

Bloom's Taxonomy

The original structure of Bloom's Taxonomy of the thinking or cognitive domain (Bloom, Engelhart, Frost, Hill, & Krathwohl, 1956):

Lower-Level Objectives:

1. **Knowledge:** Remembering, recognizing, repeating information, without necessarily understanding, using, or changing it.
2. **Comprehension:** Being able to describe information; does not require relation to other information.
3. **Application:** Using a general concept to solve a particular problem.

Higher-Level Objectives:

4. **Analysis:** Critical look at the parts of a whole; being able to break information down into its parts.
5. **Synthesis:** The use of information in a new way; the ability to create something new by combining different ideas.
6. **Evaluation:** Judgment of the value of information, or judgment of the use/application of different methods in a specific situation.

Higher level objectives require mastery of lower level objectives.

Bloom's Taxonomy

6	<i>Evaluation</i>
5	<i>Synthesis</i>
4	<i>Analysis</i>
3	<i>Application</i>
2	<i>Comprehension</i>
1	<i>Knowledge</i>

BLOOM'S REVISED TAXONOMY

The first major revision of Bloom's Taxonomy was published in 2001 (Anderson & Krathwohl, 2001). The six basic levels have been reordered and three names were changed to reflect the cognitive processes involved. As well, the model is now two-dimensional, and includes 4 kinds of knowledge, which are acted upon by 6 kinds of cognitive processes. The new model also emphasizes action verbs to promote effective design of tests and assignments.

The new model includes four kinds of knowledge:

1. Factual knowledge
2. Conceptual knowledge
3. Procedural knowledge
4. Metacognitive knowledge

The new model includes six cognitive processes:

1. Remembering
2. Understanding
3. Applying
4. Analyzing

5. Evaluating

6. Creating

*Higher-order
skills*

Create: Reorganize elements into a new pattern, structure, or purpose
(Generate, plan, produce)

Evaluate: Come to a conclusion about something based on
standards/criteria (Checking, critiquing, judging)

Analyze: Subdivide content into meaningful parts and relate the parts
(Differentiating, organizing, attributing)

Apply: Use procedures to solve problems or complete tasks (Execute,
implement)

Understand: Construct new meaning by mixing material with existing
ideas (Interpret, exemplify, classify, summarize, infer, compare, explain)

*Lower-order
skills*

Remember: Retrieve pertinent facts from long-term memory (Recognize,
recall)