

Text Complexity

Clarification and Resource Guide

Purpose

The purpose of the text is the message the author intends to communicate. Authors write for different purposes. For example, a text may present an *argument*. The author’s message in an argument may be to change the reader’s point of view; to bring about some action on the reader’s part; or to ask the reader to accept the author’s explanation or evaluation of a concept, issue or problem. An author may choose to write with the purpose of conveying information accurately. *Informational or explanatory* text can also be used for different purposes – to increase the readers knowledge of a subject, to help readers better understand a procedure or process, or to increase the readers understanding of a concept.

The purpose provides readers with the big idea and helps them better understand what they are reading and why. When readers can identify the purpose of the text, they can make connections among the key details and/or ideas presented in specific sections of the text as well as with the text as a whole.

Understanding the Levels of Complexity

	Complex Text	Mostly Complex Text	Mostly Simple Text	Simple Text
PURPOSE	Purpose <ul style="list-style-type: none"> • is subtle, implied and difficult to determine • includes multiple purposes revealed over the entirety of the text 	Purpose <ul style="list-style-type: none"> • Is implied, but easy to infer • is revealed over the entirety of the text 	Purpose <ul style="list-style-type: none"> • is explicitly stated • tends to be revealed later in the text 	Purpose <ul style="list-style-type: none"> • is simple and explicitly stated • usually revealed at the beginning of the text or in the title

- **Simple Text**

Factors which influence complexity of text include how the purpose is stated by the author and where in the text the purpose is found. When the author explicitly states the purpose in the text, especially at the very beginning of the text, the reader is better prepared to assimilate key ideas and details as they read and therefore aids in comprehension.

- **Mostly Simple Text**

A text containing an explicitly stated purpose becomes more difficult to comprehend when the author introduces the purpose later in the text. The process of comprehending the text becomes more complex if the reader must align the information read at the beginning of the text with the author’s stated purpose found later in the text.

- **Mostly Complex Text**

The complexity of a text increases when the purpose is implied by the author. To comprehend a text with an implied purpose, the reader must infer the purpose from clues or evidence within the text as they read. The inferred purpose is continually tested against new information revealed in the text. This process requires a greater cognitive demand by the reader to comprehend the text.

- **Complex Text**

In a complex text, the purpose is implied and difficult to determine. Without an explicitly stated purpose and only subtle clues provided by the author, the reader must read critically to infer the author’s message. A complex text may also have multiple purposes or purposes that change throughout the text. This increases the cognitive demand by the reader to comprehend. Readers must continue to reframe their thinking throughout the text as well as connect the different purposes to the message of the text as a whole.

Instructional Strategies to Support Purpose

Purpose	Teaching Tips	Examples
<p>Using text structures to identify the purpose</p> <ul style="list-style-type: none"> When the purpose is not explicitly stated, it is important that students look for clues in the text to help them infer the author’s message. Attention to the organization of the text and presence of text features and structures provides information that can reveal the purpose of the text. It is important not only to recognize the text features and/or structures, but understand how they support the purpose and organization of the text. 	<ul style="list-style-type: none"> Preview these text features (titles, headings, and subheadings) for clues that will help identify the purpose. Continue to ask students how these features help the reader to understand the text Annotating the text is a strategy for students. As students read, they circle or underline signal words associated with a type of text structure that may provide clues about the author’s purpose. When discussing the text, probe students to go beyond the identification of words to their role in organizing the information in the text. 	<p style="text-align: center;">Puerto Rico</p> <p>Early People Native Americans lived on the island of Puerto Rico for more than 4,000 years. The people called themselves Taino. Their island was named Borinquen. Christopher Columbus arrived on his second voyage in 1493.</p> <p>Two New Groups Arrive Spanish settlers flooded Puerto Rico after Columbus’s arrival. They enslaved the Taino. Sickneses from Europe</p> <p>Signal Words</p> <ul style="list-style-type: none"> Purpose to compare: <i>both, similarly, in the same way, like, just</i> Purpose to contrast: <i>however, but, on the other hand</i>
<p>Using word choice to identify the author’s purpose</p> <ul style="list-style-type: none"> The author’s choice of words provides information about the purpose of the text. When the purpose is not clearly stated, students can infer the purpose of the text by analyzing the choice of words, transitions, and sentence structure used by the author. 	<ul style="list-style-type: none"> Text-dependent questions can be used to focus the students on key words and ideas in the text. The teacher may identify certain words and ask how they provide clues to the reader about the purpose. As students become proficient in reading text more closely, a text-dependent question may ask the students to find those words that reveal the purpose and what they infer. Move students from modeling and guided text-questions to independently annotating text and/or using features, structures and words to support their understanding of the text. 	<p>Word Choice</p> <ul style="list-style-type: none"> If the author’s intention is to criticize, she will use words to show negative opinion or a judgment of ideas (<i>detest, unimpressive, questionable, wasteful, poor</i>) If an author presents an argument; the text will cite credible and reliable resources, incorporate direct quotes, or use factual words and phrases (<i>one research study revealed, was stated, or the final step is</i>). <p>Text-Dependent Questions</p> <ul style="list-style-type: none"> In the text, the author uses the words: unclear, not supported, disagree, and lack of evidence. From these words, what can you infer about the purpose of the text? What examples from the text support your conclusion about the author’s purpose?

