

**7 TextProject** Answers Frequently Asked Reading Research Questions

# **Text Complexity**

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What role does motivation play when reading complex text, even for students who may have all the vocabulary to tackle the text?

What makes a text complex?

What is the difference between accessible and dumb-down text?

With the enormous emphasis on complex text within Common Core State Standards, what roadblocks should teacher be prepared for? And how can they prepare for these roadblocks?

#### **Overview**

Being able to read increasingly more complex texts has always been a driving goal of reading instruction. But often this goal has not been directly addressed in state standards and assessments. Things are different within the Common Core State Standards.

The Common Core has made increased attention to this feature of reading instruction by devoting an entire standard to text complexity—Standard 10. One of the ways in which the Common Core proposes that schools attain this standard is through a staircase of text complexity which, to this point, has been based on quantitative data. This staircase and also the texts which the Common Core writers suggested as exemplifying the complexity and range of texts have been the source of considerable trepidation among educators.

Educators' concerns are addressed in this issue of *TextProject Answers*.

## What role does motivation play when reading complex text, even for students who may have all the vocabulary to tackle the text?

The idea that students' motivation will make up for a lack of knowledge of critical words in a text is suggested by Common Core writers in Appendix A where they state: "Students deeply interested in a given topic, for example, may engage



with texts on that subject across a range of complexity" (p. 9). The few studies that support the idea of interest compensating for difficulty involved students reading short texts for short periods of time. And, yes, there are anecdotal reports of interested readers persisting with hard texts, often coming from our own experiences or those of children in our acquaintance. But there are numerous questions about what challenging text means in day-to-day school settings:

*First:* What is the discrepancy between readers' proficiency and text complexity? If readers are proficient with the core vocabulary—that is, 90% of the words in most texts—they will be able to navigate many texts. For these students, reading a text where 10% of the vocabulary is unknown may be tedious but, with sufficient interest and background knowledge, they have a greater likelihood of comprehending at least some of the text than students who don't have a solid foundation in the core vocabulary.

**Second:** What is the duration of the challenge? It may be entirely possible for students to persist in reading a short text which is challenging but their engagement may wane with longer texts, especially ones that are book-length.

*Third:* What is the frequency of the challenge? If almost all of students' school time is spent with text that they can't read facilely, they are less likely to respond with interest to challenging text than when such text consumes only part of their reading experiences. The frequency of the challenge brings up the issue of students' history with reading in school. If students have a long history of being given only challenging texts in schools—and there is evidence that that has been the case for many children of poverty—the engagement that they showed as primary-level students will likely wane by middle school. As John Guthrie has shown, consistent diets of particular school tasks, including the degree of challenge in texts, can sustain engagement or lead to disinterest. The challenge for educators in Common Core classrooms is to create a diet of varied texts that support students' development as readers, all the while involving them with compelling content that fosters an interest in learning.

A recorded version of this response, entitled "Challenging Text and Motivation," is available <a href="http://www.youtube.com/watch?v=arHYRJXoQik">http://www.youtube.com/watch?v=arHYRJXoQik</a>.

#### What makes a text complex?

Many features--including topic and author's style. But the variable that consistently predicts reading comprehension is vocabulary. Remember that the core vocabulary accounts for at least 90% of the words in most texts.

The other words in texts come from a group of around 300,000 words—words that are rare in written English. An additional one or two rare words per 100 words can add challenge. The kinds of words, of course, make a difference, especially when most of the rare words are multisyllabic rather than mono-syllablic.

Further, students are rarely asked to read texts that are only 100 words long. The number of rare words needs to be viewed relative to the entire task.

## What is the difference between accessible and dumb-down text?

When I suggest in presentations that challenged readers require large amounts of accessible text, I'm often asked: But what's accessible? And are accessible texts complex enough for Common Core classrooms?

A first point of clarification is that accessible text is not dumbed-down text. These three examples (in Table 1) illustrate dumbed-down texts:

- texts with short sentences to ensure low readability levels,
- texts on bizarre topics that are thought to interest challenged readers, and
- texts with phonetically regular words.

