### **Tools for Examining Text Complexity**

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"The instruction and assessment of reading comprehension presents unique challenges to classroom teachers and test developers alike; and the criteria used in selecting a variety and range of appropriate texts is essential to meeting those purposes. In the classroom, students learn to apply and practice a variety of reading strategies, for different purposes and with different text types. Over time, students who are exposed to a variety of text types with increasing complexity also learn how text features differ by genre, and they gain confidence in pealing back the layers of complexity for a deeper understanding of what is read. ... Passages for reading assessment, drawn from "authentic" text whenever possible, should always include both literary and informational texts. A series of questions accompanying each reading passage may include initial understanding of text, analysis and interpretation of text, or a combination of both types of questions, especially for longer texts" (Hess & Biggam, p.1, 2004).

# Criteria for determining increasing text complexity include *factors that interact* to affect the relative difficulty of texts. These factors include:

- Length of Text affects the ability of students to sustain engagement with the text.
- Format and Layout of Text includes how the text is organized, size and location of print and white space, graphics, and other book/print features (e.g., numbering, bullets, graphics or visual images) that support the organization and presentation of the information.
- Genre and Characteristic Features of the Text. When students have begun to generalize what is typical of each genre of text (e.g., a fable is a fantasy story with a lesson; a play presents dialogue in a way distinct from narrative texts; an essay generally begins with a thesis/proposition and lays out supporting evidence for it; historical fiction is not all fact-based.) they are better able to anticipate how information will be organized, thus supporting their comprehension when encountering new /unfamiliar texts.
- Level of Reasoning Required to interpret the author's purpose and message can be quite complex while the actual words and sentence structure appear on the surface to simplistic. For determining this factor, consider the sophistication of themes and ideas presented, or use of abstract metaphors and other literary devices. Additionally, complex visual or symbolic images in multi-modal texts (e.g., repeated images, called motifs, may require deeper analysis to get at their significance how are they connected to theme; are there embedded iconic images of historical significance that require understanding of their context; juxtaposition of text and images that reveal humorous irony or contradiction).
- **Text Structures** are the *internal organizational structures* used within paragraphs or longer texts, appropriate to genre and purpose. Research in literacy learning indicates that: a) an understanding of various text structures and their purposes enhances student's ability to comprehend what is read; and b) that some text structures are more easily learned and understood before other more complex structures. Increasingly complex structures tend to follow this general progression: sequence (procedure), chronology (time order), description, definition, compare-contrast, cause-effect, problem-solution, proposition-support, critique, and inductive-deductive. Each text structure has associated semantic cues and signal words and phrases that help readers understand how the information is organized, as well as to compose their own texts with greater coherence and clarity (Hess, 2008).
- **Discourse Style** (e.g., sarcasm, satire, humor, irony) provides a view into author's perspective, style, voice, and sometimes potential biases, as well as adding a more complex dimension of language use for readers to interpret.
- Word Difficulty and Language Structure includes vocabulary and sentence type and complexity of words or structure, often determined through the use of multiple readability formulas, such as Lexiles.
- Background Knowledge and/or Degree of Familiarity with Content needed by the reader to understand the content (e.g., historical, geographical, or literary references) will greatly inhibit or enhance comprehension depending on both the degree to which a student has read widely and discussed texts in the past (building background/world knowledge) and how well prepared they are to read a text that might require additional background knowledge for deeper comprehension (e.g., Martin Luther King, Jr.'s 1963 "Letter from a Birmingham Jail" includes historical and biblical references).

**More about Words, Language Features, & Structure** (adapted from Beck, I., McKeown, M., & Kucan, L. *Bringing Words to Life*, 2002, 2008) Also see *CCSS for ELA*, *Appendix A* (pages 33-35) for examples.

- **Tier 1:** Words that rarely require instructional attention in school; Familiar words with high frequency, everyday use. These words are generally of Anglo-Saxon origin and not considered a challenge for native speakers of English.
- Tier 2: Words with high utility; considered high frequency use for mature language users; Found across a variety of domains and texts; Vary according to age and development; Words we assume students know, but often they have only "heard" the word, (e.g., glance, confident, commotion, regret, relative, faltered, solution). These are words the CCSS refers to as "academic words."
- **Tier 3:** Low frequency words, often limited to content-specific domains; Important to learn when the specific need arises; Critical for content area learning; found most often in informational texts. These are words the CCSS refers to as "domain-specific words" (e.g., lava, legislature, circumference).

