

**Hess' Cognitive Rigor Matrix & Curricular Examples:** Applying Webb's Depth-of-Knowledge Levels to Bloom's Cognitive Process Dimensions - *Reading*

Revised Bloom's Taxonomy	Webb's DOK Level 1 Recall & Reproduction	Webb's DOK Level 2 Skills & Concepts	Webb's DOK Level 3 Strategic Thinking/ Reasoning	Webb's DOK Level 4 Extended Thinking
<p><b>Remember</b> Retrieve knowledge from long-term memory, recognize, recall, locate, identify</p>	<ul style="list-style-type: none"> <li>○ Recall, recognize, or locate basic facts, details, events, or ideas explicit in texts</li> <li>○ Read words orally in connected text with fluency &amp; accuracy</li> <li>○ Define terms</li> </ul>			
<p><b>Understand</b> Construct meaning, clarify, paraphrase, represent, translate, illustrate, give examples, classify, categorize, summarize, generalize, infer a logical conclusion), predict, compare/contrast, match like ideas, explain, construct models</p>	<ul style="list-style-type: none"> <li>○ Identify or describe literary elements (characters, setting, sequence, etc.)</li> <li>○ Select appropriate words when intended meaning/definition is clearly evident</li> <li>○ Describe/explain who, what, where, when, or how</li> </ul>	<ul style="list-style-type: none"> <li>○ Specify, explain, show relationships; explain why, cause-effect</li> <li>○ Give non-examples/examples</li> <li>○ Summarize results, concepts, ideas</li> <li>○ Make basic inferences or logical predictions from data or texts</li> <li>○ Identify main ideas or accurate generalizations of texts</li> <li>○ Locate information to support explicit-implicit central ideas</li> </ul>	<ul style="list-style-type: none"> <li>○ Explain, generalize, or connect ideas using supporting evidence (quote, example, text reference)</li> <li>○ Identify/ make inferences about explicit or implicit themes</li> <li>○ Describe how word choice, point of view, or bias may affect the readers' interpretation of a text</li> </ul>	<ul style="list-style-type: none"> <li>○ Explain how concepts or ideas specifically relate to <i>other</i> content domains or concepts</li> <li>○ Develop generalizations of the results obtained or strategies used and apply them to new problem situations</li> </ul>
<p><b>Apply</b> Carry out or use a procedure in a given situation; carry out (apply to a familiar task), or use (apply) to an unfamiliar task</p>	<ul style="list-style-type: none"> <li>○ Use language structure (pre/suffix) or word relationships (synonym/antonym) to determine meaning of words</li> </ul>	<ul style="list-style-type: none"> <li>○ Use context to identify the meaning of words/phrases</li> <li>○ Obtain and interpret information using text features</li> </ul>	<ul style="list-style-type: none"> <li>○ Apply a concept in a new context</li> </ul>	<ul style="list-style-type: none"> <li>○ Illustrate how multiple themes (historical, geographic, social) may be interrelated</li> </ul>
<p><b>Analyze</b> Break into constituent parts, determine how parts relate, differentiate between relevant-irrelevant, distinguish, focus, select, organize, outline, find coherence, deconstruct (e.g., for bias or point of view)</p>	<ul style="list-style-type: none"> <li>○ Identify whether specific information is contained in graphic representations (e.g., map, chart, table, graph, T-chart, diagram) or text features (e.g., headings, subheadings, captions)</li> </ul>	<ul style="list-style-type: none"> <li>○ Categorize/compare literary elements, terms, facts, details, events</li> <li>○ Identify use of literary devices</li> <li>○ Analyze format, organization, &amp; internal text structure (signal words, transitions, semantic cues) of different texts</li> <li>○ Distinguish: relevant-irrelevant information; fact/opinion</li> <li>○ Identify characteristic text features; distinguish between texts, genres</li> </ul>	<ul style="list-style-type: none"> <li>○ Analyze information within data sets or texts</li> <li>○ Analyze interrelationships among concepts, issues, problems</li> <li>○ Analyze or interpret author's craft (literary devices, viewpoint, or potential bias) to critique a text</li> <li>○ Use reasoning, planning, and evidence to support inferences</li> </ul>	<ul style="list-style-type: none"> <li>○ Analyze multiple sources of evidence, or multiple works by the same author, or across genres, time periods, themes</li> <li>○ Analyze complex/abstract themes, perspectives, concepts</li> <li>○ Gather, analyze, and organize multiple information sources</li> <li>○ Analyze discourse styles</li> </ul>
<p><b>Evaluate</b> Make judgments based on criteria, check, detect inconsistencies or fallacies, judge, critique</p>			<ul style="list-style-type: none"> <li>○ Cite evidence and develop a logical argument for conjectures</li> <li>○ Describe, compare, and contrast solution methods</li> <li>○ Verify reasonableness of results</li> <li>○ Critique conclusions drawn</li> </ul>	<ul style="list-style-type: none"> <li>○ Evaluate relevancy, accuracy, &amp; completeness of information from multiple sources</li> <li>○ Draw &amp; justify conclusions</li> <li>○ Apply understanding in a novel way, provide argument or justification for the application</li> </ul>
<p><b>Create</b> Reorganize elements into new patterns/structures, generate, hypothesize, design, plan, produce</p>		<ul style="list-style-type: none"> <li>○ Generate conjectures or hypotheses based on observations or prior knowledge and experience</li> </ul>	<ul style="list-style-type: none"> <li>○ Synthesize information within one source or text</li> <li>○ Develop a complex model for a given situation</li> <li>○ Develop an alternative solution</li> </ul>	<ul style="list-style-type: none"> <li>○ Synthesize information across multiple sources or texts</li> <li>○ Articulate a new voice, alternate theme, new knowledge or perspective</li> </ul>

