td>first</td>
<td>• coming before all the other (adj)</td>
<td>First hand</td>
<td>firsthand</td>
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<tr>
<td>for</td>
<td>four fore</td>
<td>• before anything or anyone else (adv)</td>
<td>For ages</td>
</tr>
<tr>
<td>from</td>
<td></td>
<td>A far cry from (something)</td>
<td></td>
</tr>
<tr>
<td>had</td>
<td></td>
<td>Had it coming</td>
<td></td>
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<tr>
<td>has</td>
<td></td>
<td>One has to draw the line somewhere</td>
<td></td>
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<tr>
<td>have</td>
<td>• auxiliary verb</td>
<td>Have it made</td>
<td></td>
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<tr>
<td>he</td>
<td></td>
<td>He who pays the pipers pays the tune</td>
<td></td>
</tr>
<tr>
<td>her</td>
<td>• belong to female (adj) • object form of she (pro)</td>
<td>Let her rip!</td>
<td>herself</td>
</tr>
<tr>
<td>him</td>
<td>hymn</td>
<td>Good things come to those who waits</td>
<td>himself</td>
</tr>
<tr>
<td>his</td>
<td>• belong to male (adj) • object form of he (pro)</td>
<td>A man of his word</td>
<td></td>
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<tr>
<td>how</td>
<td></td>
<td>How come?</td>
<td></td>
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<tr>
<td>I</td>
<td>aye eye</td>
<td>If I had my druthers</td>
<td></td>
</tr>
<tr>
<td>if</td>
<td>• refer to something that might happen (conj) • condition or possibility (n)</td>
<td>No ifs, ands, or buts</td>
<td></td>
</tr>
<tr>
<td>in</td>
<td>inn</td>
<td>In hot water; in front of the pack; in joke/crowd; have it in for; ins and outs; in with; in that</td>
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<tr>
<td>into</td>
<td></td>
<td>Out of the frying pan and into the fire</td>
<td>inbound</td>
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<tr>
<td>is</td>
<td></td>
<td>Don't mention it</td>
<td>itself</td>
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<tr>
<td>it</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>its</td>
<td>It's</td>
<td></td>
<td></td>
</tr>
<tr>
<td>just</td>
<td>• exactly, immediately (adv) • lawful (adj)</td>
<td>Just the same (nevertheless); Just now (a moment ago); He's just biding his time.</td>
<td></td>
</tr>
<tr>
<td>know</td>
<td>no</td>
<td>Know a thing or two; know what's what</td>
<td>know-it-all</td>
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<tr>
<td>Homophone</td>
<td>Multiple Meanings</td>
<td>Idioms</td>
<td>Compound Words</td>
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<td>----------------</td>
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</tbody>
</table>
| like | • similar to (prep)  
• enjoy something (v) | Like pulling teeth | likewise |
| little | • small in size (adj)  
• only a small amount (quantifier)  
• not much (adv) | A little bird told me | little finger |
| long | • measurement (adj)  
• for an extended time (adv)  
• to feel a strong yearning (v) | Before long; so long as; long and short of (the story); so long | long-distance |
| made | maid | Made of money | tailor-made |
| make | • to produce something (v)  
• product (n) | Make do | make-believe |
| many | | In so many words | |
| may | • month (n)  
• might (v) | Come what may | maybe |
| more | moor | Bite off more than can chew | moreover |
| most | | Make the most of (something) | most-wanted |
| my | | Love me, love my dog | myself |
| no | know | No dice | nowhere |
| not | knot | Do not buy that story | cannot |
| now | | Now or never | nowadays |
| of | | Let go of | |
| on | | Hang on a little longer; put on the dog | online |
| one | won | One in a million | one-way |
| only | | Only have eyes for you | |
| or | oar | It's now or never | either-or |
| other | ore | | |
| out | • away from the inside (adv, adj)  
• from inside or through something (prep) | Tired out; out of order | take-out |
| over | • above or higher than something (prep)  
• down from an upright position (adv) | Take over; think over; over and over | overnight |
<table>
<thead>
<tr>
<th><strong>Homophone</strong></th>
<th><strong>Multiple Meanings</strong></th>
<th><strong>Idioms</strong></th>
<th><strong>Compound Words</strong></th>
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</thead>
<tbody>
<tr>
<td>people</td>
<td></td>
<td>Put people's heads together</td>
<td></td>
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<tr>
<td>said</td>
<td>• past tense of say (v)</td>
<td>Easier said than done</td>
<td></td>
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<tr>
<td></td>
<td>• giving more information about something (adj)</td>
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<td>see</td>
<td>see</td>
<td>See the light</td>
<td></td>
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<td>she</td>
<td></td>
<td>Less said the better</td>
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<td>so</td>
<td>sow</td>
<td>So to speak</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• emphasize what is being said (adv)</td>
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<td></td>
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<tr>
<td></td>
<td>• conj</td>
<td></td>
<td></td>
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<tr>
<td>some</td>
<td>sum</td>
<td>In some way</td>
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<td></td>
<td>• quantifier</td>
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<td></td>
<td>• pro</td>
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<td></td>
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<td></td>
<td>• determiner</td>
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<td></td>
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<td>than</td>
<td></td>
<td>Larger than life</td>
<td></td>
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<tr>
<td>that</td>
<td></td>
<td>This and that</td>
<td></td>
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<tr>
<td>the</td>
<td>• determiner</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>• conj</td>
<td></td>
<td></td>
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<tr>
<td>their</td>
<td>there</td>
<td>Fill the bill</td>
<td></td>
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<tr>
<td></td>
<td>they’re</td>
<td></td>
<td></td>
</tr>
<tr>
<td>them</td>
<td></td>
<td>If you can’t beat them, join them</td>
<td></td>
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<tr>
<td>then</td>
<td></td>
<td>Every now and then</td>
<td></td>
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<tr>
<td>there</td>
<td>their</td>
<td>There, there</td>
<td></td>
</tr>
<tr>
<td></td>
<td>they’re</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• something exists or happens (pro)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• particular place that is not where speaker is (adv)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>these</td>
<td></td>
<td>One of these days</td>
<td></td>
</tr>
<tr>
<td>they</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>this</td>
<td></td>
<td>This is the life!</td>
<td></td>
</tr>
<tr>
<td>time</td>
<td>thyme</td>
<td>In no time</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• minutes (n)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• to do something at a particular time (v)</td>
<td></td>
<td></td>
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<tr>
<td>to</td>
<td>two</td>
<td>His back is to the wall</td>
<td></td>
</tr>
<tr>
<td></td>
<td>too</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• used with basic form of a verb to make infinitive</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• prep</td>
<td></td>
<td></td>
</tr>
<tr>
<td>two</td>
<td>to</td>
<td>Put two and two together</td>
<td></td>
</tr>
<tr>
<td></td>
<td>too</td>
<td></td>
<td></td>
</tr>
<tr>
<td>up</td>
<td></td>
<td>Up in the air</td>
<td></td>
</tr>
<tr>
<td>use</td>
<td></td>
<td>Have no use</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• toward a higher place (adv, prep)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• awake (adj)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• do something with something for a purpose (v)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• act of using (n)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Homophone</td>
<td>Multiple Meanings</td>
<td>Idioms</td>
<td>Compound Words</td>
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<tr>
<td>-----------</td>
<td>-------------------</td>
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<td>----------------</td>
</tr>
<tr>
<td>very</td>
<td>• emphasize an adjective, adverb (adv) • emphasize reference to a particular something (adj)</td>
<td>The very idea</td>
<td></td>
</tr>
<tr>
<td>was</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>water</td>
<td>• clear colorless liquid (n) • to pour water on plant/seeds (v)</td>
<td>Water under the bridge</td>
<td>watercolor</td>
</tr>
<tr>
<td>way</td>
<td>weigh whey</td>
<td>In the way</td>
<td>wayside</td>
</tr>
<tr>
<td>we</td>
<td>wee</td>
<td></td>
<td></td>
</tr>
<tr>
<td>were</td>
<td>whirr</td>
<td></td>
<td></td>
</tr>
<tr>
<td>what</td>
<td>watt</td>
<td>What’s up?</td>
<td>what-not</td>
</tr>
<tr>
<td>when</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>where</td>
<td>wear ware</td>
<td></td>
<td>whereby</td>
</tr>
<tr>
<td>which</td>
<td>witch</td>
<td></td>
<td>whichever</td>
</tr>
<tr>
<td>who</td>
<td></td>
<td>Who do you think you’re talking to?</td>
<td>whoever</td>
</tr>
<tr>
<td>will</td>
<td>• used to make future tense (modal v) • deliberate intentions (n)</td>
<td>Where there’s a will, there’s a way</td>
<td>willpower</td>
</tr>
<tr>
<td>with</td>
<td></td>
<td>Stick with (something)</td>
<td>without</td>
</tr>
<tr>
<td>word</td>
<td>• language part (n) • to use words carefully (v)</td>
<td>A man of few words</td>
<td>word family</td>
</tr>
<tr>
<td>would</td>
<td>wood</td>
<td>As luck would have it</td>
<td>would-be</td>
</tr>
<tr>
<td>you</td>
<td>ewe yew</td>
<td>Your bet</td>
<td></td>
</tr>
<tr>
<td>your</td>
<td>you’re yore</td>
<td>Worth your salt</td>
<td>yourself</td>
</tr>
</tbody>
</table>