#### Additional Text Complexity Readings & Resources

**Text Structures -** See also: Hess, K. (2008). "Teaching and Assessing Understanding of Text Structures across Grades" [online] available: <a href="http://www.nciea.org/publications/TextStructures\_KH08.pdf">http://www.nciea.org/publications/TextStructures\_KH08.pdf</a> **Text Complexity -** See also:

*CCSS for ELA*, *Appendix A* (pages 2-10). [online] available: <a href="http://www.corestandards.org/assets/Appendix\_A.pdf">http://www.corestandards.org/assets/Appendix\_A.pdf</a>

Hess, K. & Biggam, S. (2004) "A Discussion of Text Complexity, Grades K-High School" published by NH, RI, and VT Departments of Education as part of the New England Common Assessment Program (NECAP) Grade Level Expectations for Reading. [online] available: <a href="http://www.nciea.org/publications/TextComplexity\_KH05.pdf">http://www.nciea.org/publications/TextComplexity\_KH05.pdf</a>

"Find a Book:" This free book search utility (<a href="http://www.lexile.com/fab">http://www.lexile.com/fab</a>) makes it easy for young people to find books at their reading level, whether they are reading for school or for pleasure. Lexile measures match a young person's reading ability with high-interest books at an appropriate level of difficulty to help him or her grow as a reader. The site includes a growing collection of English and Spanish fiction and nonfiction books.

On the follow pages, are a planning worksheet for examining texts and planning instruction, an annotated text illustrating a qualitative analysis of text complexity, followed by text complexity rubrics with descriptors of a continua of increasing complexity for informational and literary texts and sample compilation worksheet for ranking texts at a grade level. Text complexity rubrics were developed and refined for use in classrooms with middle and high school teachers in NYC involved in a pilot project during the 2010-2011 school year under the direction of Sheena Hervey (AUSSIE) and Karin Hess (NCIEA).

## Planning Worksheet: Analyzing Features of Text Complexity for Instruction & Assessment

Text or text passage:	Genre:				
Approximate reading time (indicate silent	or oral	_) Lexile	or Level		

Factors that Influence Text Complexity	Characteristics of this Text	Identify Best/Appropriate CC standards for assessment & instructional supports			
Length of Text					
Format and Layout of Text: to what degree does the text layout support comprehension? (e.g., bold key words, visuals, inset text with definitions, white space, signposts=quotation marks, sub heading)					
Genre & Characteristic		CC standards			
Features of Genre		Supports/scaffolding			
Level of Meaning &	Theme(s)/Key Concept(s)	CC standards			
Reasoning Required by Reader (sophistication or complexity of themes or	Explicit-Implied Purposes	Supports/scaffolding			
ideas presented)					
Text Structure (sequence, chronology, description, definition, compare-contrast, cause-effect, problem-solution, proposition-support, judgment/critique, inductive-deductive)  & Discourse Style (sarcasm,	Text Structure(s)  Semantic cues/signal words  Discourse style(employs use of literary devices)	CC standards Supports/scaffolding			
satire, irony, humor, etc.)	The 2 mode and a six and describe a six and describ	20 de de de			
Words, Language Features, & Structure  Word length, word frequency Sentence length; transitions Potential levels of meaning (single-multiple; explicit-implicit	Tier 2 words-academic words (precise, contextual, literal- figurative, archaic)	CC standards Supports/scaffolding			
<ul><li>Precise/nuanced meaning</li><li>Domain-specific</li></ul>	Tier 3 words (technical, content/domain-specific)				
Background Knowledge Demands or Degree of Familiarity with Content Required (prior knowledge, multiple perspectives, embedded citations)	Embedded references (literary, historical, cultural, economical, political, etc.)	CC standards Supports/scaffolding			

