Text Complexity

By Edwina Howard-Jack
Text Complexity

• What does text complexity mean?
• How is text complexity determined?
• How important is it?
• Will it change what students are being asked to read at a specific grade level?
What does text complexity mean and how is it determined?
Qualitative Factors:

This component of text complexity measures the

Levels of Meaning
Structure
Language and Clarity
Knowledge Demands
Levels of Meaning

• When considering levels of meaning as a part of text complexity, in easy-to-read literary texts there is usually a single level of meaning, while more complex literary texts will likely have multiple levels of meaning, especially if they employ devices like satire.
Structure

- Elements of structure that signal a simple text include uncomplicated, predictable, conventional organization. Conversely, a more intricate, complex text will conform less to the predictable norms of the genre. Chronological organization is an example of conventional organization in a literary text, while more complex literary texts may change time or sequence of events with devices like flashbacks. Complexity in informational texts may be evident in structures and conventions that conform to a particular discipline, such as is seen in technical texts.
Language and Clarity

• Determining the complexity of texts with this measure is fairly easy. Less complex texts rely on clear, timely or conversational language, while texts that use figurative language, archaic language or academic language specific to a particular discipline are more complex.
Knowledge Demands

• Determining complexity based on knowledge demands is an equally important aspect of text selection. Texts that don’t rely on a reader’s knowledge level are typically less complex than texts that assume a reader’s depth of content or discipline knowledge.
Text complexity component measures the readability of a text. It includes word length, frequency of words, length of sentences and the cohesiveness of the text.
Quantitative Factors:

- The grade-level complexity of qualitative factors can be established with free readability measures like Lexile and Flesch-Kincaid (Microsoft Word) grade-level tests as well as with other programs. If schools or districts have purchased licenses to other programs that will provide a quantitative readability measure, media specialists and reading specialists should be able to assist teachers in locating and using those programs.
The chart below demonstrates the Lexile ranges for text complexity grade bands.

<table>
<thead>
<tr>
<th>Text Complexity Grade Band in the Standards</th>
<th>Old Lexile Ranges</th>
<th>Lexile Ranges Aligned to CCR expectations</th>
</tr>
</thead>
<tbody>
<tr>
<td>K-1</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>2-3</td>
<td>450-725</td>
<td>450-790</td>
</tr>
<tr>
<td>4-5</td>
<td>645-845</td>
<td>770-980</td>
</tr>
<tr>
<td>6-8</td>
<td>860-1010</td>
<td>955-1155</td>
</tr>
<tr>
<td>9-10</td>
<td>960-1115</td>
<td>1080-1305</td>
</tr>
<tr>
<td>11-CCR</td>
<td>1070-1220</td>
<td>1215-1355</td>
</tr>
</tbody>
</table>
Reader and Task Factors:

This component includes consideration of readers’ prior knowledge, their motivation, interests and the complexity that the task creates.
Reader and Task Factors:

• According to the RAND (Research and Development) Reading Study Group, it’s vital to consider reader and tasks factors when making text determinations. This is especially important considering that prior knowledge and students’ motivation are fundamental to their ability to read and understand complex text.
Reader and Task Factors:

• The RAND report (2002) further establishes that motivation includes several criteria including a purpose for reading, the student’s interest in the subject matter, as well as how effectively the student reads.
Reader and Task Factors:

Hess and Biggam (2004) compiled the following list of text complexity factors for teacher use. It incorporates all that is in the Common Core text complexity triangle:

- word difficulty and language structure
- text structure
- discourse style (e.g. satire, humor)
- genre and characteristic features of the text
- background knowledge and/or degree of familiarity with the content (including historical, geographical or literary references)
- level of reasoning required (e.g. difficulty of themes or ideas in the text, abstract concepts in the text)
- format and layout of the text
- length of the text
Reader and Task Factors:

• Hess and Biggam aptly point out that a text with short, simple sentences can still pose a challenge if the concepts are unfamiliar, the ideas are abstract or the text still requires interpretation based on inferential thinking.
Text Complexity

• In the final analysis, it is important for teachers to keep in mind that text complexity factors are guides to aide in the selection of texts students can read. In addition, those same factors should aide in the selection of texts that will also stretch students’ to continue to grow and develop their skills as readers and as thinkers.
Are there examples to illustrate application of the triangle of text complexity factors?

