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PUTTING TEXT COMPLEXITY IN CONTEXT

Refocusing on Comprehension of Complex Text

ABSTRACT

The Common Core State Standards for English Language Arts have prompted enormous attention to issues of text complexity. The purpose of this article is to put text complexity in perspective by moving from a primary focus on the text itself to a focus on the comprehension of complex text. We argue that a focus on comprehension is at the heart of the Common Core Standards for ELA and that characteristics of the text represent only one of several factors that influence comprehension. Using both theoretical and empirical sources, we highlight the relationship between texts and tasks. We propose a Text-Task Scenario framework in which the simultaneous consideration of text and task results in a more nuanced and more instructionally responsive estimate of the comprehension of complex text.

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STANDARD 10 of the Common Core State Standards for English Language Arts (CCSS-ELA) (National Governors Association & Council of Chief State School Officers, Common Core State Standards Initiative, 2010) has prompted a barrage of attention to text complexity (Gamson, Lu, & Eckert, 2013; Hiebert & Mesmer, 2013). This is not the first time in the last century that text difficulty has been a focus of research and practice (Bormuth, 1966; Davison & Kantor, 1982; Green & Davison, 1988; Klare, 1963). Early efforts to address difficulty primarily grew out of concern that texts were too challenging, especially for beginning readers. However, efforts to revise texts to reduce difficulty often inadvertently had the opposite effect, resulting in texts that were more difficult to comprehend and

less interesting (Davison & Kantor, 1982; Goldman & Rakestraw, 2000; Pearson, 1974–1975). These early efforts were followed by a series of concerns about text difficulty, including the "dumbing down" of texts (Chall, Conard, & Harris, 1977; Hayes, Wolfer, & Wolfe, 1996), rejection of texts selected according to readability indices in favor of a standard of authenticity (California State Board of Education, 1987), and, even more recently, readability formulas that consider more nuanced factors such as text cohesion, word concreteness, and narrativity (e.g., Graesser, McNamara, & Kulokowich, 2011).

In our view, the current focus on text complexity grows out of a more nuanced perspective on reading and learning than can be captured by the emphasis on text difficulty typically represented in readability formulas and text analyses, including the three-part model for assessing text complexity presented in Appendix A of the CCSS-ELA. The view of reading and learning that emerges from a close reading of the CCSS-ELA, particularly the introductory sections in which the broad purposes of the standards are elaborated, is that of skilled, sophisticated readers who read widely and deeply from a broad range of high-quality, increasingly challenging and complex literary and informational texts, including disciplinary text. Further, the CCSS-ELA promotes the view that it is through this extensive reading that readers develop literary, cultural, and disciplinary knowledge that reflects comprehension and, equally important, facilitates it. In this context, text complexity is not an end unto itself. The purpose is not simply to have complex text in schools, it is to develop readers who can comprehend complex text—to press on deep, higher levels of comprehension and, through that, build knowledge.

When students' comprehension of texts becomes the focus of analyses of text complexity, the emphasis moves from an exclusive emphasis on texts to an examination of the interactions among reader, text, and task factors within particular contexts. Understanding these interactions helps us understand how and why comprehension varies from one situation to the next, even within a single text—information that is vital to instruction that increases students' capacity to comprehend increasingly more complex texts.

The purpose of this article is to clarify the role of text complexity in developing sophisticated comprehension and deep knowledge acquisition. While recognizing the influence of reader, text, task, and contextual factors on comprehension (RAND Reading Study Group, 2002), we focus on the relationship between tasks and texts for comprehension in this article. An understanding of how tasks can affect the comprehension of a text is especially important in light of the CCSS-ELA mandate that all students need to engage with significant amounts of grade-level texts. Similarly, those using the results of reading assessments need to understand how different tasks affect students' comprehension (i.e., exactly what an assessment is measuring).

In particular, we propose the construct of the Text-Task Scenario to illuminate the interplay between tasks and texts in comprehension. To provide the rationale for a Text-Task Scenario framework, we begin with a brief review of research on the nature of reading comprehension, including the array of factors from the RAND model (reader, text, task, and context) that interact in the process of comprehension. Next, we briefly discuss how a single factor—the text—is foregrounded in the discourse surrounding the CCSS-ELA, as the reader, task, and context fade into the background, if they are considered at all. This privileging of text could lead, we fear, to serious negative effects on the teaching, learning, and assessment of comprehen-

sion. We then address the role of the task, proposing a framework for judging the challenges of comprehending complex text by simultaneously considering the text complexity and the task complexity—what we have dubbed the Text-Task Scenario. Using data drawn from three large data sets, we provide evidence of the interaction between texts and tasks that supports our Text-Task Scenario framework. Then we explore how Text-Task Scenarios can be used together with instructional goals to inform our understanding of text complexity and our quest to help students engage effectively in comprehension of complex texts.

Conceptual Bases of Our Approach

To understand the role of text complexity in reading comprehension, we begin with a definition of reading comprehension drawn from the 1999 federally sponsored report of the RAND Corporation (RAND Reading Study Group, 2002). The RAND Reading Study Group (as the panel that was appointed) defined reading comprehension as "the process of simultaneously extracting and constructing meaning through interaction and involvement with written language. We use the words *extracting* and *constructing* to emphasize both the importance and the insufficiency of the text as a determinant of reading comprehension" (RAND Reading Study Group, 2002, p. 11). The Reading Study Group went on to suggest that comprehension entails four primary elements that interact in the comprehension process: reader, text, activity, and a sociocultural context. The panel depicted this set of relationships in what has become a widely used graphic (see Fig. 1), which serves as an icon of our collective knowledge about reading comprehension.