Sample annotated text: Lexile: 1590

### Introduction to Bearing Witness: Portraits of Americans Dreaming

#### **Introduction to Portraits of Americans Dreaming**

Since its founding in 1776, the United States has promoted itself as the land of opportunity. In the early years of the nation, the dream was tied to the widespread availability of land. Over time, it has evolved to signal a person's ability, through effort, to achieve prosperity regardless of their origins. In addition, it is the opportunity to make individual choices without the prior restrictions that limited people according to their class, caste, religion, race, or ethnicity. At its most expansive, the dream includes the belief that one's children will grow up safe, healthy, and educated; that they will become capable of a career and even greater prosperity, without barriers due to class, race or gender.

The term "American Dream" was first used by historian James Truslow Adams in his book Epic,

Numerous complex sentences with subordinate clauses and

Quotes with minimal signposting

The American Dream is that dream of a land in which life should be better and richer and fuller for every man, with opportunity for each according to ability or achievement. It is a difficult dream for the <u>European upper classes</u> to interpret adequately, also too many of us ourselves have grown weary and mistrustful of it. It is not a dream of motor cars and high wages merely, but a dream of <u>social order</u> in which each <u>man and each</u> woman shall be <u>able to attain to the fullest stature</u> of which they are innately capable, and be recognized by others for what they are, regardless of the fortuitous <u>circumstances</u> of birth or position.

Archaic language

#### Adams also wrote:

of America (1931):

The American Dream...that has lured tens of millions of all nations to our shores in the past century has not been a dream of material plenty, though that has doubtlessly counted heavily. It has been a dream of being able to grow to fullest development as a man and woman, unhampered by the barriers which had slowly been erected in the older civilizations, unrepressed by social orders which had developed for the benefit of classes rather than for the simple buman being of any and every class.

sentences with multiple concepts

Complex

Martin Luther King used the concept of the American Dream to anchor the Civil Rights movement. In his famous "Letter from a Birmingham Jail" (1963), he wrote:

language

**Figurative** 

vocabulary with multiple meaning We will win our freedom because the sacred heritage of our nation and the eternal will of God are embodied in our echoing demands.... when these disinherited children of God sat down at lunch counters they were in reality standing up for what is best in the American dream and for the most sacred values in our Judeo-Christian heritage, thereby bringing our nation back to those great wells of democracy which were dug deep by the founding fathers in their formulation of the Constitution and the Declaration of Independence.

Obscure citations

This dream has not been easy to sustain and realize. Some would say that it is a myth – even a mirage – that eludes most Americans. Numerous authors, such as Sinclair Lewis in his 1922 novel Babbitt, satirized the materialism and shallowness that he saw in the chase for the American dream. In The Great Gatsby, Nick Carraway describes how the pursuit of opportunity became "the service of a vast, vulgar, and meretricious beauty." In 1949 Arthur Miller wrote the play "Death of a Salesman" in which the American Dream is portrayed as a fruitless pursuit that destroys and deludes.

Meaning includes more complex concepts and a higher level of detail and while is implicit throughout the text, is explicitly stated at the end

