A Discussion of "Increasing Text Complexity" By Karin Hess and Sue Biggam, 2004

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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 are 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. In test development, the overall number of test items is driven by the length and type of reading passages and the number of items possible accompanying each passage. 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 text passages.

We have learned from NAEP research (1985) that difficulty of text passages was one of the three most important factors in reading comprehension performance of 4th, 8th, and 12th grade students. The other two factors were familiarity with subject matter presented in text and the type (literal, inferential, etc.) of question asked (Chall and Conard, 1991). Other research suggests that at grades 2 and 3, word difficulty may influence text complexity more than other factors (Anderson, 1992). Lipson and Wixson (2003) summarize the challenges of understanding text complexity this way:

"In the past, one of the few text features that was given much attention was its difficulty or readability, as measured by factors such as the number of syllables in the words and the number of words in the sentences. Current research has demonstrated that a number of other factors have a significant impact on both how much and what students understand and learn from a text. The presence or absence of these factors determines the extent to which a given text can be considered 'considerate' (to enable readers with minimal effort) or 'inconsiderate' (text requiring much greater effort). (Armbruster, 1984) "

A variety of factors influence text complexity. The complexity of text, or the degree of challenge of a particular text, is the result of specific combinations and interactions of these factors. For example, a text that has short simple sentences may, nevertheless, be challenging to read/comprehend when it contains abstract ideas, concepts that are unfamiliar, or requires a greater level of interpretation to unlock the intended meaning. Pinnell and Fountas' text leveling system (2002), an extension of the system used by Reading Recovery developed for classroom use at grades 3-6, includes these factors for determining complexity: understanding the nature of print, repeated text, natural language versus book text, supportive text, and high frequency vocabulary. Their system also calls

attention to differences between fiction and nonfiction texts in book leveling, and includes descriptors that "overlap" to the next level of difficulty.

Chall, Bissex, Conard, and Harris-Sharples (1996) suggest that linguistic characteristics (vocabulary and sentence structure and variety) as well as concepts presented, text organization, and background knowledge required of readers all need to be considered in determining appropriateness of text for a given grade level. "Merely breaking up longer sentences and simplifying vocabulary does not guarantee that reading materials will be completely appropriate for lower reading levels." They also point out differences between popular fiction, literature, and informational texts with regard to text difficulty. For example, popular fiction tends to (a) use less figurative language than literature, (b) be more repetition of information, and (c) have more conventional language use; therefore demands on the reader of popular fiction are more about basic understanding of explicit messages than on interpretation of the message.

Criteria for increasing text complexity include factors that interact to affect the relative difficulty of reading particular material. The tables on the following pages describe specific ways in which text materials generally increase in difficulty over the grade span of grades 1 through high school. The descriptors in the tables build from one grade span to the next. It is expected that students would have experience reading text described for their grade levels, as well as those of earlier grade spans.

Factors that Interact to Influence Text Complexity

- Word Difficulty and Language Structure, including vocabulary and sentence type and complexity of words or structure (often determined through the use of multiple readability formulas)
- **Text Structure** (e.g., description, chronology, sequence/procedure, causeeffect, proposition-support, problem-solution, critique)
- Discourse Style (e.g., satire, humor)
- Genre and Characteristic Features of the Text
- **Background Knowledge and/or Degree of Familiarity with Content** needed by the reader (e.g., historical, geographical, or literary references)
- Level of Reasoning Required (e.g., sophistication of themes and ideas presented, abstract metaphors, etc.)
- Format and Layout of Text, including how text is organized/layout, size and location of print, graphics, and other book/print features
- Length of Text

Descriptors of Text Complexity for Grade Levels or Grade Spans Karin Hess and Sue Biggam, 2004

Please Note: Sample grade-appropriate text titles are included at the end of the descriptors for each grade span as examples of text that would illustrate many of the characteristics described in the table. In many cases, particular teachers and schools will choose to introduce these specific texts at grade levels below or above the grade level indicated. While every descriptor might not be evident in a sample text passage, it is expected that the sample texts reflect the intent of the descriptors, and many of the indicators.