Code:
adj=adjective
adv=adverb
conj=conjunction
n=noun
prep=preposition

Posted on Textproject.org on January 22, 2013
READING VOLUME, STAMINA, & SILENT READING
Most American students do not read a great deal. In the typical classroom, students spend less than 20 percent of the reading/language arts block reading (Brenner & Hiebert, 2010). Even a little more reading time can go a long way. In fact, as little as an additional 7 minutes of reading per day has been shown to differentiate classrooms in which students read well from those in which students read less well. (Kuhn & Schwanenflugel, 2009). Taking the 7-Minute Challenge—in which the goal is to increase the amount students read daily by 7 minutes—can make a huge difference in students’ knowledge acquisition and capacity for reading complex text. The 7-Minute Challenge is one of the seven actions teachers can take to increase their students’ capacity to read the complex text advocated by the Common Core State Standards (Hiebert, 2012).

An immediate response from teachers is “but how am I going to increase students’ reading when the school day is already so full?” Before illustrating some ways in which teachers can increase reading in an already-full school curriculum, I want to emphasize the purpose of this increased reading.

Why Increase the Amount That Students Read?

One of our goals as teachers is to help our students increase their use of texts as a source of information and learning. Whether they are informational or narrative, texts communicate knowledge. The purpose of the 7-Minute Challenge is for students to make a habit of reading to acquire knowledge. This reading is embedded in lessons and curricular activities; it is not recreational. Recreational reading has an important place in students’ lives, just as teachers’ read-alouds have a role in classrooms. However, the intent of the 7-Minute Challenge is to increase students’ reading as part of instruction.

Students read texts with a purpose. They revisit texts to clarify their understanding, bring evidence to discussions, and offer support in compositions. They read magazine articles to get background knowledge for a novel they are reading or for a science experiment. The aim of the 7-Minute Challenge is for students to use such texts to learn and think, not to rack up numbers of words, pages, or minutes.

How Can Teachers Find Ways to Increase Students’ Reading as Part of Instruction?

Several easy-to-implement classroom strategies can help you “find room” in your day to increase your students’ reading time:

1. Expand your view of what counts as reading. Reading includes informational texts—in fact, for some kids that is what matters in reading. Further, most Americans today read magazine articles and Web sites. One Web site that has a permanent collection of solid magazine articles is ReadWorks, which had 700 magazine articles—all of informational content—available as of November 2012.
2. Make learning the reason for reading. That doesn’t mean the typical book report. It means allowing students to tell something about what they have learned, and why that information is interesting—or not. Involve students in creating mind maps and idea books that summarize what they’ve learned.

3. Always give students a purpose for reading, and follow up to ensure that they can share this knowledge. (An underlying feature of the Common Core State Standards is the ability to use text to learn.)

4. Give students choices, but don’t overwhelm them. Initially, a choice between two books is sufficient for kids who haven’t read a lot. One difficulty with many sustained silent reading efforts is that students who are not prolific readers do not know how to choose a book. Begin by giving students choices within well-defined parameters. For example, if you’re doing a book study of James Patterson’s books for middle-schoolers, allow students to choose among Patterson’s books.

5. Make the outcomes of reading social. The “social” dimension of reading does not mean that students must read everything aloud or that everything must be discussed as a class. Look for ways students can share their evaluations of books (e.g., the 5-star system of Amazon and other Web sites). Use sites such as ePals to connect students with peers in other locations.

6. Offer a variety of ways to recognize students’ learning accomplishments. Recognition can be low-key, in the form of conversations and discussions in classrooms in which students share what they have learned. It can also be more elaborate, in the form of school-wide events. But supporting students in seeing themselves as experts on particular topics—with knowledge gained through reading—is critical.

7. Use classroom events as occasions to develop a community of readers. For example, teachers can create a community of readers by selectively reading aloud texts that students might not otherwise know about. These events can become the source of sharing knowledge and also of language expressions (e.g., the “Wow!” of Lily’s teacher in Lily and the Purple Purse).

Getting kids to read more means that teachers need to be experts on books for kids. You can’t be an expert on everything, and there are thousands of books that might interest your students. There are hundreds of Web sites that help teachers select texts, but their quality varies considerably. A few focused sites provide the best support for busy teachers, among them the following two:

¥ Guysread.com: This website is the brain-child of Jon Scieszka and provides great recommendations for books, many of them narrative but some informational, that will appeal to middle-grade to middle-school boys.