The notion of interaction is central to the RAND model in that each of the components simultaneously influences and is influenced by the others; this interactive frame requires us to reject fixed views of comprehension complexity in favor of views that are constructed in accordance with the particular constellation of these four components that hold for any given act of comprehension. For example, a text such as Steinbeck's *Of Mice and Men*, with its bursts of conversation expressed in short, choppy sentences and reliance on the conversational register of ordinary folk, has a quantitative readability of second/third grade. Even so, educators would not use it
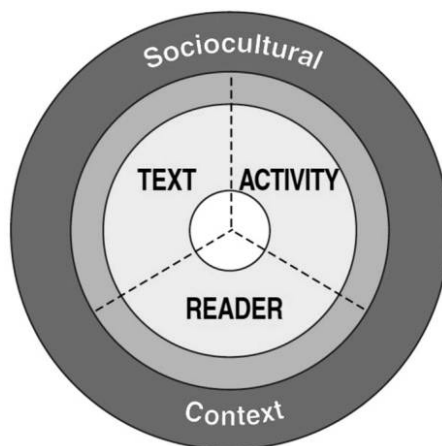

Figure 1. The RAND model of reading comprehension (Rand Reading Study Group, 2002, p. 12).

before middle or high school because of the complex nature of the themes of friendship, loyalty, and intellect inscribed by Steinbeck. Eighth-grade students might readily provide a plot summary of the work, but an analysis of the authorial tools that Steinbeck uses to unveil those complex themes would prove difficult for even sophisticated middle school students. But, change the collaborative context and the nature of the task from one in which everyone reads the text independently and writes a thematic analysis to an activity in which small groups compete with one another to produce the best book-jacket blurb for the novel, and a given student's comprehension might appear more sophisticated. Or, frontload a chapter on Egyptian cultural contributions with an engaging movie of the archaeological discoveries of ancient Egypt, and comprehension for some students might improve dramatically. Within this interactive frame, comprehension has a dynamic, complex, and tentative character. Tasks matter—both what we ask students to do and the texts to which they apply the tasks. Scaffolding matters—how teachers support and guide students throughout the task and how peers collaborate in all aspects of the activity. Teachers' goals matter—sometimes teachers support students to understand the text material at hand and sometimes they want to help students become active, self-regulated readers who have a range of strategies that support deep comprehension and learning from text. All this is by way of saying that neither reading ability nor reading disability is entirely "beneath the skin and between the ears" (Mehan, 1993, p. 241), nor is it simply on the page.

These scenarios of the complex interactive nature of comprehension are not simply niceties or surface nods to theory; they are fundamental to understanding comprehension competence and the partial role text complexity plays. Readability formulas or other indicators of text complexity (Graesser et al., 2011; Klare, 1984; Stenner & Burdick, 1997) can only ever tell part of the story. In fact, depending on the criterion variable used to scale texts independently on an underlying continuum of complexity, a recent study of six of the most sophisticated readability schemes (Nelson, Perfetti, Liben, & Liben, 2012) explained only 36%–65% of the variance in complexity. While correlations of this magnitude suggest that comprehension is shaped by these text indicators, it also suggests that other factors are involved (those that might explain the other 64%–35% of the variance); the most likely candidates are those in the RAND model (reader, activity, and contextual variables). Equally important, this highly situated, multidimensional, interactive view of comprehension has a potentially enormous role in shaping our thinking about how comprehension of complex text is taught, developed, and assessed.

Text Complexity in the CCSS-ELA Documents in Light of the RAND Report

It is not surprising that the CCSS-ELA documents acknowledge the RAND multidimensional model of reading comprehension (RAND Reading Study Group, 2002). In fact, Appendix A includes a graphic that mirrors many of the features of the RAND model—the text, reader, and task (i.e., activity in the RAND model) (see Fig. 1). Nevertheless, the emphasis in the document and the way many people are interpreting it focuses disproportionately on the text. To understand better why this might be, we first provide a close reading of the CCSS-ELA documents, and then we examine strategies several states are using to evaluate texts as they implement CCSS-ELA.

The CCSS-ELA Documents

Three sections of the CCSS-ELA focus on text complexity: the Standards, Appendix A, and Appendix B. The most visible presence is found in the Standards themselves; this is the first time since the standards movement began in the early 1990s that there is a specific reading standard devoted solely to text complexity. Anchor Standard 10 calls for students to read and comprehend increasingly complex text across the grades. The bulk of information on text complexity, however, is found in the extensive appendices and serves to bolster the prominence of text complexity.

Appendix A. As shown in Figure 2, three sources are identified as the basis for measuring text complexity: (1) qualitative dimensions—aspects "best measured or only measurable by an attentive human reader," such as levels of meaning, structure, language, and knowledge demands; (2) quantitative dimensions—aspects such as word length or frequency, sentence length, and text cohesion "that are difficult if not impossible for a human reader to evaluate efficiently" and thus typically measured by computer software; and (3) reader/task dimensions—variables specific to particular readers, such as motivation, knowledge, and experiences, and to particular tasks, such as purpose or the complexity of the task assigned and the questions posed. These descriptions appear under the heading "A Three-Part Model for Measuring Text Complexity" (p. 4). However, the graphic more accurately represents a model for comprehension of complex text than for text complexity. As RAND (2002) elaborates, reader and task are components of reading comprehension, along with text. Yet, by elevating only "Text Complexity" to the section heading, Appendix A privileges text over other components of the RAND model. Further, simply from a visual perspective, text is privileged—two-thirds of the area inside the triangle is allocated to text dimensions (qualitative and quantitative) but only one-third of the area is devoted to a combination of reader and task; context is not even mentioned in Appendix A.

Following the explanation of the graphic, Appendix A devotes approximately three pages to describing qualitative and quantitative measures of text complexity. With respect to quantitative measurement, specific Lexile scores are provided that are "aligned to CCR [College and Career Readiness] expectations" as compared to "old Lexile ranges." Reader and task considerations for comprehension receive barely a half-page description, and the content is vague and generic,
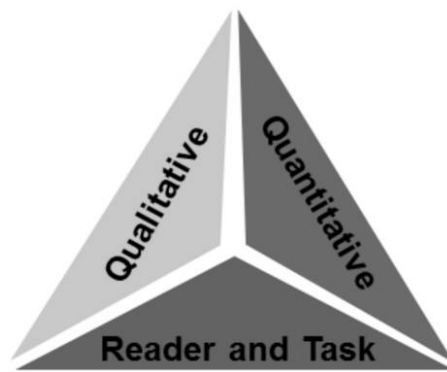

Figure 2. The CCSS-ELA three-part model for measuring text complexity.

making it challenging for readers to fully understand the contribution of these components or integrate them into their thinking about comprehension of complex text.