More Information on Author’s Purpose

- <http://suite101.com/article/how-to-identify-authors-purpose-in-a-passage-a159917>
- <http://www.learner.org/jnorth/tm/ReadStrat8.html>

Structure

The structure of the text includes two elements: text structure and text features. Text structure is the organization or arrangement of key ideas and details and relationships among those ideas. Text features are included by the author to support the body of the text. Authors use a variety of structures and features to help organize key ideas and details to convey the central idea(s) to the reader.

Part 1 - Text Structures (Organizational Patterns)

When authors write, they select specific key ideas, choose precise words, and construct and organize sentences and paragraphs to support the main idea of the text. The author may choose from several structures to support the purpose of the text: sequence/chronological order, compare/contrast, cause and effect, problem/solution, or description. Within each organizational structure, the author may use certain **signal words** (words that identify an organizational pattern), linking expressions or transitions to connect one idea to another. An author may use only one structure or multiple structures within a text.

Research indicates that if readers can identify a particular structure, they are more prepared to focus on the author's central idea as well as determine what is important at the sentence and paragraph level. As a result of experiences with text, reading comprehension improves. If readers have little experience with using text structure, they must work harder to determine the central ideas.

Examples

Organizational Pattern	Purpose of Structure	Signal words, phrases, transitions
• Sequence/Chronological	The author presents information in order of time, sequence, or process	First, second, next, finally
• Description	The author provides details on a topic, idea, person, place or thing by listing characteristics, features, and examples	For example, characteristics are, such as,
• Compare/contrast	The author explains how two or more things are alike and/or how they are different.	different, in contrast, alike, same as, on the other hand, even though, although, yet, as opposed to, instead of,
• Cause and Effect	The author identifies one or more causes or events and the resulting consequences or effects	Reasons why, if....then, therefore, because, so, since, caused by, result, brought about by
• Problem and Solution	The author states a problem and lists one or more solution to the problem.	issue, reason, problem is, answer, solution, because, possibility, if....then, so that, thus, one idea, the result,

Understanding the Levels of Complexity

	Complex Text	Mostly Complex Text	Mostly Simple Text	Simple Text
STRUCTURE	<p>Text Structure</p> <ul style="list-style-type: none"> • Is absent or contains multiple complex text structures • does not use of signal words • connections between ideas continues to be difficult to determine 	<p>Text Structure</p> <ul style="list-style-type: none"> • is implicit or difficult to determine • uses more than one text structure of varying complexity • includes few signal words • implies connections between ideas 	<p>Text Structure</p> <ul style="list-style-type: none"> • is explicit • uses 1-2 text structures of varying complexity • includes signal words • builds connections between some key ideas 	<p>Text Structure</p> <ul style="list-style-type: none"> • is explicit • single simple structure, often chronological or sequence • includes signal words • builds connections between key ideas

- **Simple Text**

When a text is considered simple, the author organizes the key ideas and details into a single obvious structure. The explicit structure along with strategically placed signal words guide the reader in making connections between information presented and the central idea of the text.

- **Mostly Simple Text**

A text containing an explicit structure becomes more difficult when the information is organized into a more complex structure like cause and effect or problem/ solution. A reader's comprehension is also challenged when the author presents information but connections among some ideas are not clear. Without clear connections, the reader must rely on inferences made from the text to make those connections that will influence comprehension of the text as a whole.

- **Mostly Complex Text**

The complexity of a text increases as the support added by a clear text structure becomes more implicit. Without the clear organization of ideas and the minimal use of signal words to make connections among ideas, comprehension becomes more demanding. Texts of this difficulty will include a variety of structures. Multiple structures require readers to interpret information presented in each structure as well as analyze and synthesize information among sections to make sense of the text as a whole.

- **Complex Text**

A text becomes more complex when the text structure and supporting signals are absent. Without the textual clues provided by signal words and/or a clear organization of ideas, the reader must read closely to construct inferences about how the key ideas connect to and support the author's purpose. Difficulty in comprehending a text also increases if an unfamiliar complex discipline-specific structure is used by the author.