¥ Great books for girls: Excellent recommendations are provided for girls of different age groups at Education Oasis.

The most important thing is to allow kids time to read so that they can support and expand their ability to comprehend and learn from complex texts.
References


Posted on TextProject on November 20, 2012
It’s not new information but, often in the busyness of classroom life, this truism can be forgotten—getting good at reading depends on doing a great deal of reading. This fact can especially be forgotten when teachers are faced with 30 young children whose reading expertise differs greatly. The students who haven’t read much in previous grades, during vacations, or after school are usually slower readers. The students who have had more previous reading time are faster. If the slower and fast readers are asked to read the same text in the same period of time, the fast readers typically finish first (and teachers need to find something to keep them busy).

One solution in current core reading programs to this dilemma is to provide texts for different levels of reading. The advanced or fast readers get one text and the below-level readers get another, “easier” text. A third text is provided for on-level students but, for comparative purposes, let’s look at the texts for the advanced and below-level readers.

The vocabulary difficulty is the same across the two levels of texts. Based on the quantitative measurement—The Lexile Framework—described in Appendix A of the Common Core State Standards (CCSS Initiative, 2010), the average frequency of words is almost exactly the same for the advanced and below-level texts for the first unit of the third-grade texts of one of America’s current premiere core reading program (Beck, Farr, & Strickland, 2009): 3.61 for the advanced texts and 3.63 for the below-level texts.

What gets the advanced texts classified as “harder” and the below-level texts as “easier” is sentence length: an average of 9.9 words in a sentence for the advanced texts and 6.7 words for the below-level texts. A difference of 3 words, on average, in sentence length is not great which means that the advanced texts do not have many of the embedded clauses which can make text more complicated. However, very short sentences, like those in the below-level texts can challenge readers because the connectives between ideas have been eliminated (Davison & Kantor, 1982).

The other big difference between the texts for advanced and below-level students is the number of words per text: approximately 1,000 words per advanced text and 540 for a below-level text. Over the 30 weeks of a school year (one book per week), advanced students will have been exposed to approximately 48% more words. Both groups are asked to reread texts so a response cannot be that the number of words for the below-level readers is greater in practice. In practice, the below-level readers will simply be reading substantially less over the school year.

The issue is not getting the below-level readers to “catch up” to the advanced readers. The advanced readers will likely always have an edge unless below-level readers read voraciously during the summer, after-school, and on weekends.
The goal that is attainable is to get below-level readers to a proficient level of reading by third grade. A clear benchmark has been established for end-of-third-grade reading that is linked to high-school retention (Hernandez, 2011). This level is challenging (at least a third of an age cohort does not get to this level) but it is approximately 200 Lexiles lower than the expected level for end of third grade according to the Common Core’s guidelines. I am not advocating for lower standards. But the assumption that complex texts can be read before students have climbed an earlier staircase—the staircase of core vocabulary—is simply inaccurate. A core vocabulary underlies success in reading complex texts. The third-grade level linked to high-school retention represents successful scaling of this first staircase, which involves automaticity with the 2,500 complex word families that account for 90% of the total words in most texts (Hiebert, 2012).

Exposure to approximately 16,500 words over the third-grade year (the total words in all of the books for below-level readers) is simply not enough to develop the automaticity that is required with the core vocabulary—especially when the “hard word” rate is high, as it is in the below-level readers of this target core program. The best indicator of amount of exposure to become facile with a word is 10 exposures (McKeown, Beck, Omanson, & Pople, 1985). Below-level readers are likely to encounter the core vocabulary that needs to be mastered from 2 or fewer times in the 16,500 words of text. Their advanced-level peers will see the same vocabulary approximately 3 to 4 times in the somewhat larger number of words in their texts.

The result of providing less text for below-level readers means that the poor continue to get poorer and the rich get richer. It is highly unlikely that reading less will develop the core vocabulary proficiency that permits students to read complex texts in the middle and high schools.

References


Posted on TextProject.org on July 30, 2012
DOES SELF-SELECTED READING HAVE A PLACE IN A COMPREHENSION PROGRAM?

It’s been some time since I reviewed the research on the reading-writing connection but, at least based on my own experience as a writer-reader, I’m confident that the more one writes the better one comprehends the texts of others. I’ve also been thinking about the nature of assessments that capture students’ thinking with text. A particular question that I have has to do with tests of background knowledge. Should an assessment capture students’ ability to think about different topics? Or should a comprehension assessment actually measure students’ thinking about particular topics?

One topic on which I’ve also been reflecting but on which I have some background knowledge is the role of self-selected reading in developing high levels of comprehension. In a column in Reading Today, Tim Shanahan (2006) wrote about interpretations of the conclusions about sustained silent reading in the National Reading Panel’s report. Tim made several distinctions in his column but, at least according to my interpretation as a reader, he was concluding that there is no research to justify devoting chunks of instructional time to independent reading of self-selected text.

To engage in a discussion of independent, silent, or self-selected reading, it is important to define the terms and, in particular, describe the contexts in which these kinds of reading occur.

Silent reading: Silent reading is reading without overt vocalization. Silent reading can—and should—occur as part of teacher-directed lessons. To be responsible for one’s own reading, even in the early stages of reading, is important. Teachers can ask a question that requires students to read a portion of a text silently, followed by students’ responses to the question. A choral reading by a small group of students can be followed by a silent reading of the text, with the aim of reading the text smoothly and quickly, while identifying additional information from the text.

Independent reading: Students are reading on their own, without a more proficient reader reading along or aloud. Independent reading can occur as part of instructional venues as, for example, when students do a follow-up reading of a section of a textbook passage that has been discussed or in preparation for a class or small group discussion. Independent reading is silent reading, although my experience as a second-grade teacher tells me that first and second graders aren’t all that silent when they are reading independently.

Self-selected reading: Self-selected reading is independent and typically silent (although it does not have to be silent; students could self-select texts and read it aloud to a peer). What distinguishes self-selected reading is the choice that students have in what they read. Self-selected reading has been a hallmark of sustained silent reading.

Little attention has been paid in the pedagogical or empirical literature to the skills or strategies of
book selection. It seems that good book selection strategies are assumed. In none of the studies in the National Reading Panel examination of “effects of encouraging students to read” (Appendix E, p. 3-43) have I been able to find any instruction in the experimental treatments for students who weren’t already avid readers. Students in the experimental groups were never taught how to select books for their needs or reading levels nor were they taught how to manage one’s reading in an independent setting (e.g., recording questions about meaning in a journal; identifying unknown words).

Self-selected independent reading involves a set of strategies that are learned. Development of these strategies should be one of the primary goals of a reading/language arts program. However, the skills of self-selected reading do not develop by simply offering students the books of a library and asking them to pick books. Even offering students the opportunity to choose from the books in a classroom library or those related to a computerized reading program will not develop the skills of self-selected reading.

