Module 5 of 5

What Are Alternative Measures of Text Complexity?

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Overview

Read and Learn

Activity 1
Read foundation material:

• *The Text Complexity Multi-Index*, Text Matters

Reflect and Respond

Activity 2
Analyze three "anchor texts" from the Grade 4–5 exemplars suggested by the Common Core State Standards using the qualitative tools described as part of the Text Complexity Multi-Index (TCMI)

Analyze and Apply

Activity 3
Use the TCMI to analyze a set of six additional anchor texts to identify the sources of challenge they might pose to various types of students, including struggling readers and English lanaguage learners, and to determine instructional focus

Background

This final module examines ways of establishing the complexity of texts that go beyond quantitative measurement. The Common Core State Standards (CCSS, 2010a) model of text complexity is based on three parts, as shown in Figure 1 (next page). A quick review of this model will help you with the content of Module 5.

Qualitative schemes give an overall rating for text complexity from simple to complex. However, as explained in the Text Matters article that provides the foundational reading for this module, the Text Complexity Multi-Index (TCMI) provides teachers a process for selecting texts by attending to specific aspects of text complexity that correspond to all three parts of the CCSS complexity model (Figure 1):

The TCMI's qualitative measures are of two types: comparisons with a set of benchmark texts and a framework for analyzing the core traits of text. Because there are two types of qualitative measures, the TCMI process has four steps in all.

Figure 1
The Common Core's Three-Part Model of Text Complexity
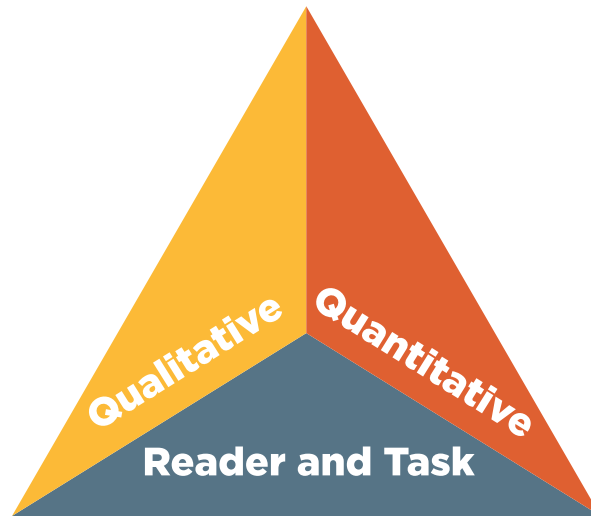
Step 1: Gather Quantitative Information, such as Lexiles, but also Mean Log Word Frequency (MLWF) and Mean Sentence Length (MSL) as described in Module 2.

Step 2: Comparison with Benchmark Texts (a sample of comparison benchmarks is provided in the Text Matters article and detailed benchmarks are expected to be developed in schools, districts and states)

Step 3: Qualitative Analysis of Features that Make Texts Easy or Hard (levels of meaning/purpose, structure, language conventions and clarity, and knowledge demands)

Step 4: Identifying the Strengths/Needs of Readers and the Tasks and the Contexts of Classrooms (see especially Table 4 in the Text Matters article outlining Developmental Stages of Reading)

A major point of the qualitative analysis of text is the role of the teacher. This is because teachers' knowledge of readers and texts influence their professional decisions about reading events for their students.

Refer to the Reading Space diagram shown in Figure 2 (next page), reproduced from the Text Matters article, for a concise summary of the various tasks and contexts of reading activities along a continuum of (1) social configuration (teacher-led to peer groups to individual/independent), (2) types of responses (oral comments, oral assignments, written assignments, written comments), and (3) allocation of time (fixed, short, immediate to open-ended).

In this module, you will analyze a set of texts (referred to as "anchor texts") that represent what elementary students should be able to read across a particular grade span. The CCSS (2010b) provides a large number of example texts in Appendix B that illustrate the kinds of materials that students should be able to read at particular grade levels. These texts are given for wide grade spans—typically two grades, but in the case of Grades 6–8, three grades.

