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
Remember Retrieve knowledge from long-term memory, recognize, recall, locate, identify	o Recall, recognize, or locate basic facts, details, events, or ideas explicit in texts o Read words orally in connected text with fluency & accuracy o Define terms			
Understand 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	o Identify or describe literary elements (characters, setting, sequence, etc.) o Select appropriate words when intended meaning/definition is clearly evident o Describe/explain who, what, where, when, or how	o Specify, explain, show relationships; explain why, cause-effect o Give non-examples/examples o Summarize results, concepts, ideas o Make basic inferences or logical predictions from data or texts o Identify main ideas or accurate generalizations of texts o Locate information to support explicit-implicit central ideas	o Explain, generalize, or connect ideas using supporting evidence (quote, example, text reference) o Identify/ make inferences about explicit or implicit themes o Describe how word choice, point of view, or bias may affect the readers' interpretation of a text	o Explain how concepts or ideas specifically relate to *other* content domains or concepts o Develop generalizations of the results obtained or strategies used and apply them to new problem situations
Apply Carry out or use a procedure in a given situation; carry out (apply to a familiar task), or use (apply) to an unfamiliar task	o Use language structure (pre/suffix) or word relationships (synonym/antonym) to determine meaning of words	o Use context to identify the meaning of words/phrases o Obtain and interpret information using text features	o Apply a concept in a new context	o Illustrate how multiple themes (historical, geographic, social) may be interrelated
Analyze 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)	o 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)	o Categorize/compare literary elements, terms, facts, details, events o Identify use of literary devices o Analyze format, organization, & internal text structure (signal words, transitions, semantic cues) of different texts o Distinguish: relevant-irrelevant information; fact/opinion o Identify characteristic text features; distinguish between texts, genres	o Analyze information within data sets or texts o Analyze interrelationships among concepts, issues, problems o Analyze or interpret author's craft (literary devices, viewpoint, or potential bias) to critique a text o Use reasoning, planning, and evidence to support inferences	o Analyze multiple sources of evidence, or multiple works by the same author, or across genres, time periods, themes o Analyze complex/abstract themes, perspectives, concepts o Gather, analyze, and organize multiple information sources o Analyze discourse styles
Evaluate Make judgments based on criteria, check, detect inconsistencies or fallacies, judge, critique			o Cite evidence and develop a logical argument for conjectures o Describe, compare, and contrast solution methods o Verify reasonableness of results o Critique conclusions drawn	o Evaluate relevancy, accuracy, & completeness of information from multiple sources o Draw & justify conclusions o Apply understanding in a novel way, provide argument or justification for the application
Create Reorganize elements into new patterns/structures, generate, hypothesize, design, plan, produce		o Generate conjectures or hypotheses based on observations or prior knowledge and experience	o Synthesize information within one source or text o Develop a complex model for a given situation o Develop an alternative solution	o Synthesize information across multiple sources or texts o Articulate a new voice, alternate theme, new knowledge or perspective

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

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
Remember Retrieve knowledge from long-term memory, recognize, recall, locate, identify				
Understand 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	o Describe or define facts, details, terms o Select appropriate words to use when intended meaning/definition is clearly evident o Write simple sentences	o Specify, explain, show relationships; explain why, cause-effect o Give non-examples/examples o Take notes; organize ideas/data o Summarize results, concepts, ideas o Identify main ideas or accurate generalizations of texts	o Explain, generalize, or connect ideas using supporting evidence (quote, example, text reference) o Write multi-paragraph composition for specific purpose, focus, voice, tone, & audience o	o Explain how concepts or ideas specifically relate to *other* content domains or concepts o Develop generalizations of the results obtained or strategies used and apply them to new problem situations
Apply Carry out or use a procedure in a given situation; carry out (apply to a familiar task), or use (apply) to an unfamiliar task	o Apply rules or use resources to edit specific spelling, grammar, punctuation, conventions, word use o Apply basic formats for documenting sources	o Use context to identify the meaning of words/phrases o Obtain and interpret information using text features o Develop a text that may be limited to one paragraph o Apply simple organizational structures (paragraph, sentence types) in writing	o Revise final draft for meaning or progression of ideas o Apply internal consistency of text organization and structure to composing a full composition o Apply a concept in a new context o Apply word choice, point of view, style to impact readers' interpretation of a text	o Select or devise an approach among many alternatives to research a novel problem o Illustrate how multiple themes (historical, geographic, social) may be interrelated
Analyze 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)	o Decide which text structure is appropriate to audience and purpose	o Compare literary elements, terms, facts, details, events o Analyze format, organization, & internal text structure (signal words, transitions, semantic cues) of different texts o Distinguish: relevant-irrelevant information; fact/opinion	o Analyze interrelationships among concepts, issues, problems o Apply tools of author's craft (literary devices, viewpoint, or potential dialogue) with intent o Use reasoning, planning, and evidence to support inferences made	o Analyze multiple sources of evidence, or multiple works by the same author, or across genres, or time periods o Analyze complex/abstract themes, perspectives, concepts o Gather, analyze, and organize multiple information sources
Evaluate Make judgments based on criteria, check, detect inconsistencies or fallacies, judge, critique			o Cite evidence and develop a logical argument for conjectures o Describe, compare, and contrast solution methods o Verify reasonableness of results o Justify or critique conclusions	o Evaluate relevancy, accuracy, & completeness of information from multiple sources o Draw & justify conclusions o Apply understanding in a novel way, provide argument or justification for the application
Create Reorganize elements into new patterns/structures, generate, hypothesize, design, plan, produce	o Brainstorm ideas, concepts, problems, or perspectives related to a topic or concept	o Generate conjectures or hypotheses based on observations or prior knowledge and experience	o Develop a complex model for a given situation o Develop an alternative solution	o Synthesize information across multiple sources or texts o Articulate a new voice, alternate theme, new knowledge or perspective