COMMON CORE S A E S ANDARDS FOR

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One of the key requirements of the Common Core State Standards for Reading is that all students must be able to comprehend texts of steadily increasing complexity as they progress through school. By the time they complete the core, students must be able to read and comprehend independently and proficiently the kinds of complex texts commonly found in college and careers. The first part of this section makes a research-based case for why the complexity of what students read matters. In brief, while reading demands in college, workforce training programs, and life in general have held steady or increased over the last half century, K–12 texts have actually declined in sophistication, and relatively little attention has been paid to students' ability to read complex texts independently. These conditions have left a serious gap between many high school seniors' reading ability and the reading requirements they will face after graduation. The second part of this section addresses how text complexity can be measured and made a regular part of instruction. It introduces a three-part model that blends qualitative and quantitative measures of text complexity with reader and task considerations. The section concludes with three annotated examples showing how the model can be used to assess the complexity of various kinds of texts appropriate for di erent grade levels.

С М

In 2006, ACT, Inc., released a report called **b**, *B*, *L* that showed which skills di erentiated those students who equaled or exceeded the benchmark score (21 out of 36) in the reading section of the ACT college admissions test from those who did not. Prior ACT research had shown that students achieving the benchmark score or better in reading—which only about half (51 percent) of the roughly half million test takers in the 2004–2005 academic year had done—had a high probability (75 percent chance) of earning a C or better in an introductory, credit-bearing course in U.S. history or psychology (two common reading-intensive courses taken by first-year college students) and a 50 percent chance of earning a B or better in such a course.¹

Surprisingly, what chiefly distinguished the performance of those students who had earned the benchmark score or better from those who had not was not their relative ability in making inferences while reading or answering questions related to particular cognitive processes, such as determining main ideas or determining the meaning of words and phrases in context. Instead, the clearest di erentiator was students' ability to answer questions associated with complex texts. Students scoring below benchmark performed no better than chance (25 percent correct) on four-option multiple-choice questions pertaining to passages rated as "complex" on a three-point qualitative rubric described in the report. These findings held for male and female students, students from all racial/ethnic groups, and students from families with widely varying incomes. The most important implication of this study was that a pedagogy focused only on "higher-order" or "critical" thinking was insu cient to ensure that students were ready for college and careers: what students could read, in terms of its complexity, was at least as important as what they could do with what they read.

The ACT report is one part of an extensive body of research attesting to the importance of text complexity in reading

during the same time period. Although the decline occurred in all demographic groups, the steepest decline by far was among 18-to-24- and 25-to-34-year-olds (28 percent and 23 percent, respectively). In other words, the problem of lack of reading is not only getting worse but doing so at an accelerating rate. Although numerous factors likely contribute to the decline in reading, it is reasonable to conclude from the evidence presented above that the deterioration in overall reading ability, abetted by a decline in K–12 text complexity and a lack of focus on independent reading of complex texts, is a contributing factor.

Being able to read complex text independently and proficiently is essential for high achievement in college and the workplace and important in numerous life tasks. Moreover, current trends suggest that if students cannot read challenging texts with understanding—if they have not developed the skill, concentration, and stamina to read such texts—they will read less in general. In particular, if students cannot read complex expository text to gain information, they will likely turn to text-free or text-light sources, such as video, podcasts, and tweets. These sources, while not without value, cannot capture the nuance, subtlety, depth, or breadth of ideas developed through complex text. As Adams (2009) puts it, "There may one day be modes and methods of information delivery that are as e cient

The Standards presume that all three elements will come into play when text complexity and appropriateness are determined. The following pages begin with a brief overview of just some of the currently available tools, both qualitative and quantitative, for measuring text complexity, continue with some important considerations for using text complexity with students, and conclude with a series of examples showing how text complexity measures, balanced with reader and task considerations, might be used with a number of di erent texts.

Qualitative and Quantitative Measures of Text Complexity

The qualitative and quantitative measures of text complexity described below are representative of the best tools presently available. However, each should be considered only provisional; more precise, more accurate, and easier-to-use tools are urgently needed to help make text complexity a vital, everyday part of classroom instruction and curriculum planning.

QLL ML C

Using qualitative measures of text complexity involves making an informed decision about the di culty of a text in terms of one or more factors discernible to a human reader applying trained judgment to the task. In the Standards, qualitative measures, along with professional judgment in matching a text to reader and task, serve as a necessary complement and sometimes as a corrective to quantitative measures, which, as discussed below, cannot (at least at present) capture all of the elements that make a text easy or challenging to read and are not equally successful in rating the complexity of all categories of text.