• The Kansas State Department of Education (KSDE) has developed and shared some very helpful text complexity resources on its website. Included in those resources are examples of how a team of Kansas educators applied the three components of text complexity to Harper Lee’s novel *To Kill a Mockingbird*. 
Qualitative Factors:

• To determine the quantitative measure, the team used MetaMetrics’ online Lexile tool, which yielded a Lexile level of 870L for Lee’s novel. They also used a measure from Accelerated Reader that gave the book a 5.6 grade-level equivalent. In addition, Kentucky Department of Education (KDE) literacy consultants used Scholastic’s Teacher Book Wizard as a tool that gave the novel a grade-level equivalent of 8.1. After applying the quantitative text complexity measures, the determination was that Lee’s novel fell in the 6-8 grade-level text complexity band.
Quantitative Factors:

• To determine qualitative measures, the KSDE developed different rubrics for literary texts and for informational texts that allow educators to evaluate the important elements of text that are often missed by computer programs, because they focus on factors that can be more easily measured electronically.
Quantitative Factors:

- A marked rubric serves as a guide for educators re-evaluating the initial placement of a work into a text complexity band. That reflection process may validate the text’s placement, or it may reveal that the placement needs to be changed. For *To Kill a Mockingbird*, most of the criteria marked on their rubric fell in the Middle High range, which also placed it in the 6-8 grade text complexity band.
Reader and Task Factors:

• To aid educators as they look at reader and task considerations, which is the final text complexity component, KSDE also developed a helpful resource document meant to stimulate teacher reflection about the text, students, and any tasks associated with the text. Using that tool for reader and task considerations, the Kansas team recommended that Lee’s novel should more appropriately placed at the 9-10 text complexity band.
Text Complexity

• Appendix B in the Common Core English/Language Arts Standards confirms the Kansas team’s final text complexity determination for the novel; To Kill a Mockingbird is placed within the grade 9-10 text complexity band of Appendix B.
How important is text complexity?

• Whether students plan to enter the workplace, the military, a community college or a university after graduation, they will all need to be able to read and understand high-level texts, according to Malbert Smith, MetaMetrics president, who authored a March 3, 2011, Policy Brief. As a result, that ability to comprehend high level texts is a critical indicator of students’ future success.
How important is text complexity?

• There is mounting evidence that young people are leaving high school unable to tackle the reading and writing demanded of them in college and good jobs.
How important is text complexity?

• Research suggests that a trend toward less challenging texts in high school, and a tilt toward narrative texts, at the expense of informational and expository ones, have left young people particularly weak at comprehending and dissecting information from difficult texts and using it to build evidence-based arguments.
Where’s the evidence?

• A [2006 study by ACT Inc.](#), for instance, found that the biggest stumbling block for students who fell short of the readiness scores in reading on its college-entrance exam was answering questions derived from complex texts.
Because reading is likely a strong intervening factor in academic areas across the high school curriculum, ACT examined the English, mathematics, and science achievement of students who met and did not meet the ACT College Readiness Benchmark for Reading.
Reading Achievement and Achievement in Other Academic Areas

• Of those who met the Reading Benchmark:

  • ▼ 94 percent also met the ACT English Benchmark;
  • ▼ 63 percent also met the ACT Mathematics Benchmark; and
  • ▼ 47 percent also met the ACT Science Benchmark.
Reading Achievement and Achievement in Other Academic Areas

• Of those who did not meet the Reading Benchmark:
  • ▼ only 41 percent met the ACT English Benchmark;
  • ▼ only 16 percent met the ACT Mathematics Benchmark;
  • Benchmark; and
  • ▼ only 5 percent met the ACT Science Benchmark.
Where’s the evidence?

• Research cited in the original Common Core Standards documents indicates that in the last 50 years the texts students are reading by high school have become less complex despite the fact that the postsecondary reading demands have continued to rise.
Where’s the evidence?