**Hess' Cognitive Rigor Matrix & Curricular Examples: Applying Webb's Depth-of-Knowledge Levels to Bloom's Cognitive Process Dimensions - Writing**

<b>Revised Bloom's Taxonomy</b>	<b>Webb's DOK Level 1 Recall &amp; Reproduction</b>	<b>Webb's DOK Level 2 Skills &amp; Concepts</b>	<b>Webb's DOK Level 3 Strategic Thinking/ Reasoning</b>	<b>Webb's DOK Level 4 Extended Thinking</b>
<b>Remember</b> Retrieve knowledge from long-term memory, recognize, recall, locate, identify				
<b>Understand</b> Construct meaning, clarify, paraphrase, represent, translate, illustrate, give examples, classify, categorize, summarize, generalize, infer a logical conclusion), predict, compare/contrast, match like ideas, explain, construct models	<ul style="list-style-type: none"> <li>○ Describe or define facts, details, terms</li> <li>○ Select appropriate words to use when intended meaning/definition is clearly evident</li> <li>○ Write simple sentences</li> </ul>	<ul style="list-style-type: none"> <li>○ Specify, explain, show relationships; explain why, cause-effect</li> <li>○ Give non-examples/examples</li> <li>○ Take notes; organize ideas/data</li> <li>○ Summarize results, concepts, ideas</li> <li>○ Identify main ideas or accurate generalizations of texts</li> </ul>	<ul style="list-style-type: none"> <li>○ Explain, generalize, or connect ideas using supporting evidence (quote, example, text reference)</li> <li>○ Write multi-paragraph composition for specific purpose, focus, voice, tone, &amp; audience</li> <li>○</li> </ul>	<ul style="list-style-type: none"> <li>○ Explain how concepts or ideas specifically relate to <i>other</i> content domains or concepts</li> <li>○ Develop generalizations of the results obtained or strategies used and apply them to new problem situations</li> </ul>
<b>Apply</b> Carry out or use a procedure in a given situation; carry out (apply to a familiar task), or use (apply) to an unfamiliar task	<ul style="list-style-type: none"> <li>○ Apply rules or use resources to edit specific spelling, grammar, punctuation, conventions, word use</li> <li>○ Apply basic formats for documenting sources</li> </ul>	<ul style="list-style-type: none"> <li>○ Use context to identify the meaning of words/phrases</li> <li>○ Obtain and interpret information using text features</li> <li>○ Develop a text that may be limited to one paragraph</li> <li>○ Apply simple organizational structures (paragraph, sentence types) in writing</li> </ul>	<ul style="list-style-type: none"> <li>○ Revise final draft for meaning or progression of ideas</li> <li>○ Apply internal consistency of text organization and structure to composing a full composition</li> <li>○ Apply a concept in a new context</li> <li>○ Apply word choice, point of view, style to impact readers' interpretation of a text</li> </ul>	<ul style="list-style-type: none"> <li>○ Select or devise an approach among many alternatives to research a novel problem</li> <li>○ Illustrate how multiple themes (historical, geographic, social) may be interrelated</li> </ul>
<b>Analyze</b> Break into constituent parts, determine how parts relate, differentiate between relevant-irrelevant, distinguish, focus, select, organize, outline, find coherence, deconstruct (e.g., for bias, point of view)	<ul style="list-style-type: none"> <li>○ Decide which text structure is appropriate to audience and purpose</li> </ul>	<ul style="list-style-type: none"> <li>○ Compare literary elements, terms, facts, details, events</li> <li>○ Analyze format, organization, &amp; internal text structure (signal words, transitions, semantic cues) of different texts</li> <li>○ Distinguish: relevant-irrelevant information; fact/opinion</li> </ul>	<ul style="list-style-type: none"> <li>○ Analyze interrelationships among concepts, issues, problems</li> <li>○ Apply tools of author's craft (literary devices, viewpoint, or potential dialogue) with intent</li> <li>○ Use reasoning, planning, and evidence to support inferences made</li> </ul>	<ul style="list-style-type: none"> <li>○ Analyze multiple sources of evidence, or multiple works by the same author, or across genres, or time periods</li> <li>○ Analyze complex/abstract themes, perspectives, concepts</li> <li>○ Gather, analyze, and organize multiple information sources</li> </ul>
<b>Evaluate</b> Make judgments based on criteria, check, detect inconsistencies or fallacies, judge, critique			<ul style="list-style-type: none"> <li>○ Cite evidence and develop a logical argument for conjectures</li> <li>○ Describe, compare, and contrast solution methods</li> <li>○ Verify reasonableness of results</li> <li>○ Justify or critique conclusions</li> </ul>	<ul style="list-style-type: none"> <li>○ Evaluate relevancy, accuracy, &amp; completeness of information from multiple sources</li> <li>○ Draw &amp; justify conclusions</li> <li>○ Apply understanding in a novel way, provide argument or justification for the application</li> </ul>
<b>Create</b> Reorganize elements into new patterns/structures, generate, hypothesize, design, plan, produce	<ul style="list-style-type: none"> <li>○ Brainstorm ideas, concepts, problems, or perspectives related to a topic or concept</li> </ul>	<ul style="list-style-type: none"> <li>○ Generate conjectures or hypotheses based on observations or prior knowledge and experience</li> </ul>	<ul style="list-style-type: none"> <li>○ Develop a complex model for a given situation</li> <li>○ Develop an alternative solution</li> </ul>	<ul style="list-style-type: none"> <li>○ Synthesize information across multiple sources or texts</li> <li>○ Articulate a new voice, alternate theme, new knowledge or perspective</li> </ul>