Figure 2
The Reading Space

Social Configuration

Teacher-Led	Peer	Independent

⟵⟶

Types of Responses

Oral (comments)	Oral (assignments)	Written (assignments)	Written (comments)

⟵⟶

Allocation of Time

Fixed, short, immediate (e.g., tests)	Open-ended (e.g., month-long units)

⟵⟶
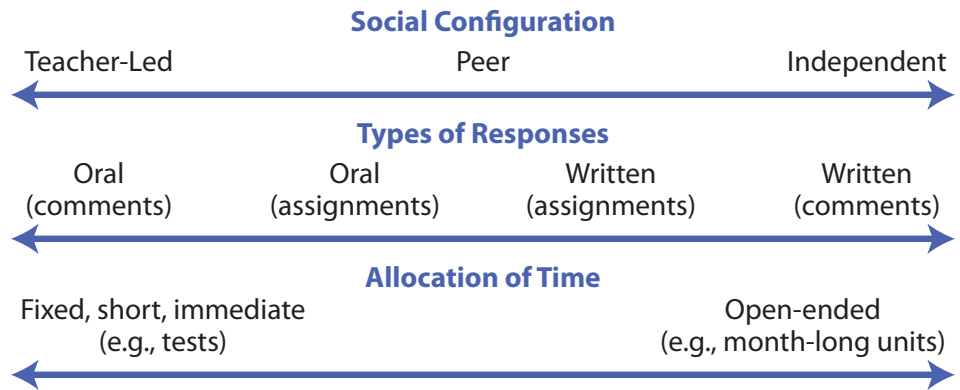
Key Terms

Three-Part Complexity Model: The CCSS (2010a) describes a three-part system for establishing text complexity: (a) qualitative dimensions of text complexity which depend on human judgment and evaluation for analysis; (b) quantitative dimensions of text difficulty (e.g., word length or frequency, sentence length, and text cohesion); and (c) reader and task variables which are best evaluated by teachers employing their professional judgment, experience, knowledge of their students, and disciplinary content expertise. Module 2 focuses on quantitative aspects of text complexity.

Quantitative Measures: Quantitative measures and estimates based on such measures, report items that can be counted and statistically manipulated in some way. In this module, quantitative measures of readability count aspects of text and compare them to scales, grade-level correlations, and so on. Qualitative measures, by contrast, rely on such factors as teacher expertise, observation of student behaviors, etc.

Lexile: A Lexile is a quantitative indicator of a text's overall difficulty, calculated by analyzing two factors: Mean Log Word Frequency (MLWF) and Mean Sentence Length (MSL). A Lexile can range from 0 to 2000. Scores below 0 are reported as Beginning Reader.

Mean Log Word Frequency (MLWF): This is a quantitative indicator of the average ranking of all of the words in a text (relative to all the words in the digital databank used in the analysis). A logarithm is applied to account for the unusual distribution of the frequency of words in texts (where a small number of words accounts for the majority of all words in texts and a large number of words appears infrequently)

Mean Sentence Length (MSL): This is a quantitative indicator that represents the average number of words in the sentences of a text.

Qualitative Measures: Unlike quantitative measures of text difficulty, which give numbers for features of texts, qualitative measures depend on human judgments. Certain features of texts such as the kinds of inferences that are needed to com-

prehend the meaning of a text require human judgment. These evaluations can be based on an agreed-upon set of guidelines. Further, evaluators can go through procedures to ensure that they are complying with the guidelines. Guidelines and the process of inter-rater agreement can produce reliable and valid outcomes.

TCMI (Text Complexity Multi-Index): A four-step process developed by Elfrieda H. Hiebert for analyzing aspects of text complexity for instructional purposes, such as selecting appropriate texts for specific readers or reading events. The TCMI process combines quantitative and qualitative procedures for examining text features.