Built on prior research, the four qualitative factors described below are o ered here as a first step in the development of robust tools for the qualitative analysis of text complexity. These factors are presented as continua of di culty rather than as a succession of discrete "stages" in text complexity. Additional development and validation would be needed to translate these or other dimensions into, for example, grade-level- or grade-band-specific rubrics. The qualitative factors run from easy (left-hand side) to di cult (right-hand side). Few, if any, authentic texts will be low or high on all of these measures, and some elements of the dimensions are better suited to literary or to informational texts.

(1) *Levels of Meaning (literary texts) or Purpose (informational texts).* Literary texts with a single level of meaning tend to be easier to read than literary texts with multiple levels of meaning (such as satires, in which the author's literal message is intentionally at odds with his or her underlying message). Similarly, informational texts with an explicitly stated purpose are generally easier to comprehend than informational texts with an implicit, hidden, or obscure purpose.

(2) *Structure.* Texts of low complexity tend to have simple, well-marked, and conventional structures, whereas texts of high complexity tend to have complex, implicit, and (particularly in literary texts) unconventional structures. Simple literary texts tend to relate events in chronological order, while complex literary texts make more frequent use of flashbacks, flash-forwards, and other manipulations of time and sequence. Simple informational texts are likely not to deviate from the conventions of common genres and subgenres, while complex informational texts are more likely to conform to the norms and conventions of a specific discipline. Graphics tend to be simple and either unnecessary or merely supplementary to the meaning of texts of low complexity, whereas texts of high complexity tend to have similarly complex graphics, graphics whose interpretation is essential to understanding the text, and graphics that provide an independent source of information within a text. (Note that many books for the youngest students rely heavily on graphics to convey meaning and are an exception to the above generalization.)

(3) Language Conventionality and Clarity. Texts that rely on literal, clear, contemporary, and conversational language tend to be easier to read than texts that rely on figurative, ironic, ambiguous, purposefully misleading, archaic or otherwise unfamiliar language or on general academic and domain-specific vocabulary.

(4) *Knowledge Demands.* Texts that make few assumptions about the extent of readers' life experiences and the depth of their cultural/literary and content/discipline knowledge are generally less complex than are texts that make many assumptions in one or more of those areas.

Figure 2: Qualitative Dimensions of Text Complexity

Levels of Meaning (literary texts) or Purpose (informational texts)

Single level of meaning Multiple levels of meaning

Explicitly stated purpose Implicit purpose, may be hidden or obscure

Structure

Simple Complex

Explicit Implicit

Conventional Unconventional (chiefly literary texts)

Events related in chronological order Events related out of chronological order (chiefly literary texts)

Traits of a common genre or subgenre Traits specific to a particular discipline (chiefly informational texts)

Simple graphics Sophisticated graphics

Graphics unnecessary or merely supplementary to understanding the text Graphics essential to understanding the text and may provide information not otherwise conveyed in the text

Language Conventionality and Clarity

Literal Figurative or ironic

Clear Ambiguous or purposefully misleading

Contemporary, familiar Archaic or otherwise unfamiliar

Conversational General academic and domain-specific

Knowledge Demands: Life Experiences (literary texts)

Simple theme Complex or sophisticated themes

Single themes Multiple themes

Common, everyday experiences or clearly fantastical situations Experiences distinctly di erent from one's own

Single perspective Multiple perspectives

Perspective(s) like one's own Perspective(s) unlike or in opposition to one's own

Knowledge Demands: Cultural/Literary Knowledge (chiefly literary texts)

Everyday knowledge and familiarity with genre conventions required Cultural and literary knowledge useful

Low intertextuality (few if any references/allusions to other texts) High intertextuality (many references/allusions to other texts)

Knowledge Demands: Content/Discipline Knowledge (chiefly informational texts)

Everyday knowledge and familiarity with genre conventions required Extensive, perhaps specialized discipline-specific content knowledge required

Low intertextuality (few if any references to/citations of other texts) High intertextuality (many references to/citations of other texts)

Adapted from ACT, Inc. (2006).	, • AC. • • •	h. 1	, . Iowa City, IA: Author; Carnegie
Council on Advancing Adolescent Literacy. (2010).	Ab, at bed ite	• •	

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The following examples demonstrate how qualitative and quantitative measures of text complexity can be used along with reader and task considerations to make informed decisions about whether a particular text is an appropriate challenge for particular students. The cases below illustrate some of the possibilities that can arise when multiple measures are used to assess text complexity and how discrepancies among those measures might be resolved. It is important to note that the conclusions o ered below concerning the texts' appropriateness for particular grade bands are informed judgments based on qualitative and quantitative assessments of text complexity. Di erent conclusions could reasonably be drawn from the same data, and reader and task considerations may also warrant a higher or lower placement.