•	Text complexity	sample for Bearin	g Witness: Portraits of	Americans Dreaming	
	Simple Texts [1]	Somewhat Complex Texts [2]	Complex Texts [text mostly ranked a " <mark>3</mark> "]	Very Complex Texts [4]	
	Consistent placement of text, regular word and line spacing, often large plain font	May have longer passages of uninterrupted text, often plain font	Longer passages of uninterrupted text may include columns or other variations in layout, often smaller more elaborate font	Very long passages of uninterrupted text that may include columns or other variations in layout, often small densely packed print	
Layout	Graphics, captioned photos, labelled diagrams that directly support and help interpret the written text	Graphs, photos, tables, charts, diagrams that directly support the text	Essential integrated graphics, tables, charts, formulas (necessary to make meaning of text)	Extensive/complex, intricate, essential integrated tables, charts, formulas necessary to make connections or synthesize concepts presented	
	Simple indexes, short glossaries	Indexes, glossaries, occasional quotes, references	Embedded quotes, concluding appendices, indexes, glossaries, bibliography	Abstracts, footnotes, citations and detailed indexes, appendices, bibliography	
	Supportive signposting and enhancements	Reduced signposting and enhancements	Minimal signposting and/or enhancements	Integrated signposting conforming to disciplinary formats. No enhancements	
Purpose & Meaning	A single or simple purpose conveying clear or factual information	Purpose involves conveying a range of ideas with more detailed information or examples	Purpose includes explaining or interpreting information, not just presenting it	Purpose may include examining/evaluating complex, sometimes theoretical and contested information	
Purp Mea	Meaning is clear, concrete with a narrow focus	Meaning is more involved with a broader focus	Meaning includes more complex concepts and a higher level of detail	Meaning is intricate, with abstract theoretical elements	
Structure/Discourse	The discourse style & organization of the text is clear or chronological and/or easy to predict	The organization of the text may include a thesis or reasoned explanation in addition to facts	The organization of the text may contain multiple pathways, more than one thesis and/or several genres	The organization of the text is intricate or specialized for a particular discipline or genre.	
	Connections between ideas, processes or events are explicit and clear.	Connections between some ideas, processes or events are implicit /subtle	Connections between an expanded range ideas, processes or events are deeper and often implicit or subtle.	Connections between an extensive range ideas, processes or events are deep, intricate and often implicit or subtle.	
Str	One primary text structure is evident	Includes a main text structure	Includes different text structure types of varying complexity	Includes sustained complex text structure types and/or specialized, hybrid text types	
ures	Mainly simple sentences	Simple and compound sentences with some more complex constructions	Many complex sentences with increased subordinate phrases and clauses or transition words	Mainly complex sentences, often containing multiple concepts	
Language Features	Simple language style, sometimes with narrative elements	Increased objective style and passive constructions with higher factual content	Objective/passive style with higher conceptual content and increasing nominalization	Specialized disciplinary style with dense conceptual content and high nominalization	
Langu	Vocabulary is mostly familiar	Includes some unfamiliar, context-dependent or multiple meaning words	Includes much academic (nuanced) vocabulary and/or some domain specific (content) vocabulary	Includes extensive academic (nuanced, precise) and/or domain specific (content) vocabulary	
Knowledge Demands Information	General topic is familiar, with details known by reader	General topic is familiar, with some details new to reader (cultural, historical, literary, political, legal, etc.)	General topic is somewhat familiar but with many details unknown to reader	General topic is mostly unfamiliar with most details unknown to reader (cultural, historical, literary, political, legal, etc.)	