To their credit, the writers of the CCSS-ELA Appendix A present several examples of how the tripartite model can be used to "make informed decisions about whether a particular text is an appropriate challenge for particular students." These acknowledge reader and task factors in locating a text within a particular complexity grade band. But, even in these more nuanced explanations, the majority of attention is devoted to qualitative and quantitative text factors; reader and task considerations receive only boilerplate comments: "these [reader and task factors] are to be determined locally with reference to such variables as a student's motivation, knowledge, and experiences as well as purpose and the complexity of the task assigned and the questions posed" (pp. 12, 14, 16).

Appendix B. Appendix B also elevates the prominence of text complexity, to the exclusion of other factors, in the examples of performance tasks for assessing the standards. Following specific titles and excerpts of texts serving as exemplars of the quality and complexity of appropriate texts at specific grade spans are exemplars of "performance tasks" to illustrate the application of specific standards to texts of "sufficient complexity, quality, and range" (p. 2). Surprisingly, all the performance tasks are treated equally. There is no analysis of the differential complexity of the tasks as they relate to a specific text. For example, the following sample performance tasks are suggested for fourth-grade literary reading and for seventh-grade informational reading (please note that italics are reproduced as in the original):

Grade band 4–5: literary texts. Sample task 1: "Students *make connections between the visual presentation* of John Tenniel's illustrations in Lewis Caroll's *Alice's Adventures in Wonderland* and the text of the story to *identify* how the pictures of Alice reflect *specific descriptions* of her *in the text*. [RL.4.7]" (860L).[1] Sample task 2: "Students *compare and contrast* coming-of-age *stories* by Christopher Paul Curtis (*Bud, Not Buddy*) and Louise Erdrich (*The Birchbark House*) by identifying *similar themes* and examining the stories' *approach* to the topic of growing up. [RL5.9]" (*Bud, Not Buddy*, 950L; *The Birchbark House*, 930–970L).

Grade band 6–8: informational texts. Sample task 1: "Students *determine* the *point of view* of John Adams in his "Letter on Thomas Jefferson" and *analyze how he distinguishes* his position *from* an alternative approach articulated by Thomas Jefferson. [RI.7.6]" (1010L) (retrieved http://www.constitution.org/primarysources/pickering.html). Sample task 2: "Students *determine* the *figurative and connotative meanings* of *words* such as *wayfaring, laconic,* and *taciturnity* as well as *phrases* such as *hold his peace* in John Steinbeck's *Travels with Charley: In Search of America*. They *analyze* how Steinbeck's *specific word choices* and diction impact the *meaning and tone* of his writing and the characterization of the individuals and places he describes. [RI.7.4]" (1010L).

These sample performance tasks, like the prose that frames them, privilege text complexity as the major consideration in determining both the nature of comprehension for each text as well as the likely difficulties students will experience in comprehending and learning from text. The Lexile levels for the texts at each grade level are fairly similar, yet the tasks clearly present different levels of challenge and comprehension complexity when they are analyzed alongside the texts.

Applying CCSS-ELA Text Complexity Analyses in State and School Contexts

In addition to specific information in the CCSS-ELA documents, evidence of the current overemphasis on the text is also found in the strategies many states are using to implement the CCSS-ELA. Although the front matter of the CCSS-ELA makes it clear that attention to text complexity is a means to an end (i.e., acquiring better and deeper knowledge from text), many states have interpreted the attention to text complexity as a directive to identify a specific text-complexity grade band for the texts students should encounter through instruction; their aim is to ensure that all students are experiencing texts of sufficient complexity. Kansas was one of the first states to describe a process for measuring text complexity (Kansas Department of Education, n.d.), and several others have followed suit with minor variations (e.g., Georgia, Rhode Island, New York, North Dakota, and Ohio).

In general, the process used in these states includes four steps: (1) A quantitative score of the text is determined using a software program. The score is compared to the ranges for the specific grade-band level (e.g., K–1, 2–3, 4–5, etc.) provided in the revised Lexile suggestions for CCSS-ELA, and the text is assigned a specific grade-band level. (2) The text is analyzed qualitatively (e.g., levels of meaning, knowledge demands) using a rubric, and the results are considered along with the quantitative score to reconsider the grade-level placement. Either the text remains at the same level or it can be raised or lowered by some amount depending on the significance of particular qualitative factors. (3) Reader and task factors are considered through a set of open-ended questions focused on cognitive capabilities, reading skills, and motivation and engagement with task and text. Once step 3 has been completed, a final recommendation is made about the text complexity and it is assigned to a grade-band level (step 4). Although reader and task are considered in this process, text considerations (both quantitative and qualitative) clearly exert the majority of influence on text placement.

The CCSS-ELA model for assessing text complexity and the implementation of review processes such as those recommended by Kansas and others suggest that the purpose for attending to text complexity is to identify the grade band in which a text resides. This is consistent, at least in part, with the information provided in Appendix A of the CCSS-ELA under the heading "Why Text Complexity Matters," which implies that it is important to measure text complexity to ensure that students actually encounter sufficiently complex texts to be college and career ready when they complete their K–12 education. At the same time, however, these approaches to measuring and implementing text complexity narrowly interpret the role of text complexity in the comprehension of complex text and, in doing so, underestimate the consequential effects this will have on curriculum, instruction, and assessment.