Instructional Strategies to Support Text Structure

Purpose	Teaching Tips
<p>Using text structure and signal words to identify organization of key ideas and details.</p> <ul style="list-style-type: none"> • While reading, noting text structures and associated signal words helps readers to make predictions about the author’s central idea and create a strategic plan for how to go about reading the text. Noting the organization of the text is also helpful when students must return to the text to locate evidence to support their argument. • Being aware of how an author conveys the central idea by using text structure will also support efforts when writing. • Providing direct instruction, modeling the process of using text structure, and using text dependent questions to support the analysis of text structure are important strategies for building student understanding of complex text. <p><i>Note the purpose of explicitly teaching structure is not to memorize structures and their signal words, but to develop a larger understanding of how text is structured and engage in repeated exercises that apply this knowledge to the understanding of new texts.</i></p>	<p>Direct instruction of text structures.</p> <ul style="list-style-type: none"> • Introduce the idea that texts have text structures or organization patterns. Introduce a common text structure. Students learn best when one structure is introduced at a time – not all at once. • Explain that each text structure can often be identified by certain signal words. Introduce key words associated with structure presented. • Show an example of a paragraph(s) that corresponds to the text structure. • Use a classroom text that utilizes this structure. Model or use text-dependent questions to identify structure or/and how the author uses signal words to organize/structure the text to accomplish a purpose. <p>Throughout the year, use the following to further extend the understanding of text structure with specific texts.</p> <ul style="list-style-type: none"> • Read the text and make an outline of the text to find how the text is structured or orally identify the information presented in each paragraph. • Examine topic sentences that clue the reader to a specific structure. Look for the signal words that are associated with each text structure. • Make connections between the signal word in the text and information following the signal word. Point out how the signal word identifies and supports organization of ideas. • Model the writing of a paragraph that uses the same specific text structure. • Have students craft paragraphs about the topic that follow a specific text structure. <p>Source: http://www.slideserve.com/dash/teaching-text-structure</p>

More Information on Text Structure

- <http://dpi.wi.gov/files/cal/pdf/text-structure.pdf>
- <http://languageartsreading.dadeschools.net/pdf/ElementaryDocuments/Intermediate/TextChart.pdf>
- <http://www.slideserve.com/dash/teaching-text-structure>
- http://usd262.com/modules/groups/homepagefiles/cms/3550/File/Curriculum/Literacy/Comprehension/Textstructure_resources.pdf
- <http://go.hrw.com/social/strategies/STRAT02U.PDF>

Teaching Students to Read like Detectives: Comprehending, Analyzing, and Discussing Text;
Douglas Fisher, Nancy Frey and Diane Lapp

Part 2 - Text Features

Text features are used by the author to bring attention to important details, locate information, or further clarify or support the information presented. Sometimes, authors will include information in text features critical to the understanding of the central idea, but not found in the main text.

Features	Purpose of Feature	Examples
Print Features	Organizational structures found outside the text that help the readers locate information	table of contents, index, appendix
Text Organization	Organizational structures found inside the text that brings attention to important details in the text, clarify information, or support understanding of text	bold print, italics, bulleted lists, headings and titles, glossary
Illustrations	Visual information that enhances the meaning of the words	photographs, drawings
Graphic Aids	Combines visual and text to clarify, support, or enhance information.	diagrams, graphs, charts, figures, maps, tables, timelines, photographs, drawings

Source: *Teaching Students to Read like Detectives*; Douglas Fisher, Nancy Frey, Diane Lapp

Understanding the Levels of Complexity

TEXT FEATURES	Complex Text	Mostly Complex Text	Mostly Simple Text	Simple Text
	Text Features <ul style="list-style-type: none"> are sophisticated, essential and integrated with the text provide information not provided elsewhere 	Text Features <ul style="list-style-type: none"> are integrated with the text are necessary to make meaning of the text 	Text Features <ul style="list-style-type: none"> enhance and supplement the reader's understanding of the text 	Text Features <ul style="list-style-type: none"> are unnecessary or merely supplemental to understanding the text

- **Simple Text**

When reading a simple text, the reader relies on the explicit and clearly organized statements to comprehend the text. Text features found in simple text may add more information about the subject of the text; they do not support a deeper understanding of the central idea(s). Features found in a simple text may not be connected to the key ideas or may be irrelevant to the text.

- **Mostly Simple Text**

The complexity of the text increases when text features are added to enhance the understanding of the text. The process of comprehension becomes more demanding as the reader must determine how to access and synthesize information presented in feature(s) with the text.

