# Analyzing Text Complexity



# **Access to Quantitative Analysis Tools**

To run a text through these tools, you will need to "scrub" the text in order to rid it of any non-ASCII characters. Use the following directions as a guide:

- 1. Copy and paste original text into a Word document.
- 2. Eliminate any extraneous information other than the passage, title, and author. Delete any tables, graphs, or other illustrations.
- 3. Make the text a uniform font, size, and paragraph scheme (single spacing, no spaces after paragraphs, etc.)
- Save file as .txt file.
- 5. Close Word and open newly saved .txt file using TextEdit or Notepad.
- 6. Proofread text for typos.
- 7. Eliminate any non-ASCII characters ("curly" quotation marks, em dashes, question marks that took the place of apostrophes, etc.). Use find and replace to streamline this process.
- 8. Re-save newly scrubbed file.
- 9. Certain tools only allow you to run texts that are 1,000 words or less. Cut down your word count as necessary.

ATOS Analyzer – Renaissance Learning	http://www.renlearn.com/ar/overview/atos/
Degrees of Reading Power® – Questar	http://www.questarai.com (Contact Questar with requests for text analysis.)
The Lexile Framework® – MetaMetrix	http://www.lexile.com/analyzer/
<b>Coh-Metrix Easability Tool</b> — University of Memphis (For Flesch-Kincaid <sup>1</sup> measure)	http://141.225.42.101/cohmetrixgates/Home.aspx?Login=1 (Beta site)
Reading Maturity – Pearson Knowledge Technologies	http://www.readingmaturity.com (Beta site)
SourceRater – Educators Testing Service	http://naeptba.ets.org/SourceRater3/ (Beta site)

Find updated grade bands and associated ranges for these quantitative analysis tools at <a href="achievethecore.org/text-complexity">achievethecore.org/text-complexity</a>.

<sup>&</sup>lt;sup>1</sup> Since Flesch-Kincaid has no 'caretaker' that oversees or maintains the formula, the research leads worked to bring the measure in line with college and career readiness levels of text complexity based on the version of the formula used by Coh-Metrix.