Students who read avidly—especially young students—have been taught how to select books that interest them. Avid readers have a repertoire of strategies and skills, including (although not limited to):

¥ a familiarity with topics, genres, and authors (and, in the case of young readers, illustrators) and an understanding of how their interests match to particular topics, genres, authors, etc.

¥ ideas about which texts they want to read next (derived from, e.g., conversations with other readers, sources such as a newspaper or a radio program, recommendations by librarians or booksellers);

¥ an interest in sharing information when they’ve read a good book;

Research shows that young avid readers typically come from homes where their choices are supported by recommendations from parents, family friends, librarians, and booksellers. I’m watching the development of an avid reader unfold in my extended family (a picture of this avid reader in development follows).

This picture shows Madeline on her first birthday, amidst the bustle of a family gathering. It happens that the book isn’t the greatest literature (another thing to remember in the development of avid readers—they also read a great deal of “popular” literature). However, she has a grand-aunt (me) who knows a great deal about choosing books for toddlers and a grandmother who was the director of a preschool. Between the two of us (and her very knowledgeable parents and other grandparents), she gets books about Big Bird, lots of books with flaps (a favorite of hers), and books by Bill Martin, Eric Carle, and other writer/illustrators who create great books for toddlers. She already has favorite books that she wants read over and over again.
But what about the children who don’t come from communities and homes such as Madeline’s? How can we scaffold or support the development of proficient self-selected reading? The answer is not to put students into contexts without any guidance. That is, students shouldn’t spend instructional time with text that they have self-selected when they have not been taught how to select books. However, should instruction on self-selection be part of an instructional program? I believe strongly that it should be. In fact, I’m advocating interventions on book selection and reading these books independently.

One aspect of such an intervention involves identifying books that one can benefit from—books that aren’t too easy and aren’t too hard. To date, many of the text leveling schemes that underlie programs (including many of the computerized programs that claim to match students and books precisely) are simply too vague to ensure that books are just right for particular students. There needs to be understanding on the part of students—even young students—of what characterizes an appropriate book for them at a particular time. Further, an intervention on book selection involves students with numerous titles that represent different genres, authors, and topics. A book selection intervention does not simply stay with the books that students already know. Such an intervention also needs to involve them with new authors, new genres, and new topics. Some children may consistently select books about Arthur and Clifford. Instruction on book selection recognizes students’ interests in reading popular books. After all, part of the diet of avid readers is popular books. However, just as the diet of avid readers is varied, so too an instructional program involves students with an array of topics, genres, and authors and the skills of knowing when a book is too easy or too hard.

References

Shanahan, T. (June 2006). Does he really think kids shouldn’t read? Reading Today, 23(6), 12.

Posted on TextProject.org on July 20, 2006
I gave many talks around the country after the release of the report, Becoming a Nation of Readers in 1985. After several months of having conversations with teachers around the country, I concluded that: “In education, the solutions of one generation when taken to their extreme become the problems of the next generation.” For example, Becoming a Nation of Readers suggested that trade books needed to be included in the school curriculum, not simply controlled texts. In some contexts, this recommendation was interpreted to mean only trade books at all grade levels (including first grade). This interpretation is still evident in the anthologies of basal reading programs where, at least in grade one, the number of unique words per 100 words is approximately four times what it was before Becoming a Nation of Readers (Hiebert, 2005).

Similarly, some (mis)interpretations of the report of the National Reading Panel (NICHD, 2000) can be expected to create a new set of problems. Several weeks ago, I was talking with a group of teachers about the need to verify that their students are, indeed, reading a critical mass of text annually and cumulatively over the primary grades. I presented guidelines that ensure students have read at least 1,000,000 words in school by grade four. The table that was the source of these guidelines appears below.

Table 1: Estimates for Opportunity to Read In-School: Ensuring 1,000,000 Words of Text By the End of Grade 3

<table>
<thead>
<tr>
<th>Level</th>
<th>Reading as Part of Instruction</th>
<th>Scaffolded Silent Reading</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grade 1</td>
<td>10 minutes daily @ 35 wpm = 63,000</td>
<td>7 minutes daily @ 30 wpm = 37,800</td>
<td>100,800</td>
</tr>
<tr>
<td>Grade 2</td>
<td>15 minutes daily @ 80 wpm = 216,000</td>
<td>15 minutes daily @ 80 wpm = 216,000</td>
<td>432,000</td>
</tr>
<tr>
<td>Grade 3</td>
<td>20 minutes daily @ 100 wpm = 360,000</td>
<td>20 minutes daily @ 100 wpm = 350,000</td>
<td>720,000</td>
</tr>
<tr>
<td>Total</td>
<td>639,000</td>
<td>613,800</td>
<td>1,252,800</td>
</tr>
</tbody>
</table>

This table—especially the third column—generated many questions from the teachers. Some asked whether it was appropriate to have students reading silently, since the NRP had stated: “No research evidence is available currently to confirm that instructional time spent on silent, independent reading with minimal guidance and feedback improves reading fluency or overall reading achievement,” there should be no silent reading during the Reading First block. That is, even in a teacher-directed instructional lesson, students were not to read silently. All reading during teacher-directed instruc-
tional lessons was aloud. Even when students were working on extensions of lessons, their reading was to be aloud. For all intents and purposes, silent reading had been eliminated from the primary grades in this school.

The debate around this finding of the NRP has centered on consequences of eliminating self-selected, independent reading from the elementary curriculum. Much has been written on this particular issue, although not much on the nature of the instruction of self-selected reading. The issue that I want to focus on here is the consequences for students’ silent reading comprehension when opportunities to read during instruction in the primary grades overemphasize oral reading or even are exclusively oral.

Silent reading is the primary mode of reading for proficient readers. If primary-level students only read aloud during instruction, it is doubtful that their reading rate and comprehension in silent reading will progress at the level required to be proficient. That is, their rate of thinking about text will be limited to their rate of oral reading fluency. While the information on silent reading rates is limited and dated, the best available data suggest that average third graders should be reading approximately half again as quickly in a silent reading task as they are reading orally (Taylor, Frankenphl, & Pettee, 1960).

A constant diet of oral reading during instruction does not give students the opportunity to develop silent reading fluency. In particular, if students’ only opportunity to read silently during instruction occurs when other students are reading orally, students have impoverished silent reading experiences. A long research literature (e.g., Gilbert, 1940) shows that those following along si-

lently while another student read slowly or dysfluently display the eye movements of poor readers.

Students whose only opportunities for silent reading occur in the context of following along as other students read orally are particularly at a disadvantage during assessment events. Even with first graders, group-administered reading assessments (other than oral reading fluency) are measures of silent reading fluency and comprehension. On the norm-referenced tests and criterion-referenced tests such as the National Assessment of Educational Progress (NAEP) and state tests modeled after the NAEP, reading is silent.