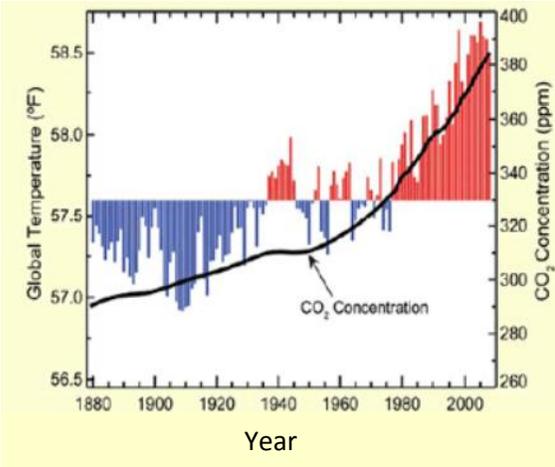
- **Mostly Complex Text**

A text increases in complexity as significant information important to comprehension is found in the text features. When readers encounter features in a text, they must strategically process the information presented and integrate the information with the text as a whole. The process of navigating and synthesizing information presented in the text and the features increases level of cognitive demand for the reader.

- **Complex Text**

In a complex text, the reader must rely on critical information provided in sophisticated features to understand the central idea(s) of the text. Illustrations and graphics in a complex text may contain key ideas and details not found anywhere else in the text but are essential to comprehension. The reader must identify new information and assimilate the new information with the information found in the text to gain an understanding of the text as a whole.

Instructional Strategies to Support Text Features

Purpose	Teaching Tips	Examples
<p>Role of Text Features</p> <p>The features of an informational text help readers navigate the text (table of contents, title, and subtitles) as well provide additional content to support and develop the ideas in the text (maps, diagrams, photographs, and glossary). Many students tend to read features as “extras”, perusing them quickly. When readers encounter complex text that includes information critical to understanding the text as a whole, they often lack the skills to support the analysis and synthesis of the text features. Explicit instruction and practice in using text features is important to understanding text. Provide explicit instructional think-alouds on:</p> <ul style="list-style-type: none"> • how to identify the different kinds of features and what the reader can learn from those features • how to analyze text features to support understanding of the central ideas of the text • how to synthesize information gathered from features with the main text. 	<p>Model a Think –Aloud Strategy</p> <ul style="list-style-type: none"> • Choose an important feature in a text. Explain the how the feature supports a reader’s understanding of the text. Demonstrate how to think carefully about the feature. As you think-aloud, model annotating the text by circling and underlining key ideas and details. • Make clear how to determine important information and note this when examining a feature. Reinforce by marking, underlining, and circling key ideas and details. Jotting short notes as you explain what a reader can learn from a feature is also helpful. • Engage in a modeled writing of one or two sentences about information learned. 	<p>Think-aloud with a graph and caption (see graph below)</p> <ul style="list-style-type: none"> • Model think-aloud. <i>When I looked at the graph, I noticed.....</i> (Circle the information of importance). • Next, I focused on the caption (read aloud). <i>The words in the caption give me information about the graph and even more information about global temperatures and CO₂</i> (underline important words). • <i>What else could I have learned from the graph?</i> • <i>What words in the caption tell you that?</i> (Follow by underlining words in the caption). • <i>What other information can we learn about the graph that is not included in the caption?</i> (Continue to underline important words, and circle important information in the graph). • Paraphrase information annotated in the graph.
<p>Progress Report of Interagency Climate Change Adaption Task Force</p>  <p>If you doubt that warming temperatures have anything to do with carbon dioxide, the primary greenhouse gas, here’s something to think about. Horizontal divider shows average temperatures, 1901-2000.</p>		<p>Guided practice (general examples)</p> <ul style="list-style-type: none"> • What do you notice about the graph? What does information does it give? • How did you figure that out? • Why did the author use this type of feature to present the information? • What new information is in the graph that is not in the text? • Re-read text and jot down important information. Synthesis key ideas with information presented in the graph. <p>Example of a Text Dependent Question</p> <p>The author challenges the reader that “there’s something to think about” in the information presented in the graph. What information does the author want the reader to think about and why? Use evidence from the text and the graph to support your answer.</p>

More Information on Text Features

- <http://languageartsreading.dadeschools.net/pdf/ElementaryDocuments/Intermediate/TextChart.pdf>
 - <http://teachersites.schoolworld.com/webpages/SLS/files/textfeaturepurposechart.pdf>
 - <http://dpi.wi.gov/files/cal/pdf/text-features.pdf>
 - http://ferguson.dadeschools.net/Faculty/Literacy/2011-2012/Text_Features_Chart.pdf
 - <http://teacherweb.com/TX/DaggettMiddleSchool/ReadingRocks/Text-Features-Class-Poster.pdf>
 - <http://www.authorstream.com/Presentation/ttravis-57862-Text-Features-Table-Contents-Index-Glossary-Titles-Subheadings-Bold-Color-Education-ppt-powerpoint/>
- **Teaching Students to Read like Detectives: Comprehending, Analyzing, and Discussing Text**
Douglas Fisher, Nancy Frey and Diane Lapp
 - **Close Reading of Informational Texts**
Sunday Cummins
 - **Text Complexity - Raising Rigor in Reading**
Douglas Fisher, Nancy Frey and Diane Lapp

Knowledge Demands

Part 1 – Knowledge Demands

The demand of complex content found within a text challenges readers because of the variability in the readers experiences and prior knowledge with discipline-specific information. To comprehend a text, readers must draw on the prior knowledge about the content/concepts presented, relate information in the text to prior life experiences, and access appropriate cultural knowledge as needed. Differences between the reader’s knowledge and experiences and those presented by the author contribute to the complexity of the text.