# Text Complexity: Qualitative Measures Rubric

# **INFORMATIONAL TEXT**

 Text Title\_\_\_\_\_\_
 Text Author\_\_\_\_\_\_

QUALITATIVE	Very Complex ←			Slightly Complex
PURPOSE	O Purpose: Subtle, implied, difficult to determine; intricate, theoretical elements	O Purpose: Implied, but fairly easy to infer; more theoretical than concrete	O Purpose: Implied, but easy to identify based upon context or source	O <b>Purpose:</b> Explicitly stated; clear, concrete with a narrow focus
TEXT STRUCTURE	Organization of Main Ideas: Connections between an extensive range of ideas or events are deep, intricate and often implicit or subtle; organization of the text is intricate or specialized for a particular discipline	Organization of Main Ideas: Connections between an expanded range ideas, processes or events are deeper and often implicit or subtle; organization may contain multiple pathways and may exhibit traits common to a specific discipline	<ul> <li>Organization of Main Ideas: Connections between some ideas or events are implicit or subtle; organization is evident and generally sequential</li> </ul>	<ul> <li>Organization of Main Ideas: Connections between ideas, processes or events are explicit and clear; organization of text is clear or chronological or easy to predict</li> </ul>
	Text Features: If used, are essential in understanding content	Text Features: If used, greatly enhance the reader's understanding of content	<ul> <li>Text Features: If used, enhance the reader's understanding of content</li> </ul>	<ul> <li>Text Features: If used, help the reader navigate and understand content but are not essential</li> </ul>
	<ul> <li>Use of Graphics: If used, extensive, intricate, essential integrated graphics, tables, charts, etc., necessary to make meaning of text; also may provide information not otherwise conveyed in the text</li> </ul>	<ul> <li>Use of Graphics: If used, essential integrated graphics, tables, charts, etc.; may occasionally be essential to understanding the text</li> </ul>	<ul> <li>Use of Graphics: If used, graphics mostly supplementary to understanding of the text, such as indexes, glossaries; graphs, pictures, tables, and charts directly support the text</li> </ul>	<ul> <li>Use of Graphics: If used, simple graphics, unnecessary to understanding the text but directly support and assist in interpreting the written text</li> </ul>
LANGUAGE	Conventionality: Dense and complex; contains abstract, ironic, and/or figurative language	<ul> <li>Conventionality: Complex; contains some abstract, ironic, and/or figurative language</li> </ul>	Conventionality: Largely explicit and easy to understand with some occasions for more complex meaning	Conventionality: Explicit, literal, straightforward, easy to understand
FEATURES	<ul> <li>Vocabulary: Generally unfamiliar, archaic, subject-specific, or overly academic language; may be ambiguous or purposefully misleading</li> </ul>	<ul> <li>Vocabulary: Somewhat complex language that is sometimes unfamiliar, archaic, subject-specific, or overly academic</li> </ul>	<ul> <li>Vocabulary: Mostly contemporary, familiar, conversational; rarely unfamiliar or overly academic</li> </ul>	O <b>Vocabulary:</b> Contemporary, familiar, conversational language
	Sentence Structure: Mainly complex sentences often containing multiple concepts	<ul> <li>Sentence Structure: Many complex sentences with several subordinate phrases or clauses and transition words</li> </ul>	<ul> <li>Sentence Structure: Simple and compound sentences, with some more complex constructions</li> </ul>	Sentence Structure: Mainly simple sentences
KNOWLEDGE DEMANDS	Subject Matter Knowledge: Extensive, perhaps specialized or even theoretical discipline-specific content knowledge; range of challenging abstract and theoretical concepts	Subject Matter Knowledge: Moderate levels of discipline-specific content knowledge; some theoretical knowledge may enhance understanding; range of recognizable ideas and challenging abstract concepts	Subject Matter Knowledge: Everyday practical knowledge and some discipline-specific content knowledge; both simple and more complicated, abstract ideas	Subject Matter Knowledge: Everyday, practical knowledge; simple, concrete ideas
	<ul> <li>Intertextuality: Many references or allusions to other texts or outside ideas, theories, etc.</li> </ul>	<ul> <li>Intertextuality: Some references or allusions to other texts or outside ideas, theories, etc.</li> </ul>	<ul> <li>Intertextuality: A few references or allusions to other texts or outside ideas, theories, etc.</li> </ul>	<ul> <li>Intertextuality: No references or allusions to other texts, or outside ideas, theories, etc.</li> </ul>

### Questions to Consider in Planning for Instructional Scaffolding of Informational Text:



#### Purpose:

- Would spending time helping students to establish a purpose for reading this text be appropriate?
- Will students know in advance what they are expected to do with the information they gain from reading this text?

#### **Text Structure:**

- Would graphic organizers or other aids be appropriate in making the structure of the text visible to students?
- Would a partial outline or some other text-based aid be appropriate in deciphering the structure of the text?
- Would previewing and discussing the graphics included with the text prior to reading be appropriate?

### Language Features:

- Would a review of figurative, abstract, or ironic language and a modeling of how that type of language might be interpreted be appropriate?
- Would glossing certain vocabulary (particularly multiple meaning words that extend across other subject matter content areas, i.e. Tier 2 words) prior to reading be appropriate?

# **Knowledge Demands:**

- What background knowledge needs to be introduced (or re-introduced) to facilitate reading success that will not supplant the actual information gained from the reading experience?
- What explicit references and/or allusions to other texts might require additional resources/opportunities for students to explore?

#### **General:**

• In what ways might collaborative groupings of students during the reading process be appropriate?