Students who are part of communities of readers outside the classroom are able to get the opportunities that are required to develop high levels of silent reading fluency and comprehension. Students who depend on schools to become literate will be penalized by instruction that overemphasizes oral reading and fails to model and provide opportunities for silent reading. What does silent reading have to do with it (with the “it” being comprehension)? Everything. Silent reading is the medium in which proficient readers typically comprehend.

*Posted on TextProject.org on June 27, 2006*
Students from high and low socioeconomic homes have been found to make similar gains on reading during the school year (Alexander, Entwistle, & Olson, 2004). It’s what happens in the summer that contributes to a growing gap in low- and high-income students’ reading. During the summer, low-income children either fall or stagnate during the summer, while higher-income children continue to progress or maintain their reading levels. By fourth-grade, the accumulated differences over several summers are reflected in a significant gap between low- and high-income students.

We can’t ameliorate all of the challenges that low-income children face but we can keep them on the page over the summer. And, to support that goal, TextProject has created a program of free texts called SummerReads™. The SummerReads program draws on what is known about effective home-summer reading programs. Here are the features of effective home-summer reading programs, with specifics on how they appear in SummerReads:

**Students need access to texts:** Students need to have texts at hand. The number of texts does not need to be great. Even reading 4 or 5 books over the summer helps to decrease the summer slide (Kim & White, 2008). Unfortunately, the very students who are most at-risk are the ones who often don’t have enough books. SummerReads changes this situation by providing 7 free texts per level.

**Texts need to be comprehensible for struggling readers:** Researchers have found that, when children got free books from a spring reading fair, two-thirds of them chose books that were too difficult for them. These children failed to score any higher on a standardized comprehension test in the fall than their peers who didn’t get the free books (Kim & Guryan, 2010).

Comprehensible means that students need to be able to read texts with enough accuracy so that they comprehend the content. What makes a comprehensible text for struggling, middle-grade students? There are 5,580 words that account for about 80% of the words in the texts read by adults and 90% of the words in texts read by students through the middle-grades. The majority of struggling readers are not automatic in recognizing these core words. They can read but their reading is slow and tedious which harms their comprehension and interest.

SummerReads gives students additional opportunities with the core vocabulary. Across the three levels of SummerReads, there is a small but steady increase in the percentage of challenging words. The rest of the words are from the core vocabulary.

**Texts need to be engaging:** Many American students are simply not reading enough to get good at reading. Information interests students and invites them to acquire more knowledge—the currency of the 21st century. Summer is a time of sports and picnics and holidays. Topics of Sum-
SummerReads deal with information about summer activities, such as the origins of first swim fins or controversies around flip flops—or even what they are called in different parts of the country and world.

**Expectations need to be clear and students need to have structures for tasks:** Conversations in classrooms as to what is expected with summer reading form the foundation of successful home summer reading programs. Students who are going into third through fifth grades are entirely able to establish goals and teachers are highly encouraged to have students set realistic goals of when and where they will read over the summer.

Teachers need to have these conversations with their students but materials can help convey these expectations and SummerReads does that in the following ways:

- Each book starts with guidelines on how to use the book.
- There is a place where students can keep records of their reading of chapters within books.
- There are comprehension questions at the end of each book.
- If students have access to computers (e.g., the library), there is a recording of each text at [www.textproject.org/summerreads](http://www.textproject.org/summerreads). This recording allows students to monitor and check their reading.

**Expectations need to be monitored:** This is one component that we couldn’t build into our free program. Schools need to take this one on: follow-up when the new school year starts. Such follow-up can include an assembly where the accomplishments of students in their summer reading are recognized.

Whatever texts you use this summer, be certain that your students, especially those who are basic or below in their reading, have access to texts that are comprehensible and engaging and have structures to keep them on track. Here’s to and enjoyable and productive summer of reading!

**References**


*Posted on TextProject.org on April 11, 2011*
KNOWLEDGE AND COMPREHENSION BUILDING
A question that parents frequently ask these days is: Does screen time count as reading time? With such a wide variety of online reading experiences available, the short answer would be have to be, “Yes, but…”

Heartily recommended are high-quality interactive e-books that engage children’s interest while expanding their knowledge of words. E-books allow children to interact with old favorites, such as Cat in the Hat, and introduce them to new friends, such as the alligator looking to have his teeth cleaned in Open Wide Snap (Kidstorybooks).

A must to avoid are the workbooks that have been turned into reading apps or software. Pitched as aids for beginning readers, they have little or anything to do with good literacy-building practices. These repetitive drills with their distracting animations and sounds do not support comprehension or offer real engagement.

Navigating the sheer amount of content for digital media can be overwhelming. One estimate is that about 300 web applications are added daily—with the majority of these applications oriented to young children. By the time one app is reviewed, 10 more have been added, making it difficult for experts to keep up with recommendations and reviews.

So without expert guidance, how can you find a quality online reading experience? Here’s how.

You can become your own expert by considering these five questions:

1. **Does the story or the language create a sense of wonder or fun?** Pushing children into games and apps that are tricked out rote exercises will not support children’s love of language and literacy in the long run.

2. **Does the experience include opportunities for varied responses and involvement?** One expert describes edutainment as “taking advantage of our psychological predisposition to repeat something over and over when the game rewards us in small ways as we go” (Hunter, 2011).

3. **Is the experience best suited to a digital environment?** Parents worry that children need to develop facility on the computer—but, at this point, there is absolutely no evidence that this experience needs to occur early on. This is not to say that at some future point advantages from participating with digital devices early on may be uncovered. Meanwhile, current research shows that children’s use of pencils to scribble, write, and draw is linked to reading development.

4. **Does the experience lend itself to a discussion with your child?** Integration of reading content into children’s lives by the adults around them is an important aspect of the effectiveness of learning from any tool—whether it is delivered via television, digital device, or book. The con-
tent that parents discuss with children creates a shared set of references that link learning to life.

5. **Is the digital experience designed to take the place of adult read-alouds or children’s independent reading time with books?** The list of documented benefits that children gain from adult read-alouds and their own independent reading time is long, including vocabulary, increased world knowledge, awareness of different genres, and focused adult attention. A national commission on reading in the 1980s concluded: “The single most important activity for building the knowledge required for eventual success in reading is reading aloud to children.” (Anderson, Hiebert, Scott, & Wilkinson, 1985). Nothing has come along since to dispute this statement.

**References**


READ-ALOUD FAVORITES: A SOURCE FOR ENRICHING STUDENTS’ KNOWLEDGE OF THE WORLD AND OF LANGUAGE

The feature of TextProject.org, Read-Aloud Favorites, is essential to our mission of providing appropriate texts for struggling and beginning readers. The Common Core State Standards bring increased focus to what it is that students are learning in schools and what they need to know. Through read-alouds, students can be introduced to topics and genres that they might otherwise not be able to read independently. Background knowledge and vocabulary (the words that are used for concepts) combined are the best predictors of students’ comprehension. Strategically chosen read-alouds are a critical arm of a curriculum that assists students’ development of vocabulary and concepts for the topics of complex texts.