• Considering the reading demands high school graduates face in postsecondary situations, Lexile levels provided by MetaMetrics give teachers one way to determine the text complexity level appropriate for their students. The MetaMetrics Policy Brief: Bridging the Readiness Gap establishes contexts to clarify the level students need to reach by the time they graduate from high school.
Where’s the evidence?

- They report that the median Lexile for military texts is 1105L, for workplace texts it is 1260L and for higher education texts it is 1393L. Right now, there is a gap from 65L to 230L between what seniors can read and the difficulty of postsecondary texts.
Why is the gap important?

- The resulting adverse consequence is that the comprehension gap for these readers interferes with their success as postgraduates. In business and in the military, these individuals research cited in the MetaMetrics Policy Brief indicates that a 250L difference can lower comprehension from 75 to 50 percent. The resulting gap for readers causes confusion and frustration. That frustration ultimately leads students to feel inept as readers.
Why is the gap important?

• Sadly, the gap interferes with these individuals reaching their potential because they are competing with peers who began their post-graduate experience as proficient readers. The long-term impact of this gap could mean low-paying jobs, which could ultimately impact our state and our country’s future.
Why is the gap important?

• Students may require additional training just to be able to do the basic job that their prepared, proficient reader peers can already do. Students entering two-year community colleges or four-year universities with this reading gap may require costly remediation before they can begin to earn credits and progress toward a degree.
So how can teachers guide students to more challenging text?

• According to social psychologist Lev Vygotsky, teachers provide instructional scaffolding by “…supporting the learner’s development and providing support structures to get to that next state or level” (Raymond, 2000).
So how can teachers guide students to more challenging text?

- It’s important for teachers to keep in mind that scaffolding should not be permanent. It is intended to give students the support they need to become independent learners. (Chang, Sung, & Chen, 2002) This strategy provides a way to guide readers to more complex texts.
Provide Scaffolding by

• introducing background knowledge
• immersing students in more complex language exposure and usage that makes a difference in their ability to access knowledge
• engaging students with carefully selected or constructed graphic organizers that make the structure of the text visible
Provide Scaffolding by

- modeling how to interpret the meaning of texts that use more complex approaches, like satire or rhetorical argument
- engaging pairs or teams of students with more challenging texts as “buddies” and giving them opportunities to reflect on those texts through discussions with each other or through “buddy” journals
- making 20 percent of their class reading “stretch” texts that help them reach beyond their reading level
“Stretch” Text Example Strategies:

• Introduce students to relevant texts that pique their interest, yet move them beyond their normal text complexity level.

• Supplement class content with more demanding texts that explore challenging concepts or different perspectives that are relevant to the topic, issue or concept being addressed in the class.

• Offer supplementary reading in the classroom library or in classroom reading centers allowing student choice with “stretch” texts.
“Stretch” Text Example

Strategies:

• Mary Schleppegrill, linguist and professor of education at the University of Michigan at Ann Arbor (as cited in Gewertz, 2011) says teachers need to intensify instruction around text instead of simplifying it. One way to intensify instruction is to focus the reader on a guiding question or a purpose for reading that nudges readers to reach beyond their current grade band and challenges their thinking.
“Stretch” Text Example

Strategies:

• Conference with readers and encourage students to set challenging reading goals that will involve them in the process of surpassing their “personal best” - just as athletes do.
“Stretch” Text Example Strategies:

• Above all else, congratulate and celebrate the stretch-successes of students. A personal note in students’ reading journals, a quiet, “I’m proud of you; look what you can do” or a public pat on the back provides encouragement and motivates the next success.
Where can educators find the resources to help them apply the text complexity measures?

• There are several text complexity resources available. CCSS Appendix A provides detailed information about text complexity. CCSS Appendix B contains text exemplars illustrating the complexity, quality and range of reading appropriate for various grade levels.
References:

References:


• RAND Reading Study Group. (2002). Reading for understanding: Toward an R & D program in reading comprehension. Santa Monica, CA: RAND.
References:


References:
