

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.