

The Text Complexity Multi-Index

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The Text Complexity Multi-Index (TCMI) is a process for matching texts with students. The process attends to all three dimensions that were recommended by the Common Core State Standards (CCSS Initiative, 2011) for selecting texts: (a) quantitative, (b) qualitative, and (c) reader-text match. Qualitative measures are of two types: comparison with a set of benchmark texts and a scheme for analyzing core traits of texts. The two types of qualitative measures mean that the TCMI process has four steps.

The four steps of the TCMI process for three texts—*Sarah: Plain and Tall*, *Henry and Mudge*, and *The Fire Cat*—are summarized in Table 1 (*next page*). The commentary that follows describes the steps of the process that are summarized in Table 1.

Step 1 Gather Quantitative Information

Lexiles are the most accessible readability data available at this point. An overall Lexile for many books can be obtained by going to www.lexile.com and using the tool “Find a book.”

As I have described in TextProject’s Reading Research Report



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Table 1

The Text Complexity Multi-Index Process

Step	<i>Sarah: Plain & Tall</i>	<i>Henry & Mudge</i>	<i>The Fire Cat</i>
1: Quantitative Indices	Lexile: 430	Lexile: 460	Lexile: 480
	MLWF: 3.84	MLWF: 3.65	MLWF: 3.76
	MSL: 8.44	MSL: 7.98	MSL: 8.68
2: Qualitative Benchmarks	Middle of Grade 3 (<i>Grandfather's Story</i>)	Middle of Grade 2 (<i>The Treasure</i>)	End of Grade 1 (<i>Frog & Toad</i>)
3: Qualitative Dimensions			
Levels of meaning/ purpose	Numerous levels of meaning: pioneer story but also story of a motherless family	Single level of meaning that is easy for children to grasp (similar to television sitcoms)	Characters are straightforward and follow the pattern of many simply written books
Structure	Follows a fairly conventional narrative sequence	Follows a fairly conventional narrative sequence	Follows a fairly conventional narrative sequence
Language conventions and clarity	Use of language is simple but elegant. Some archaic words (e.g., hearthstones).	Very straightforward	Very straightforward
Knowledge demands	High: Knowledge of pioneer life and effects on life of geography	Little, if any	Little, if any
4: Reader and Tasks	Appropriate for teacher-led discussions with third graders (i.e., early Stage 2 readers)	Appropriate for repeated and independent reading for most readers in Stage 2	Appropriate for repeated and independent reading for most readers at end of Stage 1

MLWF = Mean Log Word Frequency

MSL = Mean Sentence Length

11.03 (Hiebert, 2011), information on the two indices—Mean Log Word Frequency and Mean Sentence Length—that make up a Lexile is more informative than the overall Lexile. At this point, information on these two indices is not given in the “Find a book” information. It is possible to obtain this information by entering a sample of text (up to 500 words) into the Lexile Analyzer tool at www.lexile.com. This additional step will be prohibitive for most teachers but literacy coaches and team leaders in schools and supervisors in districts and states that have designated reading programs are encouraged to obtain this information. The effort of typing in 500 words from a text and conducting this additional analysis will be well worth the effort since determining whether a text’s difficulty rating re-

flects especially long sentences or challenging vocabulary can guide teachers in their selection and scaffolding of texts.

Step 2 Compare with Benchmark Texts

The second step of the TCMI process is to compare a text with a set of benchmark texts that have been identified within the local educational community as the goals for different points in students’ progression as readers.

Benchmarking texts is different than identifying a list of texts, as the CCSS did in an appendix attached to the English Language Arts/Reading standards. The benchmark texts in Table 2 are tied to particular developmental levels of reading. Educators who created the list studied

the word recognition needed for readers to read the texts independently and the kind of comprehension strategies that were required to make meaning of the texts.

TextProject’s list of benchmark texts in Table 2 is provided to illustrate the types of lists that educators in schools, districts, and states should be developing, not to be the be-all and end-all set of benchmarks.

Step 3 Analyze Qualitative Features That Make Texts Easy or Hard

Table 3 illustrates some of the qualitative dimensions of texts that have been shown to influence a text’s comprehensibility. In the months to come, I anticipate that various organizations will be offering more elaborated category schemes than

the one developed at TextProject and presented in Table 3.

Teachers have long examined texts with the four foci in Table 3—knowledge demands, language conventions, text structure, and level of meaning and purpose. Often these examinations have been part of daily planning. When several teachers discuss these dimensions, additional insight can be gained. Increasingly, educators will find summaries and commentaries of experts who have done qualitative analyses of particular texts, especially those listed in Appendix B of the CCSS. These summaries will be a valuable addition to the information available to teachers in working with a particular text. Teachers should always bear in mind, however, that their expertise also matters. Their expertise especially matters because they are the ones who know their students and the context in which a text will be used. The ultimate goal is the matching of students to texts—the fourth and final step of the TCMI process.