If establishing the grade-band level of the texts students should read is the sole or primary purpose of measuring text complexity, then what is likely to happen is that publishers, test developers, and districts will conduct mass analyses of texts to locate them, as best they can, at the appropriate grade-band level. Curriculum guides would then use these designations to assign materials to particular grades. Similarly, these approaches may simply result in the use of different (more complex) texts for instruction, with no discernible effect on improving comprehension—especially if the intervention consists of exhorting students and teachers to just "try harder" and read "more closely." If all this attention to text complexity is to have the desired effect on

students' comprehension and knowledge building from complex text, then task and reader factors need to play a more prominent role in considerations of text complexity than is currently the case. Further, teachers will need to understand more about the relations among reader, texts, and tasks and how to help their students become independent and strategic in their ability to engage successfully with different texts in different contexts for different purposes.

Text-Task Scenarios: An Alternative Framework for Understanding the Role of Text Complexity in the Comprehension of Complex Text

Based on the interactive definition of reading comprehension from the RAND report and the important but oversimplified role prescribed for text complexity in the CCSS-ELA, we assert a more central role for reading tasks (what the RAND report identified as activity) and readers in implementing the CCSS-ELA. We begin modestly, with a focus on text and task interactions, because text and task can be more easily manipulated and adapted—in comparison to reader (e.g., knowledge, skill, interest) and contextual factors (e.g., instruction, setting), which are generally more interpretable in specific classroom environments. Texts must be accompanied by appropriate tasks and instructional strategies to support specific reading purposes and readers who vary widely in the skills, backgrounds, and dispositions they bring to the classroom. As a caveat, it is our position that enactment of the CCSS-ELA will fall short and, ultimately, not serve all students well unless reading curriculum, instruction, and assessment reflect the full complex, dynamic nature of comprehension outlined by the RAND report. For the present, however, we suggest that being more intentional about the task dimension provides a more comprehensive and dynamic entry point to inform comprehension curriculum, instruction, and assessment.

We propose a framework for thinking about comprehension of complex text, which we call Text-Task Scenarios (TTS) (Valencia, Pearson, & Wixson, 2011), as the unit of analysis for understanding comprehension of complex text. Text-Task Scenarios do not consider texts in isolation from the tasks in which we want readers to engage, nor do they consider tasks in isolation from the texts to which they apply. Rather, Text-Task Scenarios consider text and task in relation to each other in the context of specific reading purposes. Therefore, a Text-Task Scenario is the interface of the task requirements and the specific aspects of the text that the reader must process to successfully respond to the task. It is that interaction—that simultaneous consideration of the demands of the task and the task-relevant features of the text— that makes one TTS more or less difficult than another.

In general, a TTS comprises a reading selection (or strategically linked selections) and a single task or a suite of tasks. These might be the sort of tasks that are part of an instructional event, curriculum unit, or even an assessment. Text selection might include a range of literary, discipline-specific, out-of-school, and in-school texts that include various levels of complexity, topics, genres, structures, and sources. Tasks would address both purpose (why people at various developmental levels might authentically engage with this particular text) and expected performance—what readers are accountable for (i.e., to explore character development, understand the basic plot to retell, compare author perspective to another perspective to evaluate claims, evaluate bias to critique, learn about an alternative scientific theory, etc.). Purpose and task would vary by developmental level; thus a second grader might

read Cinderella to be able to retell the plot, a fifth grader to compare culturally distinct Cinderella narratives, and an eleventh grader to unearth the dominant gendered ideologies in the text; they might read the same version of the tale or different versions. By simultaneously considering the complexity of the text and the complexity of the task, we are more likely to accurately represent the challenge and complexity of the comprehension act and to anticipate the nature of instruction that will facilitate student success. Taken together, these combinations of various purposes for reading, text types, and comprehension tasks more or less define the trajectory along which thoughtful, competent readers develop.

As we have suggested in our analysis of CCSS-ELA tasks, and as we will demonstrate in the upcoming sections, the tasks associated with any given reading activity are no small matter, for they can interact with a specific text to make the comprehension of a relatively simple text (as judged by quantitative and qualitative factors) quite difficult, or the comprehension of a very complex text quite easy. A student who can identify the main ideas of a science article organized by topic headers or the plot of a short narrative story might or might not be able, even for the same text, to describe the scientific concept being exemplified by the examples in the science article or to analyze the subtlety of the author's craft in the story.

Although the concept of Text-Task Scenarios aligns with the RAND interactive model of comprehension and the research that underlies it, there is surprisingly little empirical research on the interaction of text and task and how it may contribute to comprehension (White, 2011). Therefore, we now turn to data from three sources—the National Assessment of Educational Progress (NAEP), a special study of fourth-grade NAEP in Reading (Callahan, Benson-Griffo, & Pearson, 2009), and an analysis of Adult Functional Literacy Assessments (White, 2011)—to support our claim of the influence and potential of Text-Task Scenarios, beyond simple measures of text complexity, to influence comprehension. We use these data sets from large-scale assessments because they provide us with carefully developed sets of texts and tasks that can be analyzed alongside comprehension outcomes for large groups of students. Our goal here is to demonstrate how text complexity interacts with task complexity to produce comprehension, and to gain a better understanding of how comprehension of complex text can be more fully understood and integrated into curriculum, instruction, and assessment.

Evidence Supporting the Relation of Text-Task Scenarios to Reading Comprehension

We analyzed data from several released reading blocks (reading selections and associated items) drawn from the NAEP reading assessment (http://nces.ed.gov/nationsreportcard/itmrlsx/search.aspx?subject=reading). Each text included on NAEP is evaluated using both quantitative and qualitative procedures as well as expert review (see National Assessment Governing Board, 2010, p. 32, for criteria). The reading block is then piloted and revised as needed before it appears in the final assessment. For our analysis purposes, we considered each NAEP item a specific comprehension task linked to a specific passage. Table 1 presents a summary of NAEP's operational definitions of two task-related variables—response format (multiple choice, short constructed response, and extended constructed response) and cognitive target, or the reading processes the reader needs to engage

Table 1. NAEP Definitions of Two Task-Related Variables Associated with Items

NAEP Task-Related Variables	Categories	Definition
Response mode	Multiple choice (MC)	Stem with 4 choices
	Short constructed response (SCR)	Can be answered by one or two phrases or by one or two sentences
	Extended constructed response (ECR)	Typically requires one or two paragraphs
Cognitive target (thinking level)	Locate and recall (L/R)	Explicitly stated information
	Integrate and interpret (I/I)	Synthesize ideas across the text or across two texts
	Critique and evaluate (C/E)	Examine multiple perspectives, text qualities, or effectiveness

for a specific text to successfully carry out the task (locate and recall, integrate and interpret, and critique and evaluate).