Dumbed-down texts should not be equated with accessible texts. Accessible texts have complex content and language. These 100-word samples from narrative texts identified by Common Core writers as grade 4-5 exemplars show that the number of rare words per 100 words differs substantially—even across complex texts.

In teaching challenged readers, I'd begin with complex texts that have the most manageable percentages of rare vocabulary—that is, accessible texts. In the sample in Table 2, the most accessible texts are: Alice's adventures in wonderland, Where the mountain meets the moon, The little prince, and Bud, not Buddy. Accessible texts are complex texts with moderate numbers of rare words.

The rate of rare vocabulary matters in text complexity and rare vocabulary can be taught as illustrated in numerous resources at <u>http://www.textproject.org</u>.

#### Table 1 Examples of Dumbed-Down Texts

exts	
Type of Dumb- down Text	
Short sentences to ensure low readability levels	These plants are the biggest of all. They are trees. Their stems are called trunks. Trunks are covered with bark. Bark protects the trunk. Bark helps animals, too. They can grab onto the bark. It helps them run up to their homes in holes and nests.
	Trunks can get very tall and thick
Bizarre topics thought to interest challenged readers	Monster trucks have been around for more than 30 years. At first, some people called them chrome crushers because the drivers drove them over cars and crushed the cars flat. Later, some drivers decided they would like to have flat races over a straight track. So, in 1987, they formed the Monster Truck Racing Association.
Phonetically regular words	So the con man went into the bank. The con man didn't see well. His nose was a mass of cotton lint. So the con man didn't see a striped pike in front of bank.
	Slip! There went the con man when he stepped on the pike. Plop! That was the con man hitting the street with his seat.

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#### Table 2

### Excerpts from Narrative Common Core Exemplars (Grades 4-5)

Toxt	
<b>Text</b> Alice's Adventures in Wonderland	<b>Excerpt*</b> Alice was beginning to get very tired of sitting by her sister on the bank, and of having nothing to do: once or twice she had <b>peeped</b> into the book her sister was reading, but it had no pictures or conversations in it, and what is the use of a book, thought Alice without pictures or conversation?
	So she was considering in her own mind (as well as she could, for the hot day made her feel very sleepy and stupid), whether the pleasure of making a <b>daisy-chain</b> would be worth the trouble of getting up and picking the daisies,
When the Mountain Meets the Moon	The villagers had to <b>tramp</b> in the mud, bending and <b>stooping</b> and planting day after day. Working in the mud so much made it spread everywhere and the hot sun dried it onto their clothes and hair and homes. Over time, everything in the village had become the dull color of dried mud. One of the houses in this village was so small that its wood boards, held together by the roof, made one think of a bunch of matches tied with a piece of <b>twine</b> . Inside, there was barely enough room for three people to sit around the table which was lucky. One of them was a young girl called <b>Minli</b> . Minli was not brown and dull like the rest of the village.
The Little Prince	Once when I was six years old I saw a magnificent picture in a book, called True Stories From Nature, about the <b>primeval</b> forest. It was a picture of a <b>boa constrictor</b> in the act of swallowing an animal. Here is a copy of the drawing. In the book, it said, Boa constrictors swallow their prey whole, without chewing it. After that they are not able to move, and they sleep through the six months that they need for digestion. I <b>pondered</b> deeply, then, over the adventures of the jungle. And after some work with a colored pencil, I succeeded in making my first drawing. My Drawing Number One.
Bud, Not Buddy	I'll be <b>doggoned</b> if that tooth isn't the littlest bit <b>wiggly.</b> At first you think it's kind of funny, but the tooth keeps getting <b>looser</b> and looser and one day, in the middle of pushing the tooth back and forth and <b>squinching</b> your eyes shut, you pull it clean out. It's the scariest thing you can think of 'cause you lose control of your tongue at the same time and no matter how hard you try to stop it, it won't leave the new hole in your mouth alone, it keeps digging around in the spot where that tooth used to be.
The Black Stallion	It had been fun, those two months in India. He would miss Uncle Ralph, miss the days they had spent together in the jungle, even the screams of the <b>panthers</b> and the many eerie sounds of the jungle night. Never again would he think of a <b>missionary's</b> work as easy work. No, sir, you had to be big and strong, able to ride <b>horseback</b> for long hours through the tangled jungle paths. <b>Alec</b> glanced down proudly at the hard muscles in his arms. Uncle Ralph had taught him how to ride, the one thing in the world he had always wanted to do.