Example 1: N 🕨	• L	F	D	(Grades 6–8 Text Complexity Band)
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The plan which I adopted, and the one by which I was most successful, was that of making friends of all the little white boys whom I met in the street. As many of these as I could, I converted into teachers. With their kindly aid, obtained at di erent times and in di erent places, I finally succeeded in learning to read. When I was sent of errands, I always took my book with me, and by going one part of my errand quickly, I found time to get a lesson before my return. I used also to carry bread with me, enough of which was always in the house, and to which I was always welcome; for I was much better o in this regard than many of the poor white children in our neighborhood. This bread I used to bestow upon the hungry little urchins, who, in return, would give me that more valuable bread of knowledge. I am strongly tempted to give the names of two or three of those little it would injure me, but it might embarrass them; for it is almost an unpardonable o ence to teach slaves to read in this Christian country. It is enough to say of the dear little fellows, that they lived on Philpot Street, very near Durgin and Bailey's ship-yard. I used to talk this matter of slavery over with them. I would sometimes say to them, I wished I could be as free as they would be when they got to be men. "You will be free as soon as you are twenty-one, but I am a slave for life! Have not I as good a right to be free as you have?" These words used to trouble them; they would express for me the liveliest sympathy, and console me with the hope that something would occur by which I might be free.

I was now about twelve years old, and the thought of being a slave for life began to bear heavily upon my heart. Just about this time, I got hold of a book entitled "The Columbian Orator." Every opportunity I got, I used to read this book. Among much of other interesting matter, I found in it a dialogue between a master and his slave. The slave was represented as having run away from his master three times. The dialogue represented the conversation which took place between them, when the slave was retaken the third time. In this dialogue, the whole argument in behalf of slavery was brought forward by the master, all of which was disposed of by the slave. The slave was made to say some very smart as well as impressive things in reply to his master—things which had the desired though unexpected e ect; for the conversation resulted in the voluntary emancipation of the slave on the part of the master.

In the same book, I met with one of Sheridan's mighty speeches on and in behalf of Catholic emancipation. These were choice documents to me. I read them over and over again with unabated interest. They gave tongue to interesting thoughts of my own soul, which had frequently flashed through my mind, and died away for want of utterance. The moral which I gained from the dialogue was the power of truth over the conscience of even a slaveholder. What I got from Sheridan was a bold denunciation of slavery, and a powerful vindication of human rights. The reading of these documents enabled me to utter my thoughts, and to meet the arguments brought forward to sustain slavery; but while they relieved me of one di culty, they brought on another even more painful than the one of which I was relieved. The more I read, the more I was led to abhor and detest my enslavers. I could regard them in no other light than a band of successful robbers, who had left their homes, and gone to Africa, and stolen us from our homes, and in a strange land reduced us to slavery. I loathed them as being the meanest as well as the most wicked of men. As I read and contemplated the subject, behold! that very discontentment which Master Hugh had predicted would follow my learning to read had already come, to torment and sting my soul to unutterable anguish. As I writhed under it, I would at times feel that learning to read had been a curse rather than a blessing. It had given me a view of my wretched condition, without the remedy. It opened my eyes to the horrible pit, but to no ladder upon which to get out. In moments of agony, I envied my fellow-slaves for their stupidity. I have often wished myself a beast. I preferred the condition of the meanest reptile to my own. Any thing, no matter what, to get rid of thinking! It was this everlasting thinking of my condition that tormented me. There was no getting rid of it. It was pressed

Mae moved down and looked in. "Which ones?"

"There, them stripy ones."

The little boys raised their eyes to her face and they stopped breathing; their mouths were partly opened, their half-naked bodies were rigid.

"Oh-them. Well, no-them's two for a penny."

"Well, gimme two then, ma'am." He placed the copper cent carefully on the counter. The boys expelled their held breath softly. Mae held the big sticks out.

Steinbeck, John. New York: Viking, 1967 (1939).