Table 2 illuminates the interaction of task and text in comprehension. It arrays the results of student performance on individual NAEP reading items (tasks) by response mode, cognitive target, and level of difficulty (i.e., the percentage of students who correctly responded to each item) for one narrative and one informational passage at both fourth and eighth grades. Although the text-complexity levels as measured by the Lexile scale fall within the new Lexile ranges recommended by CCSS-ELA, and the passages were qualitatively and quantitatively evaluated and piloted by NAEP to determine appropriate grade placement, there is considerable variability in the difficulty of the items/tasks associated with a single text. Further, the less difficult pair of eighth-grade passages (the narrative, E. B. White/*Twins*) was accompanied by more difficult items than the more difficult informational passage, *Women*. Overall, these data suggest that comprehension of complex text is not determined solely, or even primarily, by quantitative and qualitative measures of text complexity.

The data also suggest that task difficulty is not consistently associated with a particular task format or particular cognitive processes—it varies. While constructed response questions are generally more difficult for students than multiple-choice items, this is not always the case, especially at the eighth-grade level. Notice also that even though multiple-choice items tend to stack up on the easy end of the difficulty distribution, 3 of the 11 most difficult items in the entire set of fourth-grade items are multiple choice. And, short constructed response items appear not to be systematically related to difficulty levels, for they vary across the entire range. For example, the challenge of the following two short constructed response items, from the eighth-grade E. B. White block, cannot be fully understood without consideration of the specific features of the text. Furthermore, teachers would not be able to determine an instructional focus to support students without considering the text-task interaction.

"Question 9: How do you think E. B. White feels by the end of his visit to the zoo? Support your answer with reference to the essay (Medium = 54%)." This question requires the reader to draw an inference about the author's feelings; however, other factors also likely contribute to the mid-range difficulty of this comprehension task. The reading block includes two consecutive reading selections. They are introduced simply with, "Meet the author: E. B. White, the author of children's classics *Charlotte's Web* and *Stuart Little*, was also a great essayist." The texts are followed by 10

Table 2. Percentage of Students Who Correctly Responded to Each Item (Task) According to Item Type and Response Mode for a Sample of NAEP Released Reading Blocks

Item Type[a]	Response Mode[b]	Easy (>60%)	Medium (40%–60%)	Hard (<40%)
Grade 4—Marian Anderson (exposition): 890L (4th–5th):				
L/R	MC	71		
L/R	MC		54	
I/I	MC	69		
I/I	MC	68		
I/I	MC	63		
I/I	MC			29
I/I	SCR			30
C/E	SCR			31
C/E	SCR		44	
I/I	ECR		41	
Grade 8—Women Vote (exposition) 1340L (11th–CCR):				
L/R	MC	79		
L/R	MC		59	
L/R	MC	66		
I/I	MC	64		
I/I	MC	82		
I/I	MC		59	
L/R	SCR	68		
I/I	SCR		41	
C/E	SCR		51	
C/E	ECR			39
Grade 4—Nutting/Treed (paired literary passage) 660L (2nd–3rd):				
L/R	MC		59	
L/R	MC		59	
I/I	MC	67		
I/I	MC		49	
I/I	MC	64		
I/I	SCR		51	
I/I	SCR		59	
C/E	SCR		56	
C/E	SCR			36
I/I	ECR			36
Grade 8—EB White/Twins (paired literary passage) 1080/1190 (9th–10th):				
L/R	MC			39
L/R	MC	74		
I/I	MC			36
I/I	MC	80		
I/I	MC		55	
I/I	MC		60	
I/I	SCR		54	
I/I	SCR			33
C/E	SCR			22
I/I	ECR			39

[a] L/R = locate and recall, I/I = integrate and interpret, C/E = critique and evaluate.
[b] MC = multiple choice, SCR = short constructed response, ER = extended constructed response.

questions. So, it is likely that students read through both selections before responding to this question. Although neither selection title refers to the "zoo," the topics of the two selections are clearly different and the question sequence cues the reader to the second selection because it follows the order of the selections (questions 1–4

pertain to the first selection and then questions 5–10 pertain to the second selection). The inference is also made easier by the specific task, which prompts the reader to "the end of his visit to the zoo," a section that can be easily located in one specific spot in the text. Finally, the task is made easier because the text permits multiple inferences from multiple sections of the text, all of which can be supported and are accepted by the scoring rubric. Interestingly, some correct answers suggested on the rubric require a focus on just a few sentences, and others require processing larger sections of text so it is possible to satisfactorily "accomplish the task" using different levels of understanding.

Question 7 of this block gets at the reader's understanding of the author's intent and his craft at portraying an event: "Question 7: Using details from the essay 'Twins,' explain what E. B. White means when he says, 'We encountered better luck than we had bargained for' (Difficult = 33%)." The phrase appears in the first two sentences of the passage and is in boldface type, but its significance and meaning must be gathered across multiple spots in the text—and more than one spot has to be consulted to derive a plausible response. It requires the reader to first understand the phrase "bargained for" and then to determine what the author had anticipated. Then the reader must contrast the anticipated with the actual events.