Table 2

TextProject’s Benchmark Texts (Narrative, Elementary Level)

Grade Level	Benchmark Texts	Description
1	<i>Green Eggs and Ham</i> * End of 1st grade—beginning of 2nd grade: <i>The Fire Cat</i> ** <i>Frog and Toad</i>	Structure of text is simple. Illustrations play a central role in enhancing story content.
2	Middle: <i>The Treasure</i> ** <i>Henry & Mudge</i> End: <i>The Bears on Hemlock Mountain</i> * <i>Tops & Bottoms</i> **	Straightforward development of a theme.
3	Middle: <i>The Stories Julian Tells</i> ** <i>Grandfather’s Story</i> End: <i>The Magic Finger</i> * <i>The Lighthouse Family</i> ** <i>Beezus & Ramona</i>	Themes can deal with challenging concepts (e.g., decimation of rain forest) but story structure and development of characters are straightforward.
4	<i>Soup and Me</i> * <i>The Black Stallion</i> ** <i>Because of Winn-Dixie</i>	Feelings and motivations of characters are a focus of text and are multi-faceted; characters face personal, family, school-related challenges.
5	<i>The Light in the Forest</i> * <i>Higgins the Great</i> ** <i>Island of the Blue Dolphins</i>	As with prior level, feelings/motivations are central but the challenges encountered by characters include societal/environmentally complex circumstances/issues.

* Exemplar suggested by Chall, et al. (1996)

** Exemplar suggested by the Common Core State Standards Initiative (2010)

Table 3

Qualitative Dimensions of Text Complexity

Dimension	Stage 1	Stage 3	Stage 5
Levels of meaning/purpose	Single level of meaning (often supported by illustrations)	More than one level of meaning (e.g., Great Kapok Tree where an individual’s choices relate to the choices of many)	Multiple levels require drawing extensively on reading/experiences from other sources
Aims/themes explicitly stated	Inferencing of characters’ motives and/or how features of context may influence plot	Implicit purpose may be hidden or obscure	
Structure	Texts follow structure of common genres (e.g., simple narrative, enumerative expository)	Texts include less common genres (e.g., autobiography, cause-effect expository)	Traits specific to a content-area discipline or use of unique chronologies/perspectives (literary)
Language conventions and clarity	Literal	Figurative; some irony (e.g., Dahl)	Literary: high level of figurative, metaphorical language (e.g., Hemingway)
Knowledge demands	Simple theme	Complex ideas interwoven	Interconnected theme

Table 4

Developmental Stages of Reading

Stage	Primary Task	Grade Span
0	Pre-reading	Through kindergarten
1	Initial reading or decoding	Grades 1–2
2	Confirmation, fluency, ungluing from print	Grades 2–3
3	Reading for learning new content and developing basic background knowledge	Grades 4–6
4	Reading for increasing content knowledge	Grades 7–8
5	Reading for multiple viewpoints	High school
6	Construction and reconstruction: A world view	College

The stages are an adaptation and extension of J.S. Chall (1983).

Developmental Stages of Reading are part of TextProject’s Stepping Up Complexity Project.

Step 4 Identify the Strengths/Needs of Readers and the Tasks and the Contexts of Classrooms

As you examine the summary of the fourth step of the TCM process, you will notice that the information from the first three steps is filtered through the lenses of reader, task, and classroom context. Ultimately, it is the teacher who identifies how particular students will interact with a text. The final decision is the teacher’s. It is useful, however, to have a means for establishing the proficiencies that students have acquired and those on which they are working.

Table 4 provides an overview of the stages of reading. Each stage includes more explicit and detailed steps that are not provided here. I chose the “big goals” intentionally. Often, in literacy instruction, the immense number of skills provided within standards documents and core reading programs has been overwhelming. These details have often kept us from attending to the big picture. The CCSS reminds us that it is movement toward the overall goals that matter most.

Teachers’ knowledge of readers and texts also need to be filtered

through their decisions about the reading event. For second graders still at the decoding stage, *Henry and Mudge* may be too challenging for independent reading but entirely appropriate for a teacher-led lesson on words with two syllables (e.g., *floppy*, *collars*, *bullies*, *breakfast*). *The Fire Cat*, on the other hand, might be an appropriate text for such students to read independently. The features of contexts and tasks of reading are many but the crucial ones are depicted in The Reading Space in Figure 1, with dimensions that include (a) social configuration, (b) form of response, and (c) allocation of time. These dimensions do not lend themselves to a scale with one end representing “easy” and the other “hard.” The crucial aspect of these dimen-

sions is the degree to which students are asked to be independent in the reading task and the degree of open-endedness in the types of responses after reading and in the time students have to read and respond. **T**

References

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Common Core State Standards Initiative (2010). *Common Core State Standards for English language arts and literacy in history/social studies, science, and technical subjects*. Washington, DC: National Governors Association Center for Best Practices and the Council of Chief State School Officers.

Figure 1
The Reading Space