# Text Complexity: Qualitative Measures Rubric

# LITERARY TEXT

Text Title\_\_\_\_\_ Text Author\_\_\_\_

QUALITATIVE	Very Complex ←			Slightly Complex
MEANING	• Meaning: Several level/layers and competing elements 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	Meaning: Several levels/layers 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	Meaning: More than one level/layer of meaning with levels clearly distinguished from each other; theme is clear but may be conveyed with some subtlety	<ul> <li>Meaning: One level/layer of meaning; theme is obvious and revealed early in the text.</li> </ul>
TEXT STRUCTURE	Narration: Complex and/or unconventional; many shifts in point of view and/or perspective	O Narration: Some complexities and/or unconventionality; occasional shifts in point of view and/or perspective	O Narration: Largely simple and/or conventional; few, if any, shifts in point of view and/or perspective	O Narration: Simple and conventional; no shifts in point of view or perspective
TEXT STRUCTURE	Order of Events: Not in chronological order; heavy use of flashback	Order of Events: Several major shifts in time, use of flashback	Order of Events: Occasional use of flashback, no major shifts in time	O Order of Events: Strictly chronological
	Use of Graphics: If used, minimal illustrations that support the text	O <b>Use of Graphics:</b> If used, a few illustrations that support the text	O <b>Use of Graphics:</b> If used, a range of illustrations that support selected parts of the text	O <b>Use of Graphics:</b> If used, extensive illustrations that directly support and assist in interpreting the written text
LANGUAGE	Conventionality: Dense and complex; contains abstract, ironic, and/or figurative language	<ul> <li>Conventionality: Complex; contains some abstract, ironic, and/or figurative language</li> </ul>	Conventionality: Largely explicit and easy to understand with some occasions for more complex meaning	<ul> <li>Conventionality: Explicit, literal, straightforward, easy to understand</li> </ul>
FEATURES	<ul> <li>Vocabulary: Generally unfamiliar, archaic, subject-specific, or overly academic language; may be ambiguous or purposefully misleading</li> </ul>	O Vocabulary: Some use of unfamiliar, archaic, subject-specific, or overly academic language	O Vocabulary: Mostly contemporary, familiar, conversational language; rarely unfamiliar or overly academic language	Vocabulary: Contemporary, familiar, conversational language
	Sentence Structure: Mainly complex sentences often containing multiple concepts	<ul> <li>Sentence Structure: Many complex sentences with several subordinate phrases or clauses and transition words</li> </ul>	<ul> <li>Sentence Structure: Simple and compound sentences, with some more complex constructions</li> </ul>	O Sentence Structure: Mainly simple sentences
KNOWLEDGE DEMANDS	Life Experiences: Explores many complex and sophisticated themes; experiences are distinctly different from the common reader	<ul> <li>Life Experiences: Explores many themes of varying layers of complexity; experiences portrayed are uncommon to most readers</li> </ul>	<ul> <li>Life Experiences: Explores few themes; experiences portrayed are common to many readers</li> </ul>	Life Experiences: Explores a single theme; experiences portrayed are everyday and common to most readers
	<ul> <li>Intertextuality and Cultural Knowledge: Many references or allusions to other texts or cultural elements</li> </ul>	O Intertextuality and Cultural Knowledge: Some references or allusions to other texts or cultural elements	<ul> <li>Intertextuality and Cultural Knowledge: Few references or allusions to other texts o cultural elements</li> </ul>	<ul> <li>Intertextuality and Cultural Knowledge:         <ul> <li>No references or allusions to other texts or cultural elements</li> </ul> </li> </ul>
	<ul> <li>Subject Matter Knowledge: requires extensive, perhaps specialized prior content knowledge</li> </ul>	Subject Matter Knowledge: requires moderate amount of prior content knowledge	O Subject Matter Knowledge: requires some prior content knowledge	Subject Matter Knowledge: requires only everyday content knowledge

# Questions to Consider in Planning for Instructional Scaffolding of Literary Text:



#### **Meaning:**

- Would spending time helping students to understand the multiple layers/levels of meaning present in the text be appropriate?
- Will students know in advance what they are expected to do with the information they gain from reading this text (i.e., summarize, gather and apply details, analyze, synthesize, create)?

#### **Text Structure:**

- Would graphic organizers or other aids be appropriate in making the structure of the text visible to students?
- Would a partial plotline, cast of characters, or some other text-based aid be appropriate in deciphering the structure of the text?
- Would previewing and discussing the graphics included with the text prior to reading be appropriate?

# **Language Features:**

- Would a review of figurative, abstract, or ironic language and a modeling of how that type of language might be interpreted be appropriate?
- Would glossing certain vocabulary (particularly multiple meaning words that extend across other subject matter content areas, i.e. Tier 2 words) prior to reading be appropriate?