The findings from these analyses may help explain earlier research findings that question type, comprehension skill, or question format—features of just the task—do not consistently predict comprehension within a grade or across grades (Bruce, Osborn, & Commeyras, 1994; Ozuru, Rowe, O'Reilly, & McNamara, 2008; Valencia & Pearson, 1986). In those studies, the categorization of the question is typically determined by simply analyzing the question (i.e., the task) instead of the relationship of the task to the specific text. This overlooked aspect of comprehension is consistent with and reminiscent of Pearson and Johnson's (1978) assertion that a question by itself is not "classifiable" into a subcategory of comprehension—that instead one can only infer the nature of the comprehension act by observing the answer a student produced or chose in relation to the question asked. This perspective led them to coin the term *Question-Answer-Relationship* as a way of classifying actual acts of comprehension rather than relying simply on the nature of the questions asked.

A somewhat different way to consider text-task interactions is represented in Table 3. Here, the distribution of item/task difficulty is displayed across three released passages—all from the fourth-grade NAEP (http://nces.ed.gov/nationsreportcard/itmrlsx/search.aspx?subject=reading). One released passage, "Daisy," is a narrative about a girl wrestler who, when her family moves to a new location, must overcome stereotypes about girls competing with boys in the same sport. The words and sentences are simple, but the themes are more complex—gender discrimination, personal initia-

Table 3. Comparison of Item Difficulty and Text Difficulty for Three Fourth-Grade NAEP Passages

		Number of Items by Difficulty		
	Lexile Grade Band	Easy	Medium	Hard
Tough as a Daisy	360L (below grades 2–3)	5	5	1
Marian Anderson	890L (grades 4–5)	4	3	3
Daddy Day Care	1080L (grades 6–8)	6	4	0

tive and perseverance, family and friend support. The second passage, "Daddy Day Care," is a straightforward descriptive informational text about the role male penguins play in the care of their young. The final passage is a biographical sketch about Marian Anderson, detailing significant milestones in her career. The Lexile level of each passage and corresponding grade band from the new Lexile levels recommended by CCSS-ELA are presented.

Two things are noteworthy about the data in Table 3. First, the text difficulty as estimated by Lexile ratings places the three reading selections in distinctly different grade bands, but NAEP's process of using a combination of quantitative measures, qualitative criteria, expert review, and pilot testing judged all three selections appropriate for the fourth-grade NAEP. Second, item difficulty is not determined primarily by text difficulty; note that the distribution of easy to moderate to hard items is similar across all three passages even though they vary widely in readability. These arrays of items represent the interplay of tasks and task-specific aspects of a text even though each of the texts has been assigned a single Lexile level. Taken together, the set of items/tasks and the associated reading passage might be construed to be a Text-Task Scenario that could guide instruction and assessment by the way it illuminates students' areas of strengths and needs within a single passage.

The second data source we used to examine text-task interactions comes from a special study of fourth-grade NAEP reading in which Pearson and his colleagues (Callahan et al., 2009) revised passages and their associated questions with the goal of making fourth-grade passages on NAEP more accessible to low-performing readers. One passage they used was "Daisy," the narrative about a girl wrestler described above (passage available at http://nationsreportcard.gov/reading_2011/testyourself _g4_passage.asp). Although this passage was rated 360L (below the second–third grade-level band), students' comprehension performance placed it as the second most difficult narrative reading block in the fourth-grade collection administered that year, even though other blocks included passages scaled as high as sixth-grade level using quantitative measures of text difficulty.

Efforts to alter both the "Daisy" text and the associated tasks (items) to make them easier included shortening the reading selection to alleviate potential fatigue, altering the focus of the tasks from probes requiring deep conceptual readings to more transparent surface-level readings, altering the scoring rubric to achieve greater precision about what constitutes an acceptable response, substituting more familiar for less familiar vocabulary in the item stem, and changing the focus of the task. Shortening the text did not result in a change of text difficulty level according to quantitative measures, especially because it was already at an extremely low level (grade level 1.2); however, students' comprehension was altered by shifting the tasks and the text-task interactions. Two examples help make this point: (1) item D7 (original): "In the story, Daisy's father describes her as 'tough.' What are two other ways to describe Daisy's character? Support your answer with information from the story"; (2) item D7 (revised): "In the story, Daisy's father describes her as 'tough.' Use at least *two* examples from the story to show how she is tough."

The original version of item D7, which is a 4-point polytomous extended constructed response item, yielded a p-value of 28%; the revision, 41%. The original is more complex because the task requires students to find two additional character traits and evidence to support them, and because the "toughness" trait is explicitly mentioned at the very beginning of the text and followed with multiple examples

throughout of Daisy's toughness. Furthermore, no other traits are explicitly mentioned in the text, so it is difficult for a reader to think beyond the "toughness" frame. The revised question is more consistent with the structure and main point of the text, thus producing better comprehension.

In contrast to the item above, other strategies in this special study to improve students' comprehension did not succeed. When students answered item D6 after reading the original text (360L), it resulted in a middle-range p-value (57.5%), and 81% of the students earned some credit: item D6: "How is the first boy Daisy wrestles different from the last boy she wrestles? Support your answer with information from the story." Pearson and his colleagues (Callahan et al., 2009), in order to reduce fatigue, actually shortened the passage from the original but left the question the same. As a result, Daisy wrestles only two contenders rather than three, which gives students less text to sift through in order to answer the question. Nevertheless, in the revised version, the average p-value was 32%, and only 63% of students received some credit. This unexpected decrease in performance is difficult to explain. Perhaps the redundancy of the second and third events in the original helped students develop an understanding; perhaps the text became less coherent by removing the second event; perhaps the plot was less suspenseful and therefore less engaging for students without the second wrestling match. Whatever the explanation, this example again points out the complexity of text-task interactions, even when the goal is comprehension of textually explicit information. Results of this special study indicated that changes aimed at making the text and the task easier yielded mixed results. One-third of the time students' comprehension increased, one-third of the time it decreased, and one-third of the time it stayed the same. It is also worth noting that one of the hardest extended constructed response items in the entire set of fourth-grade released items is the original D6. Pearson and colleagues concluded that comprehension of complex texts can be manipulated (for better or worse) by adjusting the texts and tasks, even when the text is written at a first-grade level.