Text Complexity Descriptors	Text Complexity Descriptors	
End of Grade 1	End of Grade 2	
 Includes a variety of literary texts (such as fantasy, realistic fiction, poetry), with some complexity in story structure (e.g., multiple episodes) and literary language. Simple informational books/text. Illustrations provide moderate support for the reader. Texts have several sentences per page, with sentences of moderate length and generally simple sentence structure. Very straightforward text structures. Familiar content. In narrative text, details related to story elements (setting, characterization, events, resolution) provide strong support for both literal and interpretive meanings (e.g., for drawing basic inferences or basic conclusions). Informational texts use clear and consistent formats (e.g., print location on page), illustrations, and simple graphics to support understanding of content. Simple punctuation is used: period, question mark, exclamation point, quotation marks, and commas. 	 Includes a variety of literary texts (such as realistic fiction, folktales, humorous stories, poetry) with elaborated episodes and events, and some extended descriptions. Stories usually have well-developed characters and episodes. Informational books/text. Some use of unfamiliar vocabulary, supported by other text features (e.g., such as headings and chapter titles). Illustrations may or may not be present on each page, but usually provide low to moderate support for the reader. Sentence structure becomes more complex – including causal phrases. Straightforward text structures in informational text. Content usually familiar. In narrative text, details related to story elements (setting, characterization, goals, attempts, consequences and resolutions) provide moderate support for both literal and interpretive meanings (e.g., for predicting logical outcomes or drawing inferences about problem/solution). Informational texts use clear formats (e.g., use of simple headings to organize information into categories), illustrations that extend meaning, and simple graphics to support understanding of content. Full range of punctuation used, except dashes, colons and semicolons. 	
<u>SAMPLE TEXTS AT THE END OF GRADE 1:</u> There's a Nightmare in my Closet; The Very Busy Spider; Nobody Listens to Andrew; Ants (Sunshine Science Series)	<u>SAMPLE TEXTS AT THE END OF GRADE 2</u> George and Martha; Cam Jansen and the Mystery of the Dinosaur Bones; The Stories Julian Tells; Happy Birthday Martin Luther King (Scholastic)	

Text Complexity Descriptors Grades 3	Text Complexity Descriptors Grades 5-6
 Includes a range of longer literary selections, including refiction and fantasies. Narratives usually include familiar charal settings. Informational/functional text including short expository p descriptive, compare/contrast, directions, simple recipes, etc. Varied vocabulary, but generally familiar; some figurative (e.g., similes). Increased use of challenging vocabulary (e.g., r syllabic words, words with multiple meanings). Technical word defined or explained in context. Sentence structure becoming more elaborate and complex some use of passive voice, abstract or descriptive language. Relatively straightforward text structures. Texts include n information, more complex ideas and relationships (e.g., exam comparisons). Content usually builds from shared/somewhat familiar ex In narrative text, the story elements (plot, setting, characted provide support for both literal and interpretive meanings. Informational texts use clear formats, illustrations, and gr support understanding of content. Text features include timeli captions, and maps. Full range of punctuation used. 	 rs or crafted short stories (with increasingly diverse characters and settings), historical fiction and myths. es, e.g., Includes more complex informational/functional texts, such as persuasive essays, procedural "how to" guides, scientific and historical summaries (e.g., textbooks). More varied and challenging vocabulary, including use of figurative language (idioms, metaphors) and analogies. Some technical terms. Language in narrative text includes dialect and other linguistic variants to enhance characterization and setting. Ideas and content increase in number and density. Relationships between ideas become more complex (e.g. flashback may be introduced) in narrative text; graphs and charts are needed to convey key information in expository text. Content requires general background knowledge. Underlying themes become more complex and more universal. Interrelationships among story elements become more complex and require more interpretation. Literary elements include flashback, humor, suspense, personification, and exaggeration. Informational and functional texts use a variety of formats, illustrations, and graphics to support understanding. Text features include chapter headings, glossaries, punctuation guides.
SAMPLE TEXTS AT THE END OF GRADE 3:SAMPLE TEXTS AT THE GRADE 4:The Mouse and the Motorcycle; Sideways Stories; What's the Big Idea; Ben Franklin; Time for Kids magazineCricket in Times Square; Attic; WOW magazine (N Wildlife Federation)	GRADE 5: GRADE 6: stle in the Tuck Everlasting; Shh! We're Writing GRADE 6: True Confessions of Charlotte Doyle;

