Bloom's Taxonomy Revised: A Taxonomy for Learning, Teaching, and Assessing

Benjamin Bloom and colleagues (1956) created the original taxonomy of the cognitive domain for categorizing level of abstraction of questions that commonly occur in educational settings. That work has been revised to help teachers understand and implement a standards-based curriculum (Anderson & Krathwohl, 2001). For the instructional designer, the taxonomy provides a comprehensive set of classifications for learner cognitive processes that are included in instructional objectives. Classifying instructional objectives using this taxonomy helps to determine the levels of learning included in an instructional unit or lesson.

CATEGORIES	COGNITIVE PROCESS
Remember	Retrieve relevant knowledge from long-term memory
	RECOGNIZING (identifying) RECALLING (retrieving)
Understand	Construct meaning from instructional messages, including oral, written, and graphic communication
	INTERPRETING (clarifying, paraphrasing, representing, translating) EXEMPLIFYING (illustrating, instantiating) CLASSIFYING (categorizing, subsuming) SUMMARIZING (abstracting, generalizing) INFERRING (concluding, extrapolating, interpolating, predicting) COMPARING (contrasting, mapping, matching) EXPLAINING (constructing models)
Apply	Carry out or use a procedure in a given situation
	EXECUTING (carrying out) IMPLEMENTING (using)
Analyze	Break material into its constituent parts and determine how the parts relate to one another and to an overall structure or purpose
	DIFFERENTIATING (discriminating, distinguishing, focusing, selecting) ORGANIZING (finding coherence, intergrating, outlining, parsing, structuring) ATTRIBUTING (deconstructing)
Evaluate	Make judgments based on criteria and standards
	CHECKING (coordinating, detecting, monitoring, testing CRITIQUING (judging)
Create	Put elements together to form a coherent or functional whole; reorganize elements into a new pattern or structure
	GENERATING (hypothesizing) PLANNING (designing) PRODUCING (constructing)

References

Anderson, L.W. & Krathwohl, D.R. (Eds.) (2001). *A taxonomy for Learning, teaching, and assessing: A revision of Bloom's taxonomy of educational objectives*. New York: Addison Wesley Longman.

Bloom, B.S. (Ed.), Engelhart, M.D., Furst, E.J., Hill, W.H., & Krathwohl, D.R. (1956). *Taxonomy of educational objectives: Handbook I: Cognitive domain.* New York: David McKay.

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