Books in the Read-Aloud Favorites portfolio have been chosen to ensure that both world knowledge and literary knowledge of children are enhanced. What follows are the principles for choosing read-alouds that underlie the selections of Read-Aloud Favorites (including the books that will continue to be added to the database).

Ensure that read-alouds have compelling language. As teachers read aloud texts with memorable language, phrases and expressions become part of classroom talk (e.g., “Millions and billions and trillions of cats” from Millions of Cats). And, yes, there are informational texts that meet this criterion (e.g., “Seasons melt into seasons on her parents’ farm” from Through Georgia’s Eyes).

Ensure that narratives chosen for read-alouds have a clear message and fit into themes. Narratives document the human experience—dilemmas, choices, and challenges told by contemporary authors and authors whose books have been read by generation after generation. The focus in selecting narratives for Read-Aloud Favorites has been on texts that show critical insights about friendships, families, and interactions of individuals with the world around them.

As Figure 1 illustrates, read-alouds of narratives should include a variety of genres. This figure pertains to K-1 but the categories apply across the elementary school. As they hear contemporary and classic stories, children are being introduced to a host of characters. Some of these have stood the test of time (e.g., Gingerbread Man, Ferdinand), while others are endearing from the point of introduction (e.g., Olivia).

Figure 1: Examples of Narrative Texts
Ensure that students’ background knowledge in content areas such as science, social studies, and mathematics is also extended through read-alouds. Figure 2 illustrates just a few of the many outstanding texts that deal with topics in history, math, science, geography, and music/visual arts for young children. Titles for books appropriate over the elementary school are many.

Reading aloud informational texts lays a foundation for students’ life-long engagement with texts as a source of knowledge and enjoyment. The past two decades have seen a blossoming of texts for children that convey information in domains of history, physics, ecology, biology, and much more. Many of these texts are appropriate for read-alouds in that they have compelling language and compelling content.

Select books that students would otherwise not read themselves. Use read-aloud time to select non-instructional texts that students can’t read independently. Read-alouds are not a substitute for students’ reading of texts that are part of the instructional program. Rather, read-alouds are a complement and elaboration of the curriculum. Knowledge is the commodity of the 21st century and the selections in Read-Aloud Favorites recognize the need for students—especially those who depend on schools to become literate—to gain knowledge in schools.

The underlying goal of a read-aloud program should be to expand students’ exposure to books of compelling content and beautiful language. Read-Aloud Favorites are offered as a support for teachers in achieving this goal.

 Posted on TextProject.org on March 22, 2013

Figure 2: Examples of Informational Texts

Develop background knowledge by reading aloud books that have interrelated content.

Rather than reading a single book on the orchestra (e.g., Zin, Zin, Violin), additional books such as The Philharmonic Gets Dressed and Ah, Music can create a strong foundation of knowledge about orchestral music.
To prepare for the task of writing about the centrality of content or knowledge in an English/Language Arts curriculum, I reread E.D. Hirsch, Jr.’s (2003) article in the American Educator and I scanned his new book, The knowledge deficit (2007). I then reread David Pearson’s letter to the editor of the New York Times:

*Reading, Rehashing, ‘Rithmetic*

**Published: March 28, 2006**

*To the Editor (of the New York Times):*

As a longtime reading educator, I share the concern expressed in your article that reading and math are shortchanging other subjects. This development is as bad for reading as it is for science and social studies. Without strong knowledge about the big ideas that come from solid instruction in the sciences, arts and humanities, students’ reading (and writing) will ultimately suffer. Reading and writing must always be about something, and the something comes from subject-matter pedagogy — not from more practicing of reading “skills.” Reading skills are important, but without knowledge, they are pretty useless. We’d all be better off if schools taught reading as a “tool” to support learning those big ideas found in subject-matter instruction. It’s time to transform reading instruction from its current role as the curricular “bully” in our schools into a role it is better suited to play — being a curricular “buddy”!

P. David Pearson
Berkeley, Calif.,
March 26, 2006

The writer is professor and dean of the Graduate School of Education, University of California at Berkeley.

E.D. Hirsch has described the dilemma in depth; David has described the same dilemma succinctly. The bottom line is that reading/language arts instruction needs to be centered on content. We agree on that. But what content? I reviewed the standards documents of the nation’s two largest states and the national standards document. I found little that could guide state and district leaders or publishers in designing the content-rich curricula that Hirsch and Pearson are describing.

To illustrate how the grain size of the national standards in language arts compares to other subject areas, I located the first standard for other subject areas (oriented to Grades K-4). This information is in Table 1, along with the first standard for language arts (which is intended for K-12).

<table>
<thead>
<tr>
<th>Subject Area</th>
<th>Standard Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Science</td>
<td>1</td>
<td>Understanding the nature of the universe and the laws that govern it</td>
</tr>
<tr>
<td>Social Studies</td>
<td>1</td>
<td>Studying the historic, economic, and political factors that shape our world</td>
</tr>
<tr>
<td>Arts</td>
<td>1</td>
<td>Exploring the history and development of the arts</td>
</tr>
<tr>
<td>Language Arts</td>
<td>1</td>
<td>Developing reading and writing skills that support learning big ideas</td>
</tr>
</tbody>
</table>

This table illustrates the difference in content focus between subject areas.
### Table 1:

<table>
<thead>
<tr>
<th>Science</th>
<th>Social Studies</th>
<th>Dance</th>
<th>Health</th>
</tr>
</thead>
</table>
| Life Science Content Standard 1: As a result of activities in grades K-4, all students should develop understanding of the characteristics of organisms:  
• Organisms have basic needs. For example, animals need air, water, and food; plants require air, water, nutrients, and light. Organisms can survive only in environments in which their needs can be met. The world has many different environments, and distinct environments support the life of different types of organisms.  
• Each plant or animal has different structures that serve different functions in growth, survival, and reproduction. For example, humans have distinct body structures for walking, holding, seeing, and talking.  
• The behavior of individual organisms is influenced by internal cues (such as hunger) and by external cues (such as a change in the environment). Humans and other organisms have senses that help them detect internal and external cues. | History Topic One: Living and Working Together in Families and Communities, Now and Long Ago  
STANDARD 1  
Family life now and in the recent past; family life in various places long ago:  
• Investigate a family history for at least two generations, identifying various members and their connections in order to construct a timeline.  
• Understanding that many students are raised in nontraditional family structures — i.e., single-parent families, foster homes, guardians raising children. | Content Standard 1:  
Identifying and demonstrating movement elements and skills in performing dance  
Achievement Standards:  
• Students accurately demonstrate non-locomotor/axial movements (such as bend, twist, stretch, swing)  
• Students create shapes at low, middle, and high levels  
• Students demonstrate the ability to define and maintain personal space  
• Students demonstrate movements in straight and curved pathways  
• Students demonstrate accuracy in moving to a musical beat and responding to changes in tempo  
• Students demonstrate kinesthetic awareness, concentration, and focus in performing movement skills  
• Students attentively observe and accurately describe the action (such as skip, gallop) and movement elements (such as levels, directions) in a brief movement study | Students will comprehend concepts related to health promotion and disease prevention:  
Describe relationships between personal health behaviors and individual well being.  
Identify indicators of mental, emotional, social, and physical health during childhood.  
Describe the basic structure and functions of the human body systems.  
Describe how the family influences personal health.  
Describe how physical, social, and emotional environments influence personal health.  
Identify common health problems of children.  
Identify health problems that should be detected and treated early.  
Explain how childhood injuries and illnesses can be prevented or treated. |
Whether the subject area is dance, health, geography, or earth science, experts have provided focused content standards. However, for language arts, the guidance for grades K-12 is vague, along the lines of “students need to read a lot.”