The final evidence to support the relation of Text-Task Scenarios to comprehension comes from a study of functional adult literacy based on data from the 2003 National Assessment of Adult Literacy (NAAL) and the 1992 National Adult Literacy Survey (NALS) (White, 2011). Although the assessments included real-world, adult-level prose, document, and quantitative literacy tasks that have very different task, text, and reader demands than are typical for younger, developing students, White explores a similar dynamic, interactive model of reading to predict comprehension performance. Using multidimensional item response theory (IRT), White proposes a theory to explain functional adult literacy in terms of the interaction of text features, task demands, and required respondent skills.

White acknowledges that aspects of a particular text and of a task may independently affect the ease or difficulty of comprehension (e.g., the length of a text, the mathematical operations to be performed), but she argues that the interface between the text and the task is central to consider. Further, she argues that it is possible to analyze the task demands and their relation to the text independent of a reader's abilities, which is consistent with our effort here to focus first on our Text-Task Scenarios. Finally, White has identified what she calls task facilitators and inhibitors—in our TTS framework, these would be features of a task and task-relevant features or portions of a text that assist or divert readers from successfully accomplishing a specific reading task. She provides a helpful example: "Many variables can

either aid or hinder performance, depending on the specifics of the particular task and text. For example, suppose that the year 1978 is italicized in a text associated with a literacy task. If 1978 is the correct answer the italics might make it easier for the reader to find the answer. However, if the correct answer is 1979, the italics might draw respondents' attention to 1978, the wrong year. Text features interfacing with the task are facilitators when they aid task performance and inhibitors when they hinder task performance" (2011, p. 71). In sum, data from three large databases contribute to our understanding of Text-Task Scenarios and offer support for adding this framework to existing approaches to text complexity and our understanding of comprehension of complex text.

Using a Text-Task Scenario Framework to Inform Text-Complexity Analyses

Our goal in this article has been to disrupt the narrow view of text complexity dominated by quantitative and, to a much lesser degree, qualitative measures by shifting to an emphasis on the comprehension of complex text. In doing so, we offer Text-Task Scenarios as a more comprehensive and dynamic entry point to text complexity analyses that are more directly related to reading comprehension instruction and assessment. The dominant approach currently used to determine the complexity level of a particular text is quite linear—with reader and task factors the final elements to be considered in placing a text. In contrast, a TTS approach considers text-task factors simultaneously. In a linear approach, all qualitative factors that might affect comprehension are considered equally relevant. However, when purpose and task are considered at the outset, it's possible to identify the qualitative factors that are most relevant for instruction related to the purposes/tasks for reading. A benefit of the TTS approach is that it embeds text analyses in the instructional planning process.

Establishing instructional goals is the logical starting point for using a TTS approach to text analysis for the purpose of instructional planning. This may seem fairly obvious and easily accomplished. However, professional educators with years of experience working with preservice and in-service teachers are constantly surprised at how difficult it is for many prospective and practicing teachers to fully grasp the importance of taking time, before initiating instruction, to examine the texts they are asking students to read and consider the most appropriate instructional goals for a particular text or set of texts and the best means of accomplishing those goals. This is more important now than ever as Lexiles and other quantitative measures of text complexity are influencing curriculum materials and the selection of texts for instruction.

The vision of a skilled, engaged reader who builds knowledge and broadens world views described by CCSS-ELA aligns with three types of instructional goals for reading: content goals (i.e., the ideas and knowledge students build by reading a particular text); process goals (i.e., the skills and strategies to become effective, critical readers); and dispositions (i.e., the motivation to engage with a variety of texts for a variety of purposes) (Lipson & Wixson, 2013). Without consideration of instructional goals, text analyses, even those tied to Text-Task Scenarios, are likely to suffer from the same problem we seek to solve— categorizing texts according to grade band

without an increased understanding of the interactive nature of comprehension and possible strategies to improve student learning.

Once texts are analyzed with specific instructional goals in mind, text-task relations become visible. Equally important, we can begin to identify the text-task factors that are likely to inhibit or facilitate students' close reading and comprehension, and instructional strategies that might address students' specific needs. An example, developed to align with the CCSS-ELA Standards and the CCSS-ELA approach to measuring text complexity, is useful in thinking about the relation between Text-Task Scenarios and instructional goals.

The Council of Chief State School Officers (CCSSO) website (http://www.ccsso.org/Navigating_Text_Complexity/Showroom_Models.html) provides examples of text analysis to help teachers evaluate text complexity and identify possible instructional areas of focus. One example is a 16-page informational text, "The Wonders of Nature," containing short sections about unusual animals. The brief introduction tells readers that the animals described in the book have special or unusual abilities. But the final three sentences of the text indicate that these special abilities are important for the animals' survival, which seems most likely the central idea of the text and an important content goal for students reading this informational science text.

The CCSSO analysis indicates that although the quantitative measure places this text at the fourth- to fifth-grade band level, the qualitative measures suggest that it is appropriate for the second- to third-grade band with appropriate instructional support. This recommendation is based on the "straightforward structure" of the text and "the high interest of the material for students of this age." However, a closer examination of the "possible major areas of instructional focus" identified on the website for this text indicates that the instructional goals for this text are (1) learning the characteristics of different animals (content goal) by (2) identifying the main ideas and details in each section of the text (process goal related to Anchor Standard R1). An alternative content goal might be for students to understand how animals' characteristics (i.e., appearance, habitat, diet, and/or means of reproduction) help them survive. In this case, the process goal would more likely focus on determining a central idea from the entire text (rather than separate sections), analyzing its development and summarizing key supporting ideas (Anchor Standard R2).