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Figure 6: Annotation of 🗸 🖌

Qualitative Measures	Quantitative Measures
Levels of Meaning	
There are multiple and often implicit levels of meaning within the excerpt and the novel as a whole. The surface level focuses on the literal journey of the Joads, but the novel also works on metaphorical and philosophical levels.	
Structure	
The text is relatively simple, explicit, and conventional in form. Events are largely related in chronological order.	
Language Conventionality and Clarity	
Although the language used is generally familiar, clear, and conversational, the dialect of the characters may pose a challenge for some readers. Steinbeck also puts a great deal of weight on certain less familiar words, such as	

APPENDIX A | 15

Qualitative Measures **Quantitative Measures** Purpose Various readability mda@ ad abof @1 The single, relatively clear purpose of the text (not fully apparent in the excerpt but signaled by the title) is to recount the discovery of the concept of longitude. Structure The text is moderately complex and subtle in structure. Although the text may appear at first glance to be a conventional narrative, Dash mainly uses narrative elements in the service of illustrating historical and technical points. Language Conventionality and Clarity Language is used literally and is relatively clear, but numerous archaic, domain-specific, and otherwise unfamiliar terms are introduced in the course of citing primary historical sources and discussing the craft, art, and science of navigation. Knowledge Demands The text assumes relatively little prior knowledge regarding seafaring and navigation, but some general sense of the concepts of latitude and longitude, the nature of sailing ships, and the historical circumstances that promoted exploration and trade is useful to comprehending the text.

Figure 7: Annotation of , L , P

Syllable Counting or Identification (Spoken Language)

A spoken syllable is a unit of speech organized around a vowel sound.

Repeat the word, say each syllable loudly, and feel the jaw drop on the vowel sound:

chair (1) table (2) gymnasium (4)

Onset and Rime Manipulation (Spoken Language)

Within a single syllable, is the consonant sound or sounds that may precede the vowel; is the vowel and all other consonant sounds that may follow the vowel.

Say the two parts slowly and then blend into a whole word:

school	onset - /sch/; rime - /ool/
star	onset - /st/; rime - /ar/
place	onset - /pl/; rime - /ace/
all	onset (none);

General Progression of Phoneme Awareness Skills (K-2)

P are individual speech sounds that are combined to create words in a language system. Phoneme awareness requires progressive di erentiation of sounds in spoken words and the ability to think about and manipulate those sounds. Activities should lead to the pairing of phonemes (speech sounds) with, **b** (letters and letter combinations that represent those sounds) for the purposes of word recognition and spelling.

Phoneme Identity

Say the sound that begins these words. What is your mouth doing when you make that sound?

milk, mouth, monster /m/— The lips are together, and the sound goes through the nose. thick, thimble, thank /th/— The tongue is between the teeth, and a hissy sound is produced. octopus, otter, opposite /o/— The mouth is wide open, and we can sing that sound.

Phoneme Isolation

What is the first speech sound in this word?

ship /sh/ van /v/ king /k/ echo /e/

What is the last speech sound in this word?

comb	/m/
sink	/k/
rag	/g/
go	/o/

Phoneme Blending (Spoken Language)

Blend the sounds to make a word:

(Provide these sounds slowly.)

/s/ /ay/ say /ou/ /t/ out /sh/ /ar/ /k/ shark /p/ /o/ /s/ /t/ post

Phoneme Segmentation (Spoken Language)

Say each sound as you move a chip onto a line or sound box:

/n/ /o/
/r/ /a/ /g/
/s/ /o/ /k/ /s/
/f/ /l/ /oa/ /t/

b) If the word is not recognized, try dividing, the consonant. This makes the first syllable closed and the vowel sound short. This strategy will work 25 percent of the time with VCV syllable division.

ev-er rab-id dec-ade riv-er

3. Consonant blends usually stick together. Do not separate digraphs when using the first two principles for decoding.

e-<u>th</u>er spec-<u>tr</u>um se-<u>qu</u>in

Morphemes Represented in English Orthography

Figure 13: Examples of Inflectional Su xes in English

Inflection	Example
-s plural noun	I had two for breakfast.
-s third person singular verb	She what she .
-ed past tense verb	We the notice.
-ing progressive tense verb	We will be a long time.
-en past participle	He had his lunch.
's possessive singular	The ' spots were brown.
-er comparative adjective	He is than she is.
-est superlative adjective	Tom is the of all.

Examples of Derivational Su xes in English

Derivational su xes, such as -, , , and -, , are more numerous than inflections and work in ways that inflectional su xes do not. Most derivational su xes in English come from the Latin layer of language. Derivational su xes mark or determine part of speech (verb, noun, adjective, adverb) of the su xed word. Su xes such as - , -, , and - turn words into nouns; -, , -, , and - turn words into adjectives; -, turns words into adverbs.

nature (n. — from 🖌 , birth)	permit (n. or v.)
natural (adj.)	permission (n.)
naturalize (v.)	permissive (adj.)
naturalizing (v.)	permissible (adj.)
naturalistic (adj.)	permissibly (adv.)