The content as well as domain-specific literacy strategies outlined in the standards for science, social studies, health, and the fine arts need to be part of the language arts/reading curriculum. However, there is also a substantial body of content in language arts that merits attention. At best, this content is hinted at in current national and state standards documents.

No one wants to go out on a limb and identify what the content (as opposed to the strategies) of language/literature could be. Hirsch and his colleagues have made some attempts in their “What every (nth grader) needs to know?” series. Hirsch’s list (in his 1988 text) and his dictionary of terms led many to view this as a superficial effort, even though the core knowledge efforts represented in the “What every (Nth grader) needs to know?” is more substantive.

Other than Hirsch’s efforts, there are few sources to turn for identifying content for a reading curriculum. In an effort to support thinking about content, I have outlined the beginnings of content for “reading” (elementary) in Table 2. There is much more that needs to be considered, including strategies and processes (especially those that have to do with scanning and selecting information from digital sources). Please regard this effort as illustrative and intended only to generate thinking as you prepare for the Institute (whether as a participant, facilitator, or presenter). The ideas are not proposed as comprehensive or definitive. Even a cursory glance will illustrate that I haven’t begun to examine the developmental manifestations of particular content. These ideas are presented as fodder to support our conversations—and, ultimately, our contributions to the children who depend on schools to become fully literate.
### Table 2. Very Cursory Ideas for a Reading Curriculum (K – 4)

<table>
<thead>
<tr>
<th>Literature</th>
<th>Language</th>
<th>Communication</th>
</tr>
</thead>
<tbody>
<tr>
<td>Myths &amp; Fables (e.g., Greek, Roman, Aesop’s Fables, European, African, Asian, Middle Eastern, Native American &amp; American tall tales), addressing questions such as: How do people show bravery? Courage? Fear?</td>
<td>Roots of English: Where did English come from? Where do new words come from (e.g., words used in technology)?</td>
<td>Newspapers &amp; magazines</td>
</tr>
<tr>
<td>Poetry:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>¥ Mother Goose</td>
<td></td>
<td></td>
</tr>
<tr>
<td>¥ Prominent historical poets for children: (e.g., Rossetti, de la Mare, Stevenson, Milne)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>¥ Rope Rhymes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>¥ Limericks</td>
<td></td>
<td></td>
</tr>
<tr>
<td>¥ Prominent American poets (e.g., Dickinson, Longfellow, Whitman, Frost, Sandburg, Hughes, Nash)</td>
<td></td>
<td>Television &amp; movies (How are stories created? What is a script?)</td>
</tr>
<tr>
<td>¥ Contemporary poets for children (e.g., Brooks, Hopkins, Prelusky, Kushner, Zolotow, Giovanni)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Biography &amp; Autobiography</td>
<td>Idioms</td>
<td>Internet: How can we find the best sources of information?</td>
</tr>
<tr>
<td>Speeches, including but not limited to:</td>
<td>Sayings &amp; Phrases</td>
<td>Comics &amp; cartoons</td>
</tr>
<tr>
<td>Gettysburg Address, I have a dream, I will fight no more forever (Chief Joseph), We observe today… (JFK)</td>
<td>Aphorisms Words &amp; phrases from other languages</td>
<td></td>
</tr>
<tr>
<td>Classics for children (including but not limited to:</td>
<td>Onomatopoeia &amp; Alliteration</td>
<td></td>
</tr>
<tr>
<td>Dr. Seuss, Milne, Stevenson, Alcott, Montgomery, Carroll, Twain, London, Frank)</td>
<td></td>
<td>The language &amp; images of advertisements</td>
</tr>
<tr>
<td>Types of Stories: Mystery, suspense, realistic fiction, science fiction/fantasy/adventure (addressing questions such as: How do writers keep you guessing about what is going to happen? How do writers make you laugh?)</td>
<td>Simile &amp; metaphor</td>
<td>Reading everyday texts… recipes, directions, crafts</td>
</tr>
<tr>
<td>Types of Information: History, geography, economics, life science, physical science, earth science, experiments, fine arts, addressing questions such as: How is a description in history different than one in a science experiment?</td>
<td>Word play (including puns)</td>
<td>Nonverbal Communication: Sign, Braille, Morse code</td>
</tr>
<tr>
<td>Contemporary children’s authors and illustrators (including current award winners such as Caldecott &amp; Coretta Scott King and authors of particular genre such as Gail Gibbons)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### References


*Posted on TextProject.org on June 22, 2006*
In a conversation during the No Child Left Behind era, an educator said that the topic of Comprehending and Thinking with Text wasn’t appropriate because the school system was still working on the “third and fourth” pillars of Reading First — fluency and vocabulary. I wanted to respond immediately with the statement that has become a mantra in reading pedagogy texts: “Reading to learn” doesn’t wait until students have learned to read.

I didn’t make this response because this person’s comment brought to the surface a nagging worry of mine. What does comprehension instruction look like for the millions of American students who aren’t fluent readers?

The concern isn’t a hypothetical one. The number of middle and high schoolers in this situation is high (e.g., Rasinski et al., Journal of Adolescent & Adult Literacy, 2005). Even middle and high schoolers who are lucky enough to be in effective fluency interventions will still be faced with texts that will be challenging to comprehend.

I believe that the answer to this situation may be the same as to the question that I posed last week (but didn’t answer). For students who are beginning readers (where the texts don’t warrant extended application of strategies or discussion of content) or for older, struggling readers, the key to developing a strong stance toward thinking with text comes from discussions. Young children can participate in Beck and McKeown’s Questioning the Author when an outstanding text (with content to think about) is read aloud. Rigorous curricula for middle and high school students are also required where there are texts that they experience through listening, followed by discussion. For older students, Richard Anderson’s Collaborative Reasoning came to mind. Anderson and his colleagues have been studying something they call “collaborative reasoning.” In Collaborative Reasoning, students are taught various argument stratagems. Students could participate in these discussions even if they have experienced the texts through listening or have read an accessible article on the main topic.

