Depth of Knowledge Levels, Observable Success Criteria (Engagement), and Content/Skills to be Learned

Level + Purpose	Success Criteria (from Novice to Expert) *I/we can…*
1: Acquire Foundation	o Follow specific steps to complete routine tasks o Retrieve/locate/recall facts, details, terms o Use required tools/resources for specific purpose o Practice and self-monitor routine skills/processes o Perform routine operations; apply rules o Recite/paraphrase definitions, principles
2: Use, Connect, and Conceptualize	o Explain relationships (cause-effect; compare-contrast; if-then) o Organize or graph information o Summarize, sequence, sort, classify, infer o Predict based on observations, prior knowledge o Pose conceptual questions, problems, or topics to investigate o Select and use tool/strategy for a specific purpose (e.g., word problem, collect data)
3: Construct and Deepen Meaning	o Uncover relevant, accurate, credible information, flaws in a design/ claims o Investigate questions that explore underlying/implied meanings o Use criteria to evaluate or develop supporting evidence for conclusions, solutions, claims, point of view/POV. o Conduct/revise/refine investigations o Solve non-routine problems. o Self-assess/reflect; use feedback to improve quality o Make connection to Big Ideas or themes
4: Extend, Transfer, and Broaden Meaning	o Initiate, transfer, and construct new knowledge o Modify, create, elaborate, or evaluate based on analysis or integration of information from multiple sources o Raise novel questions, investigate multi-faceted real-world problems or issues o Self-assess/reflect; use feedback to improve quality o Develop broader insights linked to Big Ideas, Essential Questions, or themes

Source: From *Applying Depth of Knowledge and Cognitive Rigor: An Educator's Guide to Supporting Deeper Learning,* by K. Hess, 2025, Teachers College Press. Copyright 2025 by Teachers College Press. Adapted with permission.

Assessment Calibration Tool

Level	Learner Actions	Key Actions	Application to Assessments
Level 1: Recall	Requires simple recall of such information as a fact, definition, term, or simple procedure.	List, Tell, Define, Label, Identify, Name, State, Write, Locate, Find, Match, Measure, Repeat	**Attributes:** One correct answer: recall; recognize; or define terms or properties **Selected Response** ☐ Multiple Choice ☐ True/False;Yes/No ☐ Matching ☐ Fill in the blank **Short Constructed Response** ☐ Listing ☐ Short paragraph ☐ Problem with work shown
Level 2: Skill/ Concept	Involves some mental skills, concepts, or processing; students must make some decisions about how to approach a problem or activity.	Estimate, Compare, Organize, Interpret, Modify, Predict, Cause/Effect, Summarize, Graph, Classify	**Attributes:** One correct answer; may explain process / procedures **Selected Response** ☐ Multiple Choice ☐ True/False;Yes/No ☐ Matching ☐ Fill in the blank **Short Constructed Response** ☐ Generally one paragraph or less; writing a list; steps in a process
Level 3: Strategic Thinking	Requires reasoning, planning, using evidence, and thinking at a higher level.	Critique, Formulate, Hypothesize, Construct, Revise, Investigate, Differentiate, Compare-Contrast, Analyze	**Attributes:** May have multiple answers/solutions, includes justification **Non Traditional Selected Response** ☐ Can have two correct answers ☐ Can be paired with another item for justification of thinking **Short Constructed Response** ☐ Can be paired with a selected response item ☐ Problem with work shown/explanation of process **Extended Response-**Multi-paragraph
Level 4: Extended Thinking	Requires complex reasoning, planning, developing, and thinking. Cognitive demands are high-students are required to make connections both within and among subject domains.	Design, Connect, Synthesize, Apply, Critique, Analyze, Create, Prove, Support	**Attributes:** Extended time to complete and synthesis is required. *Multiple choice difficult to write at this level.* **Extended Response** ☐ Multi-paragraph compositions ☐ Apply a model to describe or design a mathematical model to inform or solve ☐ Research projects/Performance-based assessment

Webbs DOK

Recall/Reproduction Level 1	Skill/Concept Level 2	Strategic Thinking Level 3	Extended Thinking Level 4
Recall a fact, information, or procedure *(Key verbs that help clue level)*	Use information or conceptual knowledge, two or more steps *(Key verbs that help clue level)*	Requires reasoning, developing a plan or a sequence of steps, some complexity *(Key verbs that help clue level)*	Requires an investigation, time to think and process multiple conditions of the problem *(Key verbs that help clue level)*
* Arrange * Define * Describe who, what, where, when, or how * Explain * Identify * Illustrate * Label * Locate * Match * Measure * Name * Perform * Recall * Recite * Recognize * Restate * Solve a one-step task * Tell * Use rules	* Apply * Calculate * Classify * Construct a simple model * Describe/Explain using context * Determine * Estimate * Find * Formulate * Give examples and nonexamples * Graph * Identify patterns * List several elements * Perform a procedure * Predict * Solve a multiple-step problem * Summarize * Use models to perform a procedure	* Analyze * Argue * Assess * Cite evidence * Compare * Contrast * Critique * Decide * Defend * Distinguish * Draw conclusions * Explain how * Extend patterns * Formulate * Infer * Interpret * Organize * Outline * Revise for meaning * Show cause and effect * Solve nonroutine problems * Verify	* Apply concepts * Create * Collaborate * Design and conduct * Evaluate * Formulate * Generalize * Hypothesize * Initiate * Produce/Present * Prove * Reflect * Reorganize into a new structure * Research * Report