The Activities

Read and Learn

Activity 1

This module's foundation reading is the Text Matters article *The Text Complexity Multi-Index* (provided in the resources for this module). The TCMI step regarding quantitative measures will build upon what you learned in previous modules. For the purposes of this module, as you read focus on the key attributes of qualitative measures of text complexity.

Reflect and Respond

In this section of Module 5, you will analyze three anchor texts using the qualitative tools described in the Text Complexity Multi-Index:

- *Alice's Adventures in Wonderland* (Carroll, 1865)
- *The Black Stallion* (Farley, 1941)
- *The Secret Garden* (Burnett, 1911)

Exceprts of these texts are provided with this module. You will describe the features of these texts that led to their assignment to the Grade 4–5 band. Table 1 summarizes various qualitative dimensions of text complextity at three developmental stages of reading. Grade 4–5 (roughly corresponding to Stage 3 in the table) is an especially critical time during which close reading strategies develop.

A worksheet that incorporates these dimensions or "levels of meaning" will be useful for qualitative analysis of the anchor texts. Please note that there are no absolute "right" answers with respect to the sorting you are being asked to do. There can be uneven ratings on traits for a text. All of the features do not have to be complex for a text to be complex overall. For example, a text can have fairly familiar vocabulary and a fairly recognizable text structure but deal with some very big issues that may be beyond the typical purview of nine- or ten-year-olds such as Anna's ambivalence toward her brother Caleb in *Sarah: Plain and Tall*—the baby who survived, but the mother who didn't.

A critical feature of this activity is for you to identify things that could challenge different students. You should look at each text from different perspectives. What

Table 1
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

complexity would this text present to an on-grade-level reader? Next, look at the text from the viewpoint of a struggling reader—how would this be more difficult for them? What about English learners in our classrooms? How might they experience difficulty with the text? Finally, you should ask yourself what features of the text you are analyzing might be the source of a lesson. Note that information on vocabulary has been used to anchor the texts. Additional information on the vocabulary is also available at the CCSS topic page at http://textproject.org/ccss/.

Activity 2 *Option 1*

You will be working in small groups. The three anchor texts may be accessed electronically or you may print copies to use.

In your group, use the TCMI to collect and analyze information on **one** of the texts. You will have about 40 minutes for this activity. You will produce one analysis paper per group.

When your group has completed the analysis, you will be asked to report your findings to the class as a whole. Since different groups will have completed analyses on different examples, you should hear the analyses of all three texts and you may want to take notes.

Next, you will be assigned to individually analyze the two texts that you did not report on as a group. These analyses will be completed independently and turned in to the instructor.

Activity 2 *Option 2*

You will be asked to analyze all three anchor texts independently and bring your reports to class. You will be assigned to a small group and spend time in discussion to compare and contrast your analyses, focusing on portions you may have ques-

tions about or need to understand more thoroughly. You will make notes on your own paper as these topics are discussed and you may amend your analyses as a result of new understandings. It is anticipated that this will take about 40 minutes of your class time. At the end of this time, you will have a short time to further amend your paper to reflect your group discussions about the texts and you will turn these in to the instructor.

Activity 2 *Option 3*

You will be asked to analyze all three anchor texts independently. You will submit your analyses to an asynchronous discussion board, then read and respond to five other students' analyses, outlining what you learned from the activity and what you learned from reading your colleagues' posts. The instructor may assign a formal reflection paper to you after this assignment is completed.

For a hybrid class (some meetings are face to face; some online), the instructor may wish to place you with another student. As a pair, you will generate comments and questions for general discussion in the face to face portion of class. Alternatively, you may be placed in synchronous chat rooms to view and discuss each other's analyses of the anchor texts completely online.