# **Knowledge Demands:**

- What background knowledge needs to be introduced (or re-introduced) to facilitate reading success that will not supplant the actual information gained from the reading experience?
- What explicit references and/or allusions to other texts might require additional resources/opportunities for students to explore?

#### **General**:

• In what ways might collaborative groupings of students during the reading process be appropriate?

# **Guiding Questions for Reader and Task Considerations**

Before analyzing the text:

- 1. Does engagement with this text make sense given my current **instructional aims**?
- 2. Is the content of this text **appropriate** for the age of my students?

If you answer no to either of these questions, consider selecting a different text.

After analyzing the text, use information gained from the quantitative and qualitative analysis to plan for instruction. Consider the following:

What learning do you want students to demonstrate after reading this text (e.g., key student understandings of the text, academic vocabulary, fluency, etc.)?#

Use the answer to this question to identify which grade-level CCSS will be the focus of instruction of the text and the content of questions about the text.

#

Based on a clear understanding of each student's reading ability, what aspects of the text will likely pose the most challenge for your students? Use the answer to this question to guide the design of your instructional supports so that all students (even those who struggle with reading) are able to access the text independently and proficiently through multiple readings of the text.#

How is this text best presented to students (through read aloud, read along, or read alone) and how can this text be used with other texts? Use the answers to determine how this text "fits" within a larger unit of instruction (e.g., Can the text serve as an "anchor" text connected to other shorter texts? Does the text require background knowledge that can be learned by reading other texts?)



# **Text Complexity Analysis of** *The Hunger Games* by Suzanne Collins

**Text Type: Literature** 

# Text Description

In a vast wasteland formerly known as the United States, stands the nation of Panem. The nation is comprised of The Capitol, a shining spectacle, surrounded by 12 dismal districts. Each year, the districts elect 2 tributes, respectively, to participate in a fight-to-the-death competition aired on television for the enjoyment of The Capitol. Katniss soon finds herself in the middle of this "show," where survival is only the beginning.

# **Recommended Complexity Band Level**

While the quantitative measure places *The Hunger Games* in the 4-5 grade band, the qualitative analysis, with specific attention called to the complex and multiple layers of meaning, suggests that the novel is more appropriate in the 6-8 grade band. Specific placement in grade 7 seems most appropriate.

# **Quantitative Measure**

Quantitative Measure of the Text:	Range:	Associated Band Level:
810L	740-1010	4-5

# **Qualitative Measures**

#### **Text Structure: Slightly Complex**

The text structure is relatively conventional with a first-person narrator (Katniss). The chronological order of events is occasionally interrupted by flashbacks and foreshadowing, which produce small shifts in time.

## **Language Features: Moderately Complex**

The narrator's tone is contemporary, familiar, and conversational in nature. Her words come across in the form of accessible sentence structures. However, extensive descriptions, imagery, and figurative language are employed by Collins in an effort to bring this foreign land to life. Although some terms are unique and specific, they can be understood through context.

#### Meaning/Purpose: Very Complex

This novel has multiple levels of meaning. Students can easily access the superficial level which explores Katniss, her surroundings, and the competition for survival in which she finds herself. Yet, beyond this, the novel also contains underlying themes that pertain to social issues, moral dilemmas, and governmental controls. These shades of meaning are more implicitly woven into the context of the entire story and are more subtle and sophisticated in nature. Consequently, they are more difficult for students to pick up on and unpack.

## **Knowledge Demands: Very Complex**

The experiences and environments portrayed will be uncommon to most students, and this compounds the varying layers of meaning and complexity found in the novel. The characteristics common to dystopian novels may need to be explored in order for all students to be able to access this text.



# **Text Complexity Analysis of** *The Hunger Games* by Suzanne Collins

**Text Type: Literature** 

# **Considerations for Reader and Task**

Possible Major Instructional Areas of Focus (include 3-4 CCS Standards) for this Text:

RL.7.2 - Determine the theme or central idea of a text and analyze its development over the course of the text; provide an objective summary of the text.

 Provide students with specific themes to trace over the course of the entire novel. Model as necessary.

RL.7.3 - Analyze how particular elements of a story or drama interact (e.g., how setting shapes the characters or plot).