Source: *Text Complexity – Raising Rigor in Reading*; Fisher, Frey, Lapp

Understanding the Levels of Complexity

	Complex Text	Mostly Complex Text	Mostly Simple Text	Simple Text
Knowledge Demands	Knowledge Demands <ul style="list-style-type: none"> • contain unfamiliar concepts • require specialized and extensive scientific or technical knowledge • include abstract scientific or technical (discipline-specific) concepts 	Knowledge Demands <ul style="list-style-type: none"> • include a range of challenging familiar and unfamiliar discipline-specific concepts 	Knowledge Demands <ul style="list-style-type: none"> • include familiar discipline-specific concepts 	Knowledge Demands <ul style="list-style-type: none"> • present familiar concrete concepts • are related to students experiences

- **Simple Text:**

Comprehension of a text is facilitated by the presentation of familiar and concrete concepts. When the reader engages cognitively with information related to prior knowledge and experiences, little demand is placed on the reader.

- **Mostly Simple Text:**

A text becomes more complex as readers interact with familiar discipline-specific concepts but do not have the depth of related experiences and understandings to make inferences or connect to other concepts presented in the text.

- **Mostly Complex Text**

Comprehension becomes more difficult as discipline-specific concepts presented in the text are unfamiliar to the reader or familiar concepts are presented with more depth. The cognitive demand on the reader also increases when the author presents or applies a known concept in a different way, compares the concept to another concept, expands the meaning of the concept, or uses the concept in a cause and effect relationship.

- **Complex Text**

A text is complex when it contains multiple concepts that require an understanding of unfamiliar and /or specialized discipline-specific knowledge. Comprehension is difficult as the reader must make conceptual inferences from abstract and complex implied information as well synthesize the information to construct new meanings from the text.

Instructional Strategies to Support Knowledge Demands

Purpose	Teaching Tips	Examples
<p>Access Prior Knowledge</p> <p>A hallmark of complex text in content areas is the demand on the reader to comprehend subtle, specialized, and unfamiliar concepts in a text. The difficulty level of the text requires the reader to make connections to prior knowledge that will support the understanding of new information presented. Many readers do not automatically activate and process prior knowledge when engaging in a text containing new information. To support comprehension, students need to re-examine their previous learning before interacting with new knowledge introduced in the text.</p>	<p>Quick Write</p> <p>A Quick Write is a 1-3 minute informal written response, usually sparked by a prompt provided by the teacher. The Quick Write strategy serves as a tool for organizing thinking as students re-activate previous learning.</p> <p>A crucial dynamic of a Quick Write is student sharing. This allows students to immerse themselves in their previous learning but also receive additional reminders from others.</p> <p>Model the process of a Quick Write and the conversation about prior knowledge between students. Gradually move to student independence.</p>	<p>History Quick Write:</p> <ul style="list-style-type: none"> • One thing a person should know about the Reconstruction Era is....because... <p>Physical Science Quick Write:</p> <ul style="list-style-type: none"> • A key term about plate tectonics is...because.... <p>Other Quick Write Prompts</p> <ul style="list-style-type: none"> • I remember that... • I already know that... • I would explain... • I would describe... • An important point about... is.... • A person should know... • The first think I think of is... • A key term about this topic is...because... • My definition of this is... • I can tell you that... • Something I should share about this is...