## $Gradients\ in\ Complexity:\ {\tt Text}\ Complexity\ {\tt Rubric}\ for\ \underline{{\tt Informational}}\ {\tt Texts}$

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	Simple Texts	Somewhat	Complex Texts	Very Complex Texts	
	[ <mark>1</mark> ]	Complex Texts[ <mark>2</mark> ]	. [ <mark>3</mark> ]	[4]	
	Consistent placement of text, regular word and line spacing, often large plain font	May have longer passages of uninterrupted text, often plain font	Longer passages of uninterrupted text may include columns or other variations in layout, often smaller more elaborate font	Very long passages of uninterrupted text that may include columns or other variations in layout, often small densely packed print	
Layout	Graphics, captioned photos, labelled diagrams that directly support and help interpret the written text	Graphs, photos, tables, charts, diagrams that directly support the text	Essential integrated graphics, tables, charts, formulas (necessary to make meaning of text)	Extensive/complex, intricate, essential integrated tables, charts, formulas necessary to make connections or synthesize concepts presented	
	Simple indexes, short glossaries	Indexes, glossaries, occasional quotes, references	Embedded quotes, concluding appendices, indexes, glossaries, bibliography	Abstracts, footnotes, citations and detailed indexes, appendices, bibliography	
	Supportive signposting and enhancements	Reduced signposting and enhancements	Minimal signposting and/or enhancements	Integrated signposting conforming to disciplinary formats. No enhancements	
Purpose and Meaning	A single or simple purpose conveying clear or factual information Purpose involves conveying a range of ideas with more detailed information or examples		Purpose includes explaining or interpreting information, not just presenting it	Purpose may include examining/evaluating complex, sometimes theoretical and contested information	
Purpo Mea	Meaning is clear, concrete with a narrow focus	Meaning is more involved with a broader focus	Meaning includes more complex concepts and a higher level of detail	Meaning is intricate, with abstract theoretical elements	
Structure/Discourse	The discourse style & organization of the text is clear or chronological and/or easy to predict  The organization of the text text may include a thesis or reasoned explanation in addition to facts		The organization of the text may contain multiple pathways, more than one thesis and/or several genres	The organization of the text is intricate or specialized for a particular discipline or genre.	
	Connections between ideas, processes or events are explicit and clear.	Connections between some ideas, processes or events are implicit or subtle	Connections between an expanded range ideas, processes or events are deeper and often implicit or subtle.	Connections between an extensive range ideas, processes or events are deep, intricate and often implicit or subtle.	
Struc	One primary text structure is evident (e.g., sequence, description)	Includes a main text structure with 1-2 embedded structures	Includes different text structure types of varying complexity	Includes sustained complex text structure types and/or specialized, hybrid text types	
tures	Mainly simple sentences	Simple and compound sentences with some more complex constructions	Many complex sentences with increased subordinate phrases and clauses or transition words	Mainly complex sentences, often containing multiple concepts	
Language Features	Simple language style, sometimes with narrative elements	Increased objective style and passive constructions with higher factual content	Objective/passive style with higher conceptual content and increasing nominalization	Specialized disciplinary style with dense conceptual content and high nominalization	
Langu	Vocabulary is mostly familiar	Includes some unfamiliar, context-dependent or multiple meaning words	Includes much academic (nuanced) vocabulary and/or some domain specific (content) vocabulary	Includes extensive academic (nuanced, precise) and/or domain specific (content) vocabulary	
Bk Knowledge Demands Informational	General topic is familiar, with details known by reader	General topic is familiar, with some details new to reader (cultural, historical, literary, political, legal, etc.)	General topic is somewhat familiar but with many details unknown to reader (cultural, historical, literary, political, legal, etc.)	General topic is mostly unfamiliar with most details unknown to reader (cultural, historical, literary, political, legal, etc.)	
Bk Kn Der Inforr	Simple, concrete ideas	Both simple and more complicated, abstract ideas	A range of recognizable ideas and challenging abstract concepts	Many new ideas, perpsectives and/or complex, challenging, abstract and theoretical concepts	