Text Complexity Descriptors Grades 7-8 and High School

- Includes a full range of literary genres, including realistic and historical fiction, science fiction, fantasy, and folk literature.
 Informational/functional texts include primary sources, personal narratives and autobiographies, schedules, and manuals, as well as synthesized information found in textbooks.
 Increasing number of uncommon words, including words with non-literal meanings and more abstract vocabulary; word choice can reflect diverse historical and cultural context; text often includes technical words with specialized meanings.
 Language in narrative text is more elaborate and complex, and includes a wide range of dialogue, use of dialects, and varied sentence structure to convey specific meanings.
 Prose style matches text purpose (informational, recreational, provocative, etc.).
 Relationships between ideas become less explicit and require more inference or interpretation.
 Understanding content requires increasing cultural and historical breadth of knowledge.
 More sophisticated themes.
 Texts used often call for literary analysis.
 - Informational texts use format, illustrations, and graphics to support understanding of meaning.
 - Text features often include advance organizers, inset text, and technology support.
- Increasing

SAMPLE TEXTS AT GRADE 7:	SAMPLE TEXTS AT GRADE 8:	SAMPLE TEXTS AT HIGH SCHOOL:
Roll of Thunder, Hear My Cry; Diary of a	The Upstairs Room; Narrative of the Life of Frederick	To Kill a Mockingbird; Night; Into Thin Air;
Young Girl; Muse magazine	Douglass; The Giver; Science magazine	Newsweek magazine

The following sources were referenced to develop text complexity descriptors:

- Caldwell, *Reading Assessment*, Guildford Press, 2002.
- Crafton, Standards in Practice: Grades K-2. Urbana, IL: National Council of Teachers of English, 1996.
- Chall, Bissex, et.al. Qualitative Assessment of Text Difficulty: A Practical Guide for Teachers and Writers. Brookline Books, Inc., 1996.
- Fountas and Pinnell, *Guiding Readers and Writers Grades 3-6*. Heinemann, 2001.
- Put Reading First. National Institute for Literacy, 2001.
- Lipson and Wixson, Assessment and Instruction of Reading and Writing Difficulties: An Interactive Approach. Pearson Education, 2003.
- National Assessment Governing Board and NAEP Reading Consensus Project. Draft NAEP Reading Framework. US Government Printing Office, April 2002.
- National Assessment Governing Board and NAEP Reading Consensus Project. Reading Framework for the National Assessment of Educational Progress: 1992-2000. US Government Printing Office, 2000.
- New Standards Primary Literacy Committee. Reading and Writing Grade by Grade: Primary Literacy Standards for Kindergarten through Third Grade. National Center of Education and the Economy and the University of Pittsburgh, 1999.
- Pinnell and Fountas, Leveled Books for Readers Grades 3-6. Portsmouth, NH: Heinemann, 2002.
- Rees and Shortland-Jones with Education Department of Western Australia. Reading Developmental Continuum, Portsmouth, NH: Heinemann, 1994.
- Sierra-Perry. *Standards in Practice: Grades 3-5*. Urbana, IL: National Council of Teachers of English, 1996.
- US Department of Education, Reading: Knowing What Works, K-3. National Institute for Literacy, 2000.
- Weaver, Brenda. Leveling Books K-6: Matching Readers to Text. International Reading Association, Inc., 2000.
- Wilhelm. Standards in Practice: Grades 6-8. Urbana, IL: National Council of Teachers of English, 1996.