<p>Comprehension Self-Monitoring</p> <p>A complex text requires readers to interact with unfamiliar, abstract, and or specialized information. The author also assumes background knowledge and may cue the reader but not directly state information needed to comprehend. As a result, the reader must bridge the author’s assumptions of previous knowledge and the actual knowledge that a reader brings to the page. Effective readers develop habits of mind that can be assessed to support comprehension of complex text. Modeling effective comprehension routines will support knowledge gaps.</p>	<p>Comprehension Checkdown</p> <p>This strategy provides students with a protocol for isolating knowledge gaps within a text and systematically working through what students are able to understand and where they faultier by lack of knowledge. This process allows students to identify gaps in knowledge and comprehension and supports an action strategy for comprehension.</p> <p>The Check-down provides a series of questions that student should progressively ask themselves as the address mismatches in knowledge with the author. Model strategy as a think aloud, moving to gradual release of the strategy and independence.</p>	<p>Comprehension Check-down Questions</p> <p>Checkpoint 1 – Identify areas of understanding</p> <ul style="list-style-type: none"> • What does the author tell me that I do understand? <p>Checkpoint 2 – Inventory personal knowledge</p> <ul style="list-style-type: none"> • What connections can I make to my personal knowledge? <p>Checkpoint 3 –Identify author’s message for hidden knowledge</p> <ul style="list-style-type: none"> • What does the author expect me to already know? <p>Checkpoint 4 – Evaluate risk of continuing with knowledge gaps</p> <ul style="list-style-type: none"> • How does not knowing affect my understanding? <p>Checkpoint 5 – Recognize unknown information</p> <ul style="list-style-type: none"> • What don’t I know that I should know? <p>Checkpoint 6 and 7 – Identify inferences from text</p> <ul style="list-style-type: none"> • What hunches do I have about what something might mean? • What are some thinking that I might be able to figure out? <p>Checkpoint 8 – Identify outside resources needed</p> <ul style="list-style-type: none"> • Where can I turn to get the information that I need to understand the author? <p>Source: <i>Developing Readers in the Academic Disciplines;</i> Buehl</p>
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More Information on Knowledge Demands

- *Developing Readers in the Academic Disciplines*
Doug Buhl

Language

Language includes two elements that influence text complexity. The first is sentence structure or the relationships among the words that form a sentence. Sentence structure is influenced by the length of the sentence and the organization of the sentence or word order. Vocabulary is the second element of language that affects the complexity of a text.

Part 1 - Sentence Structure

Sentence structure is one of the most important factors affecting the readability of a text. The meaning of the sentence depends on more than the meaning of the words they contain. It depends on the relationship among the ideas conveyed by the words. The order in which these ideas, as well as the number of ideas presented within a sentence, greatly affects the ability of the reader to understand the meaning of the text. Together, sentence length and the organization of the words within the sentence, work together to increase text complexity. Shorter sentences are simple and easy to read. Longer sentences are likely to include multiple phrases or clauses representing a greater number of related ideas. When a complex series of ideas is presented in one sentence (dense text), the cognitive demand increases as the reader must work hard to understand each idea presented as well as understand the relationship among ideas.

The reading process involves two types of memory: short-term and long-term. Short-term memory is used to store the ideas contained in a single sentence. First the reader scans a sentence, organizing the information presented into an idea as a whole for storage in memory before reading the next sentence. Complex sentences strain the limits of short-term memory and often require the reader to reread the sentence several times to comprehend.

Understanding levels of Text Complexity

	Complex Text	Mostly Complex Text	Mostly Simple Text	Simple Text
SENTENCE STRUCTURE	<p>Sentence Structure</p> <ul style="list-style-type: none"> • is dense containing mainly complex, compound sentences of varied structure • contains sentences that often include multiple concepts embedded in phrases 	<p>Sentence Structure</p> <ul style="list-style-type: none"> • contains a range of complex compound and simple sentences • may contain more than one concept embedded in a sentence 	<p>Sentence Structure</p> <ul style="list-style-type: none"> • contains simple and compound sentences 	<p>Sentence Structure</p> <ul style="list-style-type: none"> • contains mainly simple sentences

- **Simple Text**

A text that is easy to comprehend is composed of simple sentences containing a simple subject and verb and expresses one idea. The sentence is usually organized with the subject and the verb at the beginning of the sentence to clearly signal the purpose of the sentence. The use of simple sentences in a text allows the reader to connect simple ideas presented to support comprehension of the text as a whole.

- **Mostly Simple Text**

Complexity of a text increases as the author includes compound sentences. The text becomes more challenging as the reader must determine the relationship between ideas presented in a complex sentence before they can connect those ideas with other presented in the following sentences.

- **Mostly Complex Text**

Reading comprehension becomes more difficult as the text includes more and varied compound sentences. As the use of compound sentences with embedded clauses becomes more common to communicate the complexity of the information presented, a greater demand is placed on the reader to comprehend the text.

- **Complex Text**

The density of content carrying words and phrases in sentences increases in complex disciplinary text. Often, sentences will contain multiple clauses, representing different but supporting discipline specific concepts. The organization of complex sentences varies from simple text by the placement of clauses at the beginning of the sentence. The absence of the noun and verb at the beginning of the sentence to signal the purpose requires critical analysis of the components. Readers challenged with this type of sentence structure must often reread slowly to deconstruct the sentence into individual parts as well as synthesis each piece of information presented to make meaning of the sentence as a whole.