## Gradients in Complexity: Text Complexity Rubric for <u>Literary</u> Texts

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	Simple Texts	Somewhat	Complex Texts	Very Complex Texts
	Simple rexts	Complex Texts[2]	Complex Texts [ <mark>3</mark> ]	very complex rexts
	Consistent placement of text, regular word and line spacing, often large plain font	May have longer passages of uninterrupted text, often plain font	Longer passages of uninterrupted text may include columns or other variations in layout, often smaller more elaborate font	Very long passages of uninterrupted text that may include columns or other variations in layout, often small densely packed print
Layout	Numerous illustrations that directly support and help interpret the written text	A range of illustrations that support selected parts of the text	A few illustrations that support the text OR includes images that require some interpretation	Minimal or no illustrations that support the text OR includes images/text layout that require deeper interpretation (e.g., symbolism or recursive reading)
	Supportive signposting and enhancements	Reduced signposting and enhancements	Minimal signposting and/or enhancements	Integrated signposting conforming to literary devices. No enhancements
aning	Purpose usually stated explicitly in the title or in the beginning of the text	Purpose tends to be revealed early in the text, but may be conveyed with some subtlety	Purpose is implicit and may be revealed over the entirety of the text	Purpose implicit or subtle, is sometimes ambiguous and revealed over the entirety of the text
Purpose and Meaning	One level of meaning	More than one level of meaning, with levels clearly distinguished from each other	Several levels of meaning that may be difficult to identify/separate	Several levels and competing elements of meaning that are difficult to identify/separate and interpret
Purpos	Theme is obvious and revealed early in the text, sometimes a		Theme may be implicit or subtle, is sometimes ambiguous and may be revealed over the entirety of the text	Theme is implicit or subtle, is often ambiguous, and is revealed over the entirety of the text
Structure/ Discourse ex	The discourse style & organization of the text is clear, chronological and/or easy to predict or follow  The organization of the text text may have additional characters, two or more storylines and is occasionally difficult to predict		The organization of the text may include, subplots, time shifts and more complex characters	The organization of the text is intricate with regard to elements such as narrative viewpoint, time shifts, multiple characters, storylines and detail
	Connections between events or ideas are explicit and clear.	Connections among events or ideas are sometimes implicit or subtle	Connections among events or ideas are often implicit or subtle	Connections among events or ideas are implicit or subtle throughout the text.
	One primary text structure is evident (e.g., chronology)	Includes a main text structure with 1-2 embedded structures	Includes different text types of varying complexity	Includes sustained complex text types and hybrid or non-linear texts
atures	Mainly short, simple sentences	Simple and compound sentences with some more complex constructions	Many complex sentences with increased subordinate phrases and clauses	Many complex sentences, often containing intricate detail or concepts
Language Features	Simple, literal language; predictable	Mainly literal, common language	Some figurative or literary language	Much figurative language or use of literary devices (metaphor, analogy, connotative language literary allusion, etc.)
Langu	Vocabulary is mostly familiar for grade level; frequently appearing words	Some unfamiliar or context-dependent, multiple meaning words	Includes much academic vocabulary and some domain specific (content) vocabulary	Includes extensive academic and domain specific (content) vocabulary, and possibly archaic language
Bk Knowledge Demands .iterary/Fiction	Minimal assumed personal experience or background knowledge needed	Some assumed personal experience and/or knowledge of cultural or historical or ideas	Much assumed personal experience and/or explicit references to cultural, historical, literary, or political knowledge	Extensive, demanding, assumed personal experience and implied cultural, historical, literary, or political knowledge
Bk Ki De Litera	Simple, straightforward ideas	Both simple and more complex ideas	A range of recognizable ideas and challenging concepts or themes	Many new ideas, perspectives, and/or complex, challenging concepts

Author	Title	Publisher ( & Pub date	Genre	Suggested Grade Level(s)	Lexile	Complexity Ratings (using Hess & Hervey rubric descriptors)				Other	Overall	
						Format & Layout	Purpose & meaning	Text Structures/ Discourse	Language features	Knowledge demands	comments	Low- Mid- High for grade(s)
Wade, P. & Macheras, D.	Luk' ae	?	Graphic novel	Gr 4		1	salmon/ effects of pollution	1	2 Domain- specific	1	Use to introduce sci concept - human impact on environment	L
Wallis, Velma	Two Old Women	Harper Perennial, 1993	Historical fiction	Gr 7-8	870	2 -3 Longer passages of uninterrupted text; a few illustrations support the text	2 Theme is clear, levels of complexity clearly distinguished	1-2 Text is clear, chronological, easy to predict Different text types	1-2 Simple and compound sentences, with some complex constructions  A few unfamiliar words (Gwitchin names)	1 Some assumed cultural knowledge	Presented as a traditional Native story	
Huntington, Sidney	Shadows on the Koyukuk	Alaska Northwest Books, 1993	Autobiogra phy (historical reflection and recollection )	Gr 9-10	1050	3 Longer passages of uninterrupted text; chapter headings; minimal signposts; maps	3 Explain and interpret some information; complex subjects	3 Time shift, complex characters, connections are subtle	2 Simple and compound sentences; some unfamiliar vocabulary	3 Much assumed personal experience and cultural knowledge	Well-written, complex biography	M-H
Proenneke, Dick and Keith, Sam	One Man's Wilderness	Alaska Northwest Books, 1999	Autobiogra phy (journal entries)	Gr 9-10	950	Some longer passages, plain font. Range of illustrations. Signposting and enhancemen ts.	Purpose explicitly stated, one level of meaning, theme is obvious	Organization of text is clear; connections are explicit	1 Simple sentences; literal language; familiar vocabulary	Some assumed personal experience and cultural knowledge		

Sample *Preliminary* Bibliography of Texts reviewed by (Alaska) Educators for Range of Complexity