

# Evaluating Text Complexity

Text complexity is evaluated using both quantitative and qualitative measures. Quantitative tools measure word count and dimensions of text complexity—such as word frequency, sentence length, and text cohesion—that can be analyzed by a computer and are difficult for a human reader to evaluate; CETE uses Flesch-Kincaid and Flesch Reading Ease measures, calculated in Review by Microsoft Office. Qualitative tools guide our professional judgment of text complexity based on textual features; CETE uses rubrics according to text type—Literary, Informational, or Listening.

For an overview of F/K and the other quantitative measures, see **Appendix A**. For the Flesch-Kincaid, maximum word count, and Flesch Reading Ease guidelines, see **Appendix B**. For text complexity evaluation rubrics, see **Appendix C**.

- 1. Determine the quantitative measure** in order to place the text in a grade band using the readability statistics, word count and Flesch-Kincaid, calculated in Microsoft Office. See charts in Appendix B.
- 2. Perform a qualitative analysis** of text complexity using your professional judgment and the rubrics in Appendix C. Fill out the information in the appropriate rubric and mark each qualitative category as you evaluate the text against the rubric. The qualitative analysis may uphold, alter, or even override the quantitative measure. This is why qualitative and quantitative measures work together to analyze a text.

Overview of qualitative text features analyzed when evaluating text complexity:

- *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 (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, multiple points of view 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 might if they are conforming to the norms and conventions of a specific discipline or if they contain a variety of structures (as an academic textbook or history book might). 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 that provide an independent source of information and are essential to understanding 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.)
- *Language Conventinality 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 (such as general academic and domain-specific vocabulary).
- *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.

- *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.

**3. Compare your complexity designation to the Flesch Reading Ease** designation according to the chart in Appendix B. If they do not align, consider your rationale for placement and reevaluate if you think it is appropriate.

The qualitative analysis may override quantitative measures in some cases, particularly in narrative texts. For example, while an excerpt of *To Kill a Mockingbird* has quantitative measures that place it in the 4-5 grade band, the complexity of the layers of meaning in the text can push it up to the 9-10 grade band for instruction.

Poetry and drama are not reliably quantifiable due to the nature of the genres' general structures and styles.

### What is a Flesch-Kincaid Measure?

Readability Statistics	
<b>Counts</b>	
Words	1665
Characters	8787
Paragraphs	84
Sentences	123
<b>Averages</b>	
Sentences per Paragraph	2.7
Words per Sentence	12.1
Characters per Word	4.9
<b>Readability</b>	
Passive Sentences	0%
Flesch Reading Ease	51.2
Flesch-Kincaid Grade Level	9.0

We use the Flesch-Kincaid Grade Level Measure to measure grade band for our texts.

Flesch Reading Ease provides a quantitative measure of complexity.

\*In the above example, the text is appropriate for 6-8 grades and is considered very complex, according to quantitative measures.\*

The Flesch/Flesch–Kincaid Readability Tests are readability tests designed to indicate how difficult a reading passage in English is to understand. There are two tests, the Flesch Reading Ease, and the Flesch–Kincaid Grade Level. Although they use the same core measures (word length and sentence length), they have different weighting factors. The results of the two tests correlate approximately inversely: a text with a comparatively high score on the Reading Ease test should have a lower score on the Grade Level test. Rudolf

Flesch devised both systems while J. Peter Kincaid developed the latter for the United States Navy.

### What is a Lexile Measure?



A book, article or piece of text gets a **Lexile text measure** when it's analyzed by MetaMetrics.

For example, the first "Harry Potter" book measures 880L, so it's called an 880 Lexile book. A Lexile text measure is based on the semantic and syntactic elements of a text. Many other factors affect the relationship between a reader and a book, including its content, the age and interests of the reader, and the design of the actual book. The Lexile text measure is a good starting point in the book-selection process, with these other factors then being considered. Lexile text measures are rounded to the nearest 10L. Unlike the reader measure, all text measures below 0L are currently reported as BR. MetaMetrics has conducted research to differentiate the BR text measures, and these measures will be available at a later date.