Instructional Strategies to Support Sentence Structure

Purpose	Teaching Tips	Examples
<p>Deconstructing Sentences A challenging sentence that adds to the complexity of a text contains multiple clauses strung together by connective words (and, so, but, if, when, as, after, because). The use of these complex sentences allows an author to more accurately and effectively present information and make logical arguments. The text becomes more rigorous as the number of clauses and the dependent relationship among them increases. In many discipline-specific texts, the construction of compound sentence also increases the density of more difficult content vocabulary and concepts.</p> <p>Source: Language and Literacy Zhihui Fang, Linda Lamme and Rose M Pringle.</p>	<p>Deconstructing complex sentences with teacher think-aloud</p> <ul style="list-style-type: none"> • Choose a complex sentence from a text. Display the sentence. • As you read the sentence, model a think-aloud about the parts of the sentence. <ul style="list-style-type: none"> ✓ <i>What is the subject and verb of this sentence? (Underline)</i> ✓ <i>What simple sentence(s) can I write to tell me what this about using the noun and verbs as clues? (Identify dependent clauses with parenthesis. Underling subject and verb for independent clause)</i> ✓ <i>What other information in the sentence does the author want me to know? (separate the clauses)</i> ✓ <i>What is the relationship between the other information and the simple sentence or main idea I wrote? (who, what, where, when, how)</i> • Continue to support student use of strategy by: <ul style="list-style-type: none"> ✓ discussing important but difficult sentences in a new text. ✓ asking students to deconstruct difficult sentences independently. • As students become more proficient and independent, the following modifications can be made by: <ul style="list-style-type: none"> ✓ re-writing the sentence into shorter “chunks” of information. ✓ annotating the text to show key ideas and relationship to supporting ideas. 	<p>United States Preamble</p> <p>We, the People of the United States, in Order to form a more perfect union, establish justice, insure domestic Tranquility, provide for the common defence, promote the general Welfare, and secure the Blessings of Liberty to ourselves and our Posterity, do ordain and establish the Constitution of the United States of America.</p> <p>Main idea: We do ordain and establish the Constitution</p> <p>Relationship to other words Who- the people of U.S Why – to form a more perfect union What will it accomplish –</p> <ul style="list-style-type: none"> ✓ establish justice, insure Tranquility, provide for defense, promote Welfare ✓ secure liberty and prosperity

More Information on Sentence Structure

- <http://arb.nzcer.org.nz/supportmaterials/english/thinking-about-how-language-works.php#s2>
- <http://canada.justice.gc.ca/eng/dept-min/pub/legis/n35.html> (introduction only)
- <http://www.eslbee.com/sentences.htm>
- <http://www.ascd.org/publications/educational-leadership/mar12/vol69/num06/The-Challenge-of-Challenging-Text.aspx>
- **Language and Literacy in Inquiry Based Science Classrooms, Grades 3-8**
 Zjihui Fang, Linda L. Lamme and Rose M. Pringle

Part 2 – Vocabulary

Authors convey ideas through words and phrases. As vocabulary and sentence structures used by an author become less familiar, the complexity of the text increases. Complex text often contains vocabulary with a greater percent of general **academic** (frequently occurring words found across content areas and in multiple contexts) and discipline-specific words. Text can also contain words that are largely unfamiliar to the reader. The density of challenging words within sentences increases the cognitive demand placed on the reader.

Research shows that higher-order thinking in reading depends heavily on knowledge of vocabulary. Discipline focused text contains specific words that represent complex concepts, as well as essential academic terms. Discipline-specific words receive instructional attention because of their relationship to content. It is important to remember that academic words (e.g. estimate, determines distributed, resulting) play an equally important role in comprehension across disciplines and should play an important role in vocabulary instruction. The number of unfamiliar domain-specific words and new general academic terms found in a text often determine a reader’s ability to comprehend text.

Source: <http://www.ascd.org/publications/educational-leadership/mar12/vol69/num06/The-Challenge-of-Challenging-Text.aspx>

Understanding levels of Text Complexity

	Complex Text	Mostly Complex Text	Mostly Simple Text	Simple Text
VOCABULARY	<p>Vocabulary</p> <ul style="list-style-type: none"> includes sophisticated, complex academic and/or discipline- specific vocabulary crucial to understanding the text is not specifically defined within the text, and assumes prior knowledge 	<p>Vocabulary</p> <ul style="list-style-type: none"> includes unfamiliar discipline-specific or academic words may be defined contextually at the paragraph or passage level 	<p>Vocabulary</p> <ul style="list-style-type: none"> includes a range of familiar and unfamiliar discipline-specific or academic words is defined contextually or in a footnote 	<p>Vocabulary</p> <ul style="list-style-type: none"> includes familiar discipline-specific or academic words is usually defined within the same sentence

- **Simple Text**

Academic and discipline-specific words used in the text are familiar to the reader. If the author includes words that may affect the readers’ understanding of the text, the author will include a definition within the same sentence.

