## **5.1 THE COGNITIVE PROCESS DIMENSION**

CATEGORIES & COGNITIVE PROCESSES	ALTERNATIVE NAMES	DEFINITIONS AND EXAMPLES
1. REMEMBER-	Retrieve relevant knowledge from long-term memory	
1.1 RECOGNIZING	Identifying	Locating knowledge in long-term memory that is consistent with presented material (e g , Recognize the dates of important events in U.S history)
1.2 RECALLING	Retrieving	Retrieving relevant knowledge from long-term memory (e g , Recall the dates of important events in U S. history)
2. Understand-	Construct meaning fr communication	rom instructional messages, including oral, written, and graphic
2.1 INTERPRETING	Clarifying, paraphrasing, representing, translating	Changing from one form of representation (e.g., numerical) to another (e.g., verbal) (e.g., Paraphrase important speeches and documents)
2.2 EXEMPLIFYING	Illustrating, instantiating	Finding a specific example or illustration of a concept or principle (e g , Give examples of various artistic painting styles)
2.3 CLASSIFYING	Categorizing, subsuming	Determining that something belongs to a category (e.g., Classify observed or described cases of mental disorders)
2.4 SUMMARIZING	Abstracting, generalizing	Abstracting a general theme or major point(s) (e.g. Write a short summary of the event portrayed on a videotape)
2.5 Inferring	Concluding, extrapolating, interpolating, prediction	Drawing a logical conclusion from presented information (e.g., In learning a foreign language, infer grammatical principles from examples)
2.6 COMPARING	Contrasting, mapping, matching	Detecting correspondences between two ideas, objects, and the like (e.g., Compare historical events to contemporary situations)
2.7 EXPLAINING	Constructing	Constructing a cause-and-effect model of a system (e.g., Explain the
	models	causes of important 18th century events in France)
3. Apply-	Carry out or use a procedure in a given situation	
3.1 EXECUTING	Carrying out	Applying a procedure to a familiar task (e.g., Divide one whole number by another whole number, both with multiple digits)
3.2 IMPLEMENTING	Using	Applying a procedure to an unfamiliar task (e.g., Use Newton's Second Law in situations in which it is appropriate)

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4. ANALYZE-	Break material into its constituent parts and determine how the parts relate to one another and to an overall structure or purpose	
4.1Differentiating	Discriminating, distinguishing, focusing, selecting	Distinguishing relevant from irrelevant parts or important from unimportant parts of presented material (e.g., Distinguish between relevant and irrelevant numbers in a mathematical word problem)
4.2 ORGANIZING	Finding coherence, integrating, outlining, parsing, structuring	Determining how elements fit or function within a structure (e g , Structure evidence in a historical description into evidence for and against a particular historical explanation)
4.3 ATTRIBUTING	Deconstructing	Determine a point of view, bias, values, or intent underlying presented material (e.g., Determine the point of view of the author of an essay in terms of his or her political perspective)
5. EVALUATE-	Make judgments based on criteria and standards	
5.1 CHECKING	Coordinating, detecting, monitoring, testing	Detecting inconsistencies or fallacies within a process or product; determining whether a process or product has internal consistency; detecting the effectiveness of a procedure as it is being implemented (e g , Determine if a scientist's conclusions follow from observed data)
5.2 CRITIQUING	Judging	Detecting inconsistencies between a product and external criteria, determining whether a product has external consistency; detecting the appropriateness of a procedure for a given problem (e.g., Judge which of two methods is the best way to solve a given problem)
6. CREATE-	Put elements together to form a coherent or functional whole, reorganize elements into a new pattern or structure	
6.1 GENERATING	Hypothesizing	Coming up with alternative hypotheses based on criteria (e g , Generate hypotheses to account for an observed phenomenon)
6.2 PLANNING	Designing	Devising a procedure for accomplishing some task (e.g., Plan a research paper on a given historical topic)
6.3 PRODUCING	Constructing	Inventing a product (e g., Build habitats for a specific purpose)

Taken from Anderson et al. (2001) A Taxonomy for Learning, Teaching, and Assessing: A revision of Bloom's Taxonomy of Educational Objectives-Abridged Version. Longman, New York.