### What is an ATOS Measure?



The ATOS readability formula is a quantitative measure. ATOS levels are based on a book's average sentence length, average word length, word level from a graded vocabulary list of over 100,000 words, and the number of words in a book. ATOS values are expressed on an easily understandable grade-level scale. For example, an ATOS reading level of 5.4 translates to "fifth year, fourth month."

# Quantitative Text Measures

Flesch-Kincaid, Word Count, and Flesch Reading Ease

Flesch-Kincaid (F/K) and Word Count Guidelines by Grade Band		Reading Passages Narrative & Informational	Writing Sets	Listening Passages (do not use F/K)
Grade Band	Flesch-Kincaid Range	Max Word Count	Max Word Count	Word Count Range
3-5	3.0 - 7.7	750	750	All Grades 150-275
6-8	6.5 - 10.3	950	1000	
9-12	8.5 - 14.2	1100	1500	

Flesch Reading Ease (FRE) Complexity Designations*	80-100	60-79	50-59	30-49	0-29
Reading Complexity	Slightly	Moderately	Very	Exceedingly	<b>AVOID</b>
Listening Complexity	Low	Medium	High		<b>AVOID</b>

\*FRE value is NOT sole determining factor for complexity placement; considered in conjunction with F/K and qualitative evaluation

Text Complexity Evaluation: **Literary Texts**

Text Title: \_\_\_\_\_

Text Author: \_\_\_\_\_

Text Evaluator: \_\_\_\_\_

Grade and Complexity Placement: \_\_\_\_\_

Flesch-Kincaid: Flesch Reading Ease: Word Count:
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**Literary Qualitative Measures Rubric**