The Secret Garden	"Well <b>enow. Th'</b> carriage is waitin' outside for thee." A <b>brougham</b> stood on the road before the little outside platform. Mary saw that it was a smart carriage and that it was a smart <b>footman</b> who helped her in. His long waterproof coat and the <b>waterproof</b> covering of his hat were shining and <b>dripping</b> with rain as everything was, the burly <b>station-master</b> included. When he shut the door, mounted the box with the <b>coachman</b> , and they drove off, the little girl found herself seated in a comfortably <b>cushioned</b> corner, but she was not <b>inclined</b> to go to sleep again
The Birchbark House	Sheput her leathery pawlike hands on the smooth bark, feeling for flaws. Yes, she decided her eyes sparkling at her granddaughter. A good one?
	"It is ready? <b>Geget</b> ," said <b>Nokomis.</b> Surely. Nokomis's tobacco pouch was decorated with blue and white beads in the shape of a pipe. She had owned this tobacco bag ever since <b>Omakayas</b> could remember. When she talked to the <b>Manitous</b> , Nokomis dipped out a <b>pinch</b> of tobacco.
	"Old Sister," she said to the <b>birchbark</b> tree, "we need your skin for our shelter." At the base of the tree, Nokomis left her offering, sweet and <b>fragrant.</b> Suddenly, she pressed her <b>razor</b> -sharp knife

\*Bolded words are rare words; un-bolded words come from the core vocabulary (i.e., 4,000 simple word families—available for download at: <u>http://www.textproject.org/library/resources/wordzones-for-4000-simple-word-families/</u>)

# With the enormous emphasis on complex text within the Common Core State Standards, what roadblocks should teacher be prepared for? And how can they prepare for these roadblocks?

I've written extensively about potential consequences of (mis)interpretations of text complexity. Here are my three biggest fears and potential responses of teachers to the current push for complex texts.

**Problem:** Teachers will be browbeaten to give students texts which have been identified by third parties to be complex but which students either can't read facilely or which they don't understand. An example of inappropriateness is children asked to read Sarah, Plain and Tall in the middle of second grade. Yes, some children may be able to pronounce most of the words. But the ideas of this book were aimed at older children (as evidenced by its receipt of the Newbery award as the most distinguished contribution to children's literature in 1986).

*Solution:* Teachers in districts and schools need to identify texts that illustrate the progression of growth expected at particular grade levels.

**Problem:** Teachers will think that they don't have the expertise to identify which texts are appropriately complex to grow the capacity of their students. They will look for third parties to tell them which books are complex and which aren't.

**Solution:** Knowing that a text has a guided reading level of N or a Lexile of 810 does not provide teachers with information on how to increase students' reading capacity with a text. Teachers need to examine texts themselves, attending to fea-

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tures such as prior knowledge, text structure, vocabulary, and purpose in relation to their own students. Publishers can give useful guidelines (e.g., the number of words that are challenging, the demands of prior knowledge) but teachers need to develop skills at identifying the features that require attention for their students.

*Problem:* In scrambling to give students complex texts, teachers will forget that proficiency at any complex task reflects involvement and practice over time.

*Solution:* Teachers need to attend to the amount that their students are reading across a school day. Many American students simply aren't reading enough across a school day to achieve the foundation needed to grapple with complex text.

To learn more about my cautions related to text complexity and an alternative that I've proposed—the *Text Complexity Multi-Index*—see:

Hiebert, E.H. (2012). *Readability and the Common Core's Staircase of Text Complexity* (Text Matters 1.3) and *The Text Complexity Multi-Index* (Text Matters 1.2). Retrieved from <a href="http://textproject.org/professional-development/text-matters/">http://textproject.org/professional-development/text-matters/</a>