- **Mostly Simple**

The complexity of the text increases as more unfamiliar academic and discipline-specific vocabulary is included in the text. Definitions of key words are not explicitly defined at this level of complexity. Contextual clues are included within the same sentence or following sentence to support comprehension of the unfamiliar word. The cognitive demand increases as the reader must identify the context clues related to an unfamiliar word and infer meaning.

- **Mostly Complex**

As the number of unfamiliar and discipline-specific words in a text increases, so does the level of cognitive demand needed for comprehension. At this level, less support for unfamiliar words is provided by the author. Explicit definitions and context clues embedded within close proximity are absent. The reader must depend on inferences found within the paragraph or the text and prior knowledge to facilitate meaning.

- **Complex**

The vocabulary found in complex text is sophisticated and the author assumes the reader has the necessary prior knowledge to understand the vocabulary included. Academic and discipline-specific words found in the text are essential for comprehension, but minimal vocabulary support is provided. The reader must closely read the text to make text inferences about the meaning of unfamiliar words in connection to the text as a whole.

Instructional Strategies to Support Vocabulary

Purpose	Teaching Tips
<p style="text-align: center;">Guiding Instruction of Academic Vocabulary</p> <p>In content classrooms, vocabulary instruction is usually focused on discipline specific words. However, academic words demand an important place in the classroom because of their wide applicability to many sorts of reading. Academic words help readers think, write and speak with precision and are found in complex text across content areas. Academic vocabulary exposes students to the word origins, multiple meanings of words, and references abstract concepts that relate and connect directly to targeted content area. Source: Pennsylvania State Department of Education</p> <p>Academic words are easily generalized and can be found in a variety of texts: informational texts (ex: relative, vary, formulate, specificity, and accumulate) and technical texts (calibrate, itemize, periphery). These words are “powerful because of their wide applicability to many sorts of reading.” They help readers think, write and speak with precision. Source: CCSS, Appendix A</p>	<p>Processes teachers can use to help students learn academic vocabulary</p> <ul style="list-style-type: none"> • Provide a description, explanation or example of the new term. • Ask students to restate the description, giving an explanation for example in their own words. • Ask students to construct a picture, symbol, or graphic representing the term. • Engage students periodically in activities that help them add to their knowledge of the term. • Periodically ask students to discuss the terms with one another. <p>Source: Building Academic Vocabulary, Maranon and Pickering</p>

Purpose	Teaching Tips	Examples:			
<p>Word Analysis/ Teaching Word Parts “Many underprepared readers, lack basic knowledge of word origins or etymology, such as Latin and Greek roots, as well as discrete understandings of how a prefix or suffix can alter the meaning of a word. Learning clusters of words that share a common origin can help students understand content-area texts and connect new words to those already known.</p> <p>Source: Pearson Prentice Hall http://www.phsschool.com/eteach/language_arts/2002_03/essay.html</p>	<p>Learning and reviewing high frequency affixes (prefixes and suffixes) and root words will equip students with some basic tools for word analysis, which will be useful when they are prompted to apply them in rich and varied learning contexts. As new words are introduced containing Latin and Greek affixes, unpack the meaning of the word with students. Identify the meaning of the prefix, root word, and suffix and use this information to construct the content or academic definition. “This type of contextualized direct teaching meets the immediate need of understanding unknown words while building generative knowledge that supports students in figuring out difficult words in future reading.”</p>	Prefix	Part of Speech	Meaning	Example
		epic-	noun	center	epicenter epidermis
		Suffix	Part of Speech	Meaning	Example
		-ion, -tin	noun	act or condition of	connection fusion
		-size -iffy	verb	to produce a state or quality	criticize
		Root	Part of Speech	Meaning	Example
		duct	noun	To lead, make, shape, or fashion	aqueduct

More information on Vocabulary

General

- <http://www.millmarkeducation.com/pd-articles-unlocking-content-area-success-w-explicit-academic-vocab.cfm>
- <http://www.olemiss.edu/celi/download/vocabulary/StrategiesVocabulary-080808.pdf>
- http://www.phschool.com/eteach/language_arts/2002_03/essay.html

Academic vocabulary

- <http://www.uefap.com/vocab/select/awl.htm>
- <http://www.englishcompanion.com/pdfDocs/acvocabulary2.pdf>
- <http://oald8.oxfordlearnersdictionaries.com/academic/>
- <http://www.cdl.org/resource-library/pdf/The%20Academic%20Word%20List.pdf>

Affixes

- <http://www.readingrockets.org/article/40406/>
- <http://www.ballard-tighe.com/championweb/redlevel/teachingaffixes.pdf>
- <http://www.prefixsuffix.com/rootchart.php>
- <http://www.adlit.org/article/40406/>

Books

- **Bringing Words to Life**
Isabel Beck
- **Words, Words, Words**
Janet Allen
- **Teaching Basic and Advanced Vocabulary**
Robert Marzano