	Exceedingly Complex	Very Complex	Moderately Complex	Slightly Complex
<b>TEXT STRUCTURE</b>	<ul style="list-style-type: none"> <li>○ <b>Organization:</b> Is intricate with regard to such elements as point of view, time shifts, multiple characters, storylines and detail</li> <li>○ <b>Use of Graphics:</b> If used, illustrations or graphics are essential for understanding the meaning of the text</li> </ul>	<ul style="list-style-type: none"> <li>○ <b>Organization:</b> May include subplots, time shifts and more complex characters</li> <li>○ <b>Use of Graphics:</b> If used, illustrations or graphics support or extend the meaning of the text</li> </ul>	<ul style="list-style-type: none"> <li>○ <b>Organization:</b> May have two or more storylines and occasionally be difficult to predict</li> <li>○ <b>Use of Graphics:</b> If used, a range of illustrations or graphics support selected parts of the text</li> </ul>	<ul style="list-style-type: none"> <li>○ <b>Organization:</b> Is clear, chronological or easy to predict</li> <li>○ <b>Use of Graphics:</b> If used, either illustrations directly support and assist in interpreting the text or are not necessary to understanding the meaning of the text</li> </ul>
<b>LANGUAGE FEATURES</b>	<ul style="list-style-type: none"> <li>○ <b>Conventionality:</b> Dense and complex; contains abstract, ironic, and/or figurative language</li> <li>○ <b>Vocabulary:</b> Complex, generally unfamiliar, archaic, subject-specific, or overly academic language; may be ambiguous or purposefully misleading</li> <li>○ <b>Sentence Structure:</b> Mainly complex sentences with several subordinate clauses or phrases; sentences often contain multiple concepts</li> </ul>	<ul style="list-style-type: none"> <li>○ <b>Conventionality:</b> Fairly complex; contains some abstract, ironic, and/or figurative language</li> <li>○ <b>Vocabulary:</b> Fairly complex language that is sometimes unfamiliar, archaic, subject-specific, or overly academic</li> <li>○ <b>Sentence Structure:</b> Many complex sentences with several subordinate phrases or clauses and transition words</li> </ul>	<ul style="list-style-type: none"> <li>○ <b>Conventionality:</b> Largely explicit and easy to understand with some occasions for more complex meaning</li> <li>○ <b>Vocabulary:</b> Mostly contemporary, familiar, conversational; rarely unfamiliar or overly academic</li> <li>○ <b>Sentence Structure:</b> Primarily simple and compound sentences, with some complex constructions</li> </ul>	<ul style="list-style-type: none"> <li>○ <b>Conventionality:</b> Explicit, literal, straightforward, easy to understand</li> <li>○ <b>Vocabulary:</b> Contemporary, familiar, conversational language</li> <li>○ <b>Sentence Structure:</b> Mainly simple sentences</li> </ul>
<b>MEANING</b>	<ul style="list-style-type: none"> <li>○ <b>Meaning:</b> Multiple competing levels of meaning that are difficult to identify, separate, and interpret; theme is implicit or subtle, often ambiguous and revealed over the entirety of the text</li> </ul>	<ul style="list-style-type: none"> <li>○ <b>Meaning:</b> Multiple levels of meaning that may be difficult to identify or separate; theme is implicit or subtle and may be revealed over the entirety of the text</li> </ul>	<ul style="list-style-type: none"> <li>○ <b>Meaning:</b> Multiple levels of meaning clearly distinguished from each other; theme is clear but may be conveyed with some subtlety</li> </ul>	<ul style="list-style-type: none"> <li>○ <b>Meaning:</b> One level of meaning; theme is obvious and revealed early in the text.</li> </ul>
<b>KNOWLEDGE DEMANDS</b>	<ul style="list-style-type: none"> <li>○ <b>Life Experiences:</b> Explores complex, sophisticated or abstract themes; experiences portrayed are distinctly different from the common reader</li> <li>○ <b>Intertextuality and Cultural Knowledge:</b> Many references or allusions to other texts or cultural elements</li> </ul>	<ul style="list-style-type: none"> <li>○ <b>Life Experiences:</b> Explores themes of varying levels of complexity or abstraction; experiences portrayed are uncommon to most readers</li> <li>○ <b>Intertextuality and Cultural Knowledge:</b> Some references or allusions to other texts or cultural elements</li> </ul>	<ul style="list-style-type: none"> <li>○ <b>Life Experiences:</b> Explores several themes; experiences portrayed are common to many readers</li> <li>○ <b>Intertextuality and Cultural Knowledge:</b> Few references or allusions to other texts or cultural elements</li> </ul>	<ul style="list-style-type: none"> <li>○ <b>Life Experiences:</b> Explores a single theme; experiences portrayed are everyday and common to most readers</li> <li>○ <b>Intertextuality and Cultural Knowledge:</b> No references or allusions to other texts or cultural elements</li> </ul>

Text Complexity Evaluation: **Informational Texts**

Text Title: \_\_\_\_\_

Grade and Complexity Placement: \_\_\_\_\_

Text Author: \_\_\_\_\_

Flesch-Kincaid: Flesch Reading Ease: Word Count:
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Text Evaluator: \_\_\_\_\_