 Focus on the ways in which Katniss' surroundings and past experiences contribute to and shape her character's thoughts, words, and actions.

RL.7.7 - Compare and contrast a written story, drama, or poem to its audio, filmed, staged, or multimedia version, analyzing the effects of techniques unique to each medium (e.g., lighting, sound, color, or camera focus and angles in a film).

• View salient portions of the film to see what film techniques were used to achieve certain effects not possible in writing.

L.7.5 - Demonstrate understanding of figurative language, word relationships, and nuances in word meanings.

 Study Collins' use of description and figurative language to better understand the ways in which she is able to create a foreign yet tangible new world. Below are factors to consider with respect to the reader and task:

#### **Potential Challenges this Text Poses:**

Some students may struggle with grasping the underlying political and social commentary. The dystopian genre may prove difficult, as well.

#### **Differentiation/Supports for Students:**

Give additional background knowledge regarding dystopian novels in order to enhance students' understanding.

Provide students with specific underlying themes to look for while reading and model how to analyze them [the themes] once they can identify them. Using text-dependent questions in order to walk students through this process may be helpful.

#### For learning extension:

- Consider linking to certain history/social studies standards, such as RH.6 8.6: Identify aspects of a text that reveal an author's point of view or purpose (e.g., loaded language, inclusion or avoidance of particular facts).
- Reading this novel as a part of a text set that includes other texts that
  explore similar issues. Some examples of novels include the following.
  Using excerpts (rather than the novels in their entireties) may be
  necessary.
  - The Giver
  - Animal Farm
  - 0 1984
  - o Feed
  - Fahrenheit 451
  - Lord of the Flies



# **Text Complexity Analysis of** *American Revolution* by Kids Discover

**Text Type: Informational** 

# **Text Description**

This magazine-style text covers a diverse set of events and highlights of the era of the American Revolution.

# **Recommended Complexity Band Level**

The quantitative measure for this text places it in the 6-8 band, likely due to the domain specific vocabulary. We recommend it for use in the 4-5 band. The purpose of the text is to present factual information, so very little inference is required. While the vocabulary and density of information in this text will present challenges, the text is appropriate in the 4-5 band with instructional supports.

## **Quantitative Measure**

Quantitative Measure of the Text:	Range:	Associated Band Level:	
1090L	925-1185	6-8	

# **Qualitative Measures**

#### **Text Structure: Moderately Complex**

Content is unified, organized on topic related pages, and clearly labeled with headlines and subheads that cue readers and will help them navigate the text. Much information is presented on a single page and the structures used vary from page to page making an understanding of text structure essential to comprehension.

## **Language Features: Moderately Complex**

While many pages begin with simplified, conversational language, additional examination reveals complexities that could prove quite challenging for students. The text is rich in academic and domain specific vocabulary. While some sentences, many sentences are long and atypical in structure. For example, a high percentage of sentences begin with adverbial clauses rather than the subject (*In protest, representatives from every state except Virginia, met to...*). Breaking down sentences and rereading will be essential to comprehension.

#### Meaning/Purpose: Slightly Complex

The purpose of the text is primarily informational; the topic is clear, explicit and the magazine has a narrow focus of the year 1776.

#### **Knowledge Demands: Moderately Complex**

This text requires students to bring practical knowledge and simple concrete ideas to the reading. Increased discipline-specific (Revolutionary War) knowledge would allow for deeper meaning of the text. If carefully reviewed, the timeline at the beginning of the article can provide some of the general context needed to understand subsequent information.



# **Text Complexity Analysis of** *American Revolution* by Kids Discover

**Text Type: Informational** 

# **Considerations for Reader and Task**

Possible Major Instructional Areas of Focus (include 3-4 CCS Standards) for this Text:

RI.4.1 - Refer to details and examples in a text when explaining what the text says explicitly and when drawing inferences from the text.

 Use the information on pages 2& 3 to create a chart showing the contrasting perspectives of America and Great Britain on key events leading up to the war.

RI.4.5 - Describe the overall structure of events, ideas, concepts, or information in a text or part of a text.

• Compare and contrast the structure of the Timeline on pages 4 & 5 with another section of the magazine. Discuss how the structure of each enhances the reader's ability to make meaning of the text.