Analyze and Apply

The final activity of Module 5 involves taking another set of anchor texts and analyzing them through the TCMI process. These six texts are at the same grade band (4–5) as the three original anchor texts (*The Black Stallion*, *The Secret Garden*, and *Alice's Adventures in Wonderland*). Consequently your work on those texts can serve as a baseline. Excerpts of all six additional texts are provided in the resources for this module.

As you analyze these texts, you may decide that they do not fit into the complexity band for Grades 4–5. You may conclude that they are either easier or more challenging. The purpose of the activity, however, is for you to determine what might be the source of challenge for students—what elements might be the "growing edge" and what might rightfully be the focus of instruction. Remember to include normally achieving readers, struggling readers, and English learners in your analyses.

Activity 3 *Option 1*

You will need a copy of Table 1 (Qualitative Dimensions of Text Complexity) and Table 2 (Anchor Texts at Grade 4–5 Complexity Band) and access to (or a copy of) the excerpt from *The Wonderful Wizard of Oz*. During class, your instructor will project the text onto a screen that all can see.

Pay close attention as the instructor leads you through the text. Based on the information in Table 1, as you read:

- Identify the **levels of meaning** and provide a rationale for your decision.

Table 2
Anchor Texts at Grade 4–5 Complexity Band

	Lexile	Mean Sentence Length	Mean Log Word Frequency
Jupiter and His Mighty Company (Baldwin, 2012)	1220	23.52	3.74
The Railway Children (Nesbit, 1906)	870	12.92	3.51
"Tiger, Tiger" (Kipling, 1894)	1210	19.59	3.42
The Velveteen Rabbit (Williams, 1922)	1170	17.46	3.31
"The Fox & the Horse" (Grimm)	930	16.47	3.81
The Wonderful Wizard of Oz (Baum, 1900)	1030	17.5	3.67

- Identify the **structure of the text** and provide a rationale for your decision.

- Identify **language conventions and clarity** and provide a rationale for your decision.

- Identify **knowledge demands** and provide a rationale for your decision.

This activity should provide you with opportunities for extended discussion and you will engage in professional give-and-take of difference stances on the text.

Next, you will be asked to complete the analysis of at least two other texts independently. Your instructor may elect to have a more complete discussion of all the texts once this assignment has been completed.

Activity 3 *Option 2*

You will individually complete analyses of two selected anchor texts independently (you may choose the texts or you instructor may choose to assign them). Bring in these completed assignments printed for classroom discussion. Your instructor will review each anchor text, noting the qualitative dimensions for each and may ask you to provide a rationale for your analysis of a given text. You will participate in discussion of the applied dimensions. If you are teaching and have your own classroom, an extension of this activity would be to select a text you are already using and do a complete TCMI analysis (quantitative and qualitative) to be turned in separately, along with a one-page reflection on the analysis process and what this means to your teaching.

Activity 3 *Option 3*

This activity is designed for online classes and based on the idea of a wiki. Your instructor may assign you to a small group or have you work independently.

According to Wikipedia (http://www.wikipedia.org), a wiki (pronounced *wick-ee*) is a type of website that allows its users to add, modify, or delete its content via a web browser using simplified markup language or a rich-text editor. Wiki software powers the wiki and most are created collaboratively. Wikis can be community websites.

The instructor will place you with other students so that you may see, communicate, and "grow" the wiki collaboratively. You will use the same criteria for analysis

of the anchor texts. This activity requires that all the students in your group post the quantitative scores for one or more of the anchor texts (see Table 2) on the wiki. With the help of others in your group, analyze the text in accordance with the guidelines in Table 1, creating a table for the data and annotating the file as you work.

Activity 3 *Option 4*

Using the original three anchor texts (*Alice's Adventures in Wonderland*, etc.) as a model, you will choose a text from Table 2 and then select a text in use at your school for the 4–5 grade band. You will then analyze and compare the two texts (the anchor text and the selected text from your school). This report is placed on-line in a discussion board and candidates respond to five colleagues in detail. After the discussion, the instructor may ask for a one-page reflection on the process.

References

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