**Informational Qualitative Measures Rubric**

	Exceedingly Complex	Very Complex	Moderately Complex	Slightly Complex
<b>TEXT STRUCTURE</b>	<ul style="list-style-type: none"> <li><b>Organization:</b> Connections between an extensive range of ideas, processes, or events are deep, intricate, and often ambiguous; organization is intricate or discipline-specific</li> <li><b>Text Features:</b> If used, are essential in understanding the content</li> <li><b>Use of Graphics:</b> If used, intricate, extensive graphics, tables, charts, etc. are integral to making meaning of the text; may provide information not otherwise conveyed in the text</li> </ul>	<ul style="list-style-type: none"> <li><b>Organization:</b> Connections between an expanded range of ideas, processes, or events are often implicit or subtle; organization may contain multiple pathways or exhibit some discipline-specific traits</li> <li><b>Text Features:</b> If used, directly enhance understanding of the content</li> <li><b>Use of Graphics:</b> If used, graphics, tables, charts, etc. support or are integral to understanding the text</li> </ul>	<ul style="list-style-type: none"> <li><b>Organization:</b> Connections between some ideas or events are implicit or subtle; organization is evident and generally sequential or chronological</li> <li><b>Text Features:</b> If used, enhance understanding of the content</li> <li><b>Use of Graphics:</b> If used, graphics, pictures, tables, charts, etc. are mostly supplementary to understanding the text</li> </ul>	<ul style="list-style-type: none"> <li><b>Organization:</b> Connections between ideas, processes, or events are explicit and clear; organization is chronological, sequential, or easy to predict</li> <li><b>Text Features:</b> If used, aid navigation and understanding of the content but are not essential for understanding the text</li> <li><b>Use of Graphics:</b> If used, graphics, pictures, tables, charts, etc. are simple and unnecessary for understanding the content but may support and assist readers in understanding the text</li> </ul>
<b>LANGUAGE FEATURES</b>	<ul style="list-style-type: none"> <li><b>Conventionality:</b> Dense and complex; contains considerable abstract, ironic, and/or figurative language</li> <li><b>Vocabulary:</b> Complex, generally unfamiliar, archaic, subject-specific, or overly academic language; may be ambiguous or purposefully misleading</li> <li><b>Sentence Structure:</b> Mainly complex sentences with several subordinate clauses or phrases; sentences often contain multiple concepts</li> </ul>	<ul style="list-style-type: none"> <li><b>Conventionality:</b> Fairly complex; contains some abstract, ironic, and/or figurative language</li> <li><b>Vocabulary:</b> Fairly complex language that is sometimes unfamiliar, archaic, subject-specific, or overly academic</li> <li><b>Sentence Structure:</b> Many complex sentences with several subordinate phrases or clauses and transition words</li> </ul>	<ul style="list-style-type: none"> <li><b>Conventionality:</b> Largely explicit and easy to understand with some occasions for more complex meaning</li> <li><b>Vocabulary:</b> Mostly contemporary, familiar, conversational; rarely overly academic</li> <li><b>Sentence Structure:</b> Primarily simple and compound sentences, with some complex constructions</li> </ul>	<ul style="list-style-type: none"> <li><b>Conventionality:</b> Explicit, literal, straightforward, easy to understand</li> <li><b>Vocabulary:</b> Contemporary, familiar, conversational language</li> <li><b>Sentence Structure:</b> Mainly simple sentences</li> </ul>
<b>PURPOSE</b>	<ul style="list-style-type: none"> <li><b>Purpose:</b> Subtle and intricate, difficult to determine; includes many theoretical or abstract elements</li> </ul>	<ul style="list-style-type: none"> <li><b>Purpose:</b> Implicit or subtle but fairly easy to infer; more theoretical or abstract than concrete</li> </ul>	<ul style="list-style-type: none"> <li><b>Purpose:</b> Implied but easy to identify based on context or source</li> </ul>	<ul style="list-style-type: none"> <li><b>Purpose:</b> Explicitly stated, clear, concrete, narrowly focused</li> </ul>
<b>KNOWLEDGE DEMANDS</b>	<ul style="list-style-type: none"> <li><b>Subject Matter Knowledge:</b> Relies on extensive levels of discipline-specific or theoretical knowledge; includes a range of challenging abstract concepts</li> <li><b>Intertextuality:</b> Many references or allusions to other texts, outside ideas, theories, etc.</li> </ul>	<ul style="list-style-type: none"> <li><b>Subject Matter Knowledge:</b> Relies on moderate levels of discipline-specific or theoretical knowledge; includes a mix of recognizable ideas and challenging abstract concepts</li> <li><b>Intertextuality:</b> Some references or allusions to other texts, outside ideas, theories, etc.</li> </ul>	<ul style="list-style-type: none"> <li><b>Subject Matter Knowledge:</b> Relies on common practical knowledge and some discipline-specific content knowledge; includes a mix of simple and more complicated, abstract ideas</li> <li><b>Intertextuality:</b> Few references or allusions to other texts, outside ideas, theories, etc.</li> </ul>	<ul style="list-style-type: none"> <li><b>Subject Matter Knowledge:</b> Relies on everyday, practical knowledge; includes simple, concrete ideas</li> <li><b>Intertextuality:</b> No references or allusions to other texts, outside ideas, theories, etc.</li> </ul>