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Argument

Arguments are used for many purposes—to change the reader's point of view, to bring about some action on the reader's part, or to ask the reader to accept the writer's explanation or evaluation of a concept, issue, or problem. An argument is a reasoned, logical way of demonstrating that the writer's position, belief, or conclusion is valid. In English language arts, students make claims about the worth or meaning of a literary work or works. They defend their interpretations or judgments with evidence from the text(s) they are writing about. In history/social studies, students analyze evidence from multiple primary and secondary sources to advance a claim that is best supported by the evidence, and they argue for a historically or empirically situated interpretation. In science, students make claims in the form of statements or conclusions that answer questions or address problems. Using data in a scientifically acceptable form, students marshal evidence and draw on their understanding of scientific concepts to argue in support of their claims. Although young children are not able to produce fully developed logical arguments, they develop a variety of methods to extend and elaborate their work by providing examples, o ering reasons for their assertions, and explaining cause and e ect. These kinds of expository structures are steps on the road to argument. In grades K–5, the term "opinion" is used to refer to this developing form of argument.

S R S L K5L

If literacy levels are to improve, the aims of the English language arts classroom, especially in the earliest grades, must include oral language in a purposeful, systematic way, in part because it helps students master the printed word. Besides having intrinsic value as modes of communication, listening and speaking are necessary prerequisites of reading and writing (Fromkin, Rodman, & Hyams, 2006; Hulit, Howard, & Fahey, 2010; Pence & Justice, 2007; Stuart, Wright, Grigor, & Howey, 2002). The interrelationship between oral and written language is illustrated in the table below, using the distinction linguists make between (language that is generated and produced by an individual).

Figure 14: Receptive and Expressive Oral and Written Language

	Receptive Language	Expressive Language
Oral Language	Listening	Speaking
Written Language	Reading (decoding + comprehension)	Writing (handwriting, spelling, written composition)

Oral language development precedes and is the foundation for written language development; in other words, oral language is primary and written language builds on it. Children's oral language competence is strongly predictive of their facility in learning to read and write: listening and speaking vocabulary and even mastery of syntax set boundaries as to what children can read and understand no matter how well they can decode (Catts, Adolf, & Weismer, 2006; Hart & Risley, 1995; Hoover & Gough, 1990: Snow, Burns, & Grin, 1998).

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The Standards take a hybrid approach to matters of conventions, knowledge of language, and vocabulary. As noted in the table below, certain elements important to reading, writing, and speaking and listening are included in those strands to help provide a coherent set of expectations for those modes of communication.

Figure 16: Elements of the Language Standards in the Reading, Writing, and Speaking and Listening Strands

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Example	Condition
H A A A A A A A A A A A A A A A A A A A	Subject and verb next to each other
[Glowing Shoes, grade 4]	Compound subject joined by
A · · · · · · · · · · · · · · · · · · ·	Compound subject joined by ; each subject takes a singular verb ¹
[Zoo Field Trip, grade 4]	Intervening phrase between subject and verb
/ • • • • • • • • • • • • • • • • • • •	Intervening phrase between each subject and verb suggesting a dierent number for the verb than the subject calls for
A	Indefinite pronoun as subject, with increasing distance between subject and verb
A	
[Author Response: Roald Dahl, grade 5] O G G G G G G G G G G G G G G G G G G G	

Figure 17: Example of Subject-Verb Agreement Progression across Grades

¹In this particular example, should have been punctuated by the student as a nonrestrictive appositive, but the sentence as is illustrates the notion of a compound subject joined by or.

Three Tiers of Words

Isabel L. Beck, Margaret G. McKeown, and Linda Kucan (2002, 2008) have outlined a useful model for conceptualizing categories of words readers encounter in texts and for understanding the instructional and learning challenges that words in each category present. They describe three levels, or , of words in terms of the words' commonality (more to less frequently occurring) and applicability (broader to narrower).

While the term may connote a hierarchy, a ranking of words from least to most important, the reality is that all three tiers of words are vital to comprehension and vocabulary development, although learning tier two and three words typically requires more deliberate e ort (at least for students whose first language is English) than does learning tier one words.

o are the wordsor yel≩y 2 agos net a uRog refn

Our planet made up of many of rock. The top of rock are called the . Deep beneath the is the

Understanding the excerpt's Tier Three words is also necessary to comprehend the text fully. As was the case in example 1, these words are often repeated and defined in context. **S** , for example, is introduced in the second paragraph, and while determining its meaning from the sentence in which it appears might be di cult, several closely related concepts (, , ,) appears in the next sentence to provide more context.

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