W.4.2 - Write informative/explanatory texts to examine a topic and convey ideas and information clearly.

• Write a short essay on the role of women in the Revolutionary War.

L.4.6 - Acquire and use accurately grade-appropriate general academic and domain-specific words and phrases, including those that...are basic to a particular topic.

 Create a glossary of war-related vocabulary used in the magazine (mercenary, casualty, conflict, victorious) using both words and pictures to define each word. Below are factors to consider with respect to the reader and task:

#### **Potential Challenges this Text Poses:**

Knowledge demands of this time period are significant for understanding this text. The text may pose further questions for students about this time period.

Students may not see a logical process for navigating the magazine format. Some pages may be visually confusing due to the variety of text features used and the amount of information presented.

#### **Differentiation/Supports for Students:**

Use the format of the magazine to separate text into manageable chunks. Work with a single page or a single text box at a time and spread the reading over a period of days.

Provide opportunities for students to physically sort and manipulate blocks of text to develop and show understanding. For example, timeline entries can be cut apart and arranged in order and all of the passages about slaves can be grouped together and then reread to answer a focusing question, etc.

Use graphic organizers to support students in selecting and recording information.

Some vocabulary--particularly vocabulary for which the context does not provide enough support to determine meaning—could be introduced in advance of reading to support understanding.

Provide supporting texts and/or online opportunities for students to explore the topics introduced in the text further.

# Suggested Considerations for Reader and Task

## **Cognitive Capabilities**

- Do readers at this grade level possess the necessary attention to read and comprehend the text?
- Will the readers at this grade level be able to **remember and make connections** among the various details presented in the text?
- Do readers at this grade level possess the necessary **critical/analytical thinking skills** to understand the relationships between the various parts of the text?
- Will the text help to develop the attention, memory, and critical/analytic thinking skills necessary for future reading endeavors?

#### Reading Skills

- Do readers at this grade level possess the necessary **inferencing skills** to "read between the lines" and make connections among elements that may not be explicit in the text?
- Do readers at this grade level possess the necessary **visualization skills** to imagine what is occurring or what is being described in the text?
- Do readers at this grade level possess the necessary **questioning skills** to challenge the ideas being presented in this text and consider those ideas from multiple points of view?
- Do readers at this grade level possess the necessary comprehension strategies to manage this text?
- Will the text help to develop the inferencing skills, visualization skills, questioning skills, and comprehension strategies necessary for future reading endeavors?

# Motivation and Engagement with Task and Text

- Will the readers at this grade level **understand the purpose**—which might shift over the course of the reading experience—for reading the text (i.e., skimming, studying to retain content, close reading, etc.)?
- Will the readers at this grade level be interested in the content of the text?
- Might the readers at this grade level develop an interest in this content because of this text?
- Do readers at this grade level believe that they will be able to read and understand the text?
- Will the readers at this grade level be **interested and engaged with the style of writing and the presentation of ideas** within the text?
- Will the text maintain the reader's motivation and engagement throughout the reading experience?

# **Prior Knowledge and Experience**

- Do readers at this grade level possess adequate prior knowledge and/or experience regarding the topic of the text to manage the material that is presented?
- Are there any **explicit connections** that can be made between what content the readers at this grade level will encounter in the text and other learning that may occur in this or another class?
- Do readers at this grade level possess adequate prior knowledge and/or experience regarding the vocabulary used within the text to manage the material that is presented?
- Do readers at this grade level possess **adequate knowledge of and/or experience with the genre** of the text to manage the material that is presented?
- Do readers at this grade level possess **adequate knowledge of and/or experience with the language** (i.e. syntax, diction, rhetoric) of the text to manage the material that is presented?

#### **Content and/or Theme Concerns**

- Are there any potentially concerning elements of content or theme that might contribute to students, teachers, administrators, and/or parents feeling uncomfortable with reading the text?
- Do readers at this grade level possess the **maturity** to respond appropriately to any potentially concerning elements of content or theme?

# **Complexity of Associated Tasks**

- Will the complexity of any tasks associated with the text interfere with the reading experience?
- Will the complexity of any questions asked or discussed concerning this text interfere with the reading experience?