Text Complexity Evaluation: **Listening**

Grade and Complexity Placement: \_\_\_\_\_

Script Title: \_\_\_\_\_

Script Author: \_\_\_\_\_

Script Evaluator: \_\_\_\_\_

Flesch Reading Ease: Word Count:
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**Listening Qualitative Measures Rubric**

	Highly Complex	Moderately Complex	Slightly Complex
<b>PRESENTATION</b>	<ul style="list-style-type: none"> <li>○ <b>Purpose:</b> Subtle, implied; theoretical elements; variety of persuasive techniques</li> <li>○ <b>Audience:</b> Potentially multiple intended</li> <li>○ <b>Delivery:</b> Two or more speakers interacting; may include contrasting intentions/influences/meanings</li> </ul>	<ul style="list-style-type: none"> <li>○ <b>Purpose:</b> Implied but easily inferred; more theoretical; possibly persuasive intent</li> <li>○ <b>Audience:</b> Implied but discernible</li> <li>○ <b>Delivery:</b> Two or more speakers interacting; patterns of communication may influence meaning and flow</li> </ul>	<ul style="list-style-type: none"> <li>○ <b>Purpose:</b> Explicit, clear, concrete, narrow</li> <li>○ <b>Audience:</b> Clear, specific</li> <li>○ <b>Delivery:</b> Single speaker; straightforward, transparent approach</li> </ul>
<b>STRUCTURE</b>	<ul style="list-style-type: none"> <li>○ <b>Organization:</b> Deep, implicit, subtle connections; non- chronological/non- sequential; potentially discipline-specific</li> <li>○ <b>Sound Variety:</b> Multi-layered, overlapping voices and sounds</li> </ul>	<ul style="list-style-type: none"> <li>○ <b>Organization:</b> Some subtle or implicit connections; evident, generally sequential</li> <li>○ <b>Sound Variety:</b> Somewhat layered, overlapping voices or sounds</li> </ul>	<ul style="list-style-type: none"> <li>○ <b>Organization:</b> Clear, explicit connections; chronological or easily predicted</li> <li>○ <b>Sound Variety:</b> One-dimensional; distinct and direct</li> </ul>
<b>LANGUAGE</b>	<ul style="list-style-type: none"> <li>○ <b>Conventionality:</b> Complex; may include specialized, abstract, ironic, and/or figurative language</li> <li>○ <b>Vocabulary:</b> Complex, unfamiliar, archaic, discipline-specific, and/or academic</li> <li>○ <b>Delivery:</b> Varied; subtle, complex shifts in tone and emphasis</li> </ul>	<ul style="list-style-type: none"> <li>○ <b>Conventionality:</b> Mostly explicit with some more complex meaning</li> <li>○ <b>Vocabulary:</b> Mainly contemporary, conversational, familiar; rarely academic or unfamiliar</li> <li>○ <b>Delivery:</b> Somewhat varied; emphasis/meaning indicated by speakers voice at times</li> </ul>	<ul style="list-style-type: none"> <li>○ <b>Conventionality:</b> Explicit, literal, straightforward</li> <li>○ <b>Vocabulary:</b> Contemporary, conversational, familiar</li> <li>○ <b>Delivery:</b> Mainly direct, simple sentences</li> </ul>
<b>KNOWLEDGE DEMANDS</b>	<ul style="list-style-type: none"> <li>○ <b>Subject Matter Knowledge:</b> Discipline-specific content; understanding may be enhanced by theoretical knowledge; range of familiar ideas and challenging concepts; knowledge of context affects interpretation</li> <li>○ <b>Allusions/References:</b> Many</li> </ul>	<ul style="list-style-type: none"> <li>○ <b>Subject Matter Knowledge:</b> Some discipline- specific content; both simple and more complex/abstract ideas; knowledge may impact interpretation</li> <li>○ <b>Allusions/References:</b> Some</li> </ul>	<ul style="list-style-type: none"> <li>○ <b>Subject Matter Knowledge:</b> Everyday, practical, simple, concrete</li> <li>○ <b>Allusions/References:</b> None</li> </ul>