All of this brings up a new and perplexing question—if too much is done through listening to text (digitally, teacher, or peers), is it possible that students never develop in their fluency? This question I can answer! The consistent, frequent opportunities for fluency need to be alongside the thinking/comprehension strand of the program. And it also doesn’t mean that there is nothing to comprehend in the fluency sessions. Texts that provide students with background knowledge—e.g., on the topics that are the focus of the comprehension strategy and discussions—can support fluency and comprehension.

Posted on TextProject.org on June 13, 2006
WHERE’S THE “THERE, THERE” FOR STRATEGIES IN READING PROGRAMS?

The byword for comprehension research of the 1980s was “strategy.” The National Reading Panel’s comprehension review emphasized research on strategies. But where does content fit in with strategies?

Take the basal story that finished off the experiences for a group of second graders whose classroom I visited recently. The final story of the their state-adopted basal was about a class painting a mural on a wall at their school. The author signals the steps of the mural painting with sub-headings (e.g., A Mural Idea, The Plan, Painting the Mural). The teachers’ guide cites three strategies as the focus of this unit: evaluate, summarize, and question, with evaluate the focus strategy. What’s to evaluate in this text? One student in the story has the idea for the mural. Then, as a class, the students plan it, make it, and share it. The illustrations of the text are beautiful—but the text itself is very straightforward (which is a good thing for second graders who are at the point of solidifying their fluency). There is absolutely no “there there” to evaluate.

Here are my wonderings…..
If teachers cry “Wolf” early and often (with Wolf being “Remember to use a comprehension strategy such as predict/infer, summarize, monitor/clarify, question, evaluate before, during, and after reading”) but the texts that students read are straightforward and uncomplicated, do students become careless about or even resistant to using comprehension strategies? Annemarie Palincsar’s dissertation on Reciprocal Teaching used social studies and science texts. In social studies and science texts (even in primary levels), there are issues to evaluate and clarify. For example, in Owen and Mzee, what are the students’ hypotheses about Owen’s (a hippo) choice of Mzee (a giant tortoise) as a caretaker/friend?

This isn't to say that there aren't narratives that have oomph and benefit from the application of comprehension strategies, including picture books for children (think of Zen Shorts, for one). But the kinds of narratives that dominate in grades 1-2 (and often extend into grade three) typically don’t need the existential discussions that called for in teacher’s guides or the need for application of strategies.

Are we starting strategy instruction too early? Or should strategy instruction in the primary grades be limited to the texts of science and social studies?

Posted on TextProject.org on June 6, 2006
In an article in Reading Research Quarterly, Pearson, Hiebert, and Kamil (2007) describe difficulties with current vocabulary assessments. They argue that words on vocabulary assessments are typically chosen to discriminate across students, not to establish whether students have knowledge about particular domains of vocabulary. If educators are to make a dent in the vocabulary gap that currently exists between low- and high-achieving students, disciplined ways of selecting words for instruction—and assessments—are needed. Among the guidelines that Pearson et al. propose for assessing (and instructing) vocabulary in a strategic manner are a focus on: (a) words that are, indeed, unknown, to students; (b) thematic clustering of vocabulary; (c) morphological families; and (d) providing vocabulary in a variety of different and rich textual contexts.

References


Posted on TextProject.org on April 17, 2007
Even a quick tour of blogs and online discussions confirms that there is a lot of worry and confusion about the new assessments connected to the Common Core. One frequent comment from teachers is that “we don’t know what the assessments are like or how we can support them.”

It is true that we won’t know what texts will be on English/Language Arts assessments—and texts are undeniably essential in reading. But there is also some very clear information about the content and the form of the assessments, as a webinar for TextProject by Karen Wixson demonstrates.

The design of the Common Core assessments for both PARCC and Smarter Balanced draw heavily on prior work for the National Assessment of Educational Progress (NAEP) and also a number of state-wide assessments (e.g., Michigan, Illinois, Maryland) of the 1990s. Karen’s expertise on the new assessments is extensive, having served as a long-time advisor to the NAEP and as a developer of the earlier Michigan assessment.

Karen Wixson’s presentation underscores what we know about the new assessments. The assessments involve both a computer adaptive assessment (where students read texts and answer questions on computers) and a performance assessment (where students engage in research and present information). In this Frankly Freddy, I will focus on what we know about the computer adaptive assessment.

In the computer adaptive assessment, students as early as Grade 3 will spend two one-hour sessions (PARCC) and a 105-minute session (Smarter Balanced) reading texts and responding to questions. In PARCC, the time will increase by 10 minutes per session in Grade 4 (and we are assuming that there will be a chance for a break in the 105-minute period of Smarter Balanced).

Texts during these sessions will differ in length (more on that in a subsequent column on texts of the assessments). Students will respond to questions about these texts in three formats:

1. selected responses (i.e., multiple choice),
2. technology-enhanced responses (e.g., moving words on a graphic)
3. constructed responses (short written responses).

PARCC will use only the first two; Smarter Balanced all three.

The questions will ask students to be able to move beyond superficial understandings of texts. For example, they will need to be able to identify information from a text that justifies a response. The format is multiple-choice but the content requires attention to the text and also application of understanding.
The multiple-choice and the short-answer responses to questions that require deep understanding of texts have been used in many state assessments. The technology-enhanced responses will be new for students. The tasks, however, are similar to exercises in many comprehension workbooks and computer programs where students answer questions by creating charts or ranking information from texts.

What will be different for students in most states are the performance tasks—a topic of a subsequent column. However, approximately half of the Common Core assessments—the computer adaptive assessment portion—will have texts, questions, and response types that closely resemble the texts, questions, and response types of the NAEP. Prior to the Common Core, states were bringing the content and tasks of the assessments in line with those of the NAEP. That is, texts on passages were getting more complex than had been the case in the past, questions were being grounded in deeper features of texts, and responses were requiring students to provide evidence from texts.

These features of the Common Core assessments were already in motion. The results of the NAEP (and international assessments which have similar features) are the assessments on which policy-makers, the press, and the public have based conclusions about how well students are doing in English/Language Arts. The critical task for educators is to ensure that students are receiving classroom experiences that permit them to excel on these assessments—assessments that capture the kinds of reading proficiencies required for college and careers.

Presentation slides from Dr. Wixson’s webinar (Assessment and Instruction in the Era of the CCSS in English Language Arts) can be found at:

A video of Dr. Wixson’s recorded webinar can be found at:
https://www.youtube.com/watch?v=IHYcJAX0A08&list=PL0F32BE29849E98E1

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