Either instructional focus is possible with this text. However, the comprehension of this complex text will vary as a function of the intended instructional focus and its concomitant tasks. If the instructional focus is on learning the "special" characteristics of the different animals described in this text, the types of tasks that might be used include asking students to construct a chart that contains text information about each animal's appearance, habitat, diet, and/or reproduction. In the context of this Text-Task Scenario, the placement of the text in the second- to third-grade band is appropriate. If, however, the content goal focuses on understanding how each animal's characteristics help it survive, a task focused on simply describing the animals' characteristics is unlikely to help students achieve this goal. Tasks more consistent with this instructional focus might include one or more of the following: (*a*) exploring the concept of survival in the context of the animals described in this text; (*b*) describing how each animal's characteristics help it survive and/or making comparisons among the animals about the roles played by different characteristics in the animals' survival; (*c*) a mini-research project in which students add a section to this text that describes the special characteristics of a different animal that help it survive.

In this latter case, the use of the Text-Task Scenario approach more likely places this text at the grade 4–5 band, because text-task interactions require deeper understanding and the ability to synthesize information across multiple sections of a text. The point here is that simply knowing the measured complexity of the text is insufficient to locate the text in the appropriate grade-band level without the simultaneous consideration of text-task factors in the context of specific reading purposes. Further, the underlying vision of the Standards will be lost and certainly not attained if tasks are developed without an eye toward higher levels of comprehension.

From a classroom assessment perspective, a Task-Text Scenario framework helps teachers think about the conditions under which students can successfully comprehend and learn from text and the conditions under which they may have difficulty. So, for example, if a student does not perform well when presented with lengthy narratives set in historical times and tasks requiring deep understanding, the teacher might supplement this assessment with other types of evidence to learn how the student performs in other reading situations—for example, different types of texts, tasks, and reading events of varying difficulty, interest, or knowledge demands. In this way, it is possible to identify the conditions under which students can perform well and plan instruction accordingly. In addition, by examining students' abilities to comprehend across several different combinations of texts and tasks, teachers can learn about students' abilities to adjust and adapt to novel reading situations in which their knowledge, expertise, and interest vary substantially. This flexible use of strategies and the judicious use of knowledge to solve new problems are at the core of CCSS-ELA. The Text-Task Scenario framework may help educators both assess and teach toward this flexibility as texts and tasks are intentionally manipulated to create novel reading situations.

What we hope is clear from this discussion is that text complexity cannot be determined outside the context of understanding the text-task interactions implied by a particular instructional focus. Current approaches to text analyses are undertaken either outside this context or in a linear fashion that only addresses task factors in a general way and outside the context of the instructional focus. The result is an evaluation of texts that may or may not be relevant to a particular instructional context. This is most likely to be true when considering longer texts with multiple ideas and a myriad of qualitative features that might impede or facilitate comprehension of particular ideas or information. However, as demonstrated with "The Wonders of Nature" and "Daisy" texts, text-task interactions can make a difference in the complexity analysis of shorter, less challenging texts as well.

Conclusions

Our analyses of different perspectives on text complexity lead to the simple conclusion that a focus on text complexity apart from comprehension misses the point. What we are after is comprehension of complex text—and comprehension of complex text is not an inherent property of a text. Rather, it is a function of the interaction among reader, text, and task factors within particular contexts. When viewed in this way, it is clearly futile to attempt to evaluate text without taking into consideration the reader and task factors associated with comprehension in the context of a particular reading event. If text complexity is not considered in light of the other factors that contribute to comprehension, students will never achieve college and career

readiness, and we will continue to pour millions of dollars per year into remedial programs in college and the workplace to improve students' capacity to handle the level of text complexity that should have been addressed throughout K–12.

Although we have emphasized task factors in this discussion, it is important to remember that task and text factors still interact with reader factors within a context, and that none of these can be understood fully in isolation from the others. When the reader's knowledge, skill, motivation, interest, and instructional context are added to this equation, an even greater understanding of comprehension of complex text emerges (Lipson & Wixson, 2013). Understanding these interactions provides insight into how and why comprehension varies, which helps teachers plan instruction that builds on students' strengths and needs.

In the context of instruction, teachers need to consider tasks in relation to specific texts that accommodate students with a range of reading abilities. Such differentiation of tasks allows the teacher to both promote student learning and gather evidence about students' reading comprehension. An understanding of how task can affect the comprehension of a text is especially important in the context of the CCSS-ELA mandate that all students need to be engaging with significant amounts of grade-level texts.

Similarly, in the context of assessment, those using the results of reading assessments need to understand how different tasks affect students' comprehension—that is, exactly what an assessment is measuring. Toward this end, it is important to understand the nature of the tasks students are expected to complete on any given assessment in terms of the content being probed, the comprehension processes students must engage, and how students are expected to respond. Such a careful analysis of the text-task interface on assessment items and tasks will help educators identify the conditions under which students are being evaluated and the range of texts and tasks to which any assessments of reading might generalize.

When it comes to the purpose of the articles in this special issue, we understand, support, and appreciate the need to have general qualitative and quantitative indicators of text difficulty. We know that our understanding of text features will be enhanced by the various initiatives undertaken by our colleagues. However, in the final analysis, we don't believe that any approach can accurately measure text complexity without contextualizing those quantitative or qualitative indices in a more elaborated model of comprehension of complex text. Viewed from that perspective, one could say that our Text-Task Scenario framework is all about what we can learn when we ask, How well can students read a particular text to achieve a particular kind of understanding? We are at a critical juncture in the implementation of the CCSS-ELA and the inevitable prospect of text complexity becoming a major factor in shaping curriculum, instruction, and assessment. We believe that Text-Task Scenarios will help the field put text complexity in the context of all we know about comprehension, and will help educators support students in achieving the goal of deeper comprehension and knowledge building from complex texts.

Note

1. Notations in the sample tasks are in the form R = reading standard, L = literary, I = informational, 4 = grade, 7 = standard number. Lexile scores are not provided in the CCSS document; they are provided by the authors.

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