

Guide to Using Bloom's Taxonomy of the Cognitive Domain

As an educator, you want your learning outcomes to be clear, actionable and measurable. One of the best resources to help ensure these goals are met is Bloom's Taxonomy of the Cognitive Domain. The cognitive domain of Bloom's Taxonomy helps educators design learning experiences that progress from lower-order thinking skills (like remembering and understanding) to higher-order thinking skills (like analyzing, evaluating, and creating) to promote deeper understanding and critical thinking among learners.

The cognitive domain of Bloom's taxonomy consists of six levels, from the simplest to the most complex:

1. **Remembering:** This level involves recalling facts, information, or concepts.
2. **Understanding:** Understanding requires grasping the meaning of information and being able to explain it in one's own words.
3. **Applying:** Applying knowledge means using learned information in new situations or solving problems.
4. **Analyzing:** At this level, learners break down information into parts, examine its structure, and identify relationships between elements.
5. **Evaluating:** Evaluating involves making judgments about the value, validity, or quality of information or ideas.
6. **Creating:** The highest level, creating, entails generating original ideas, products, or solutions based on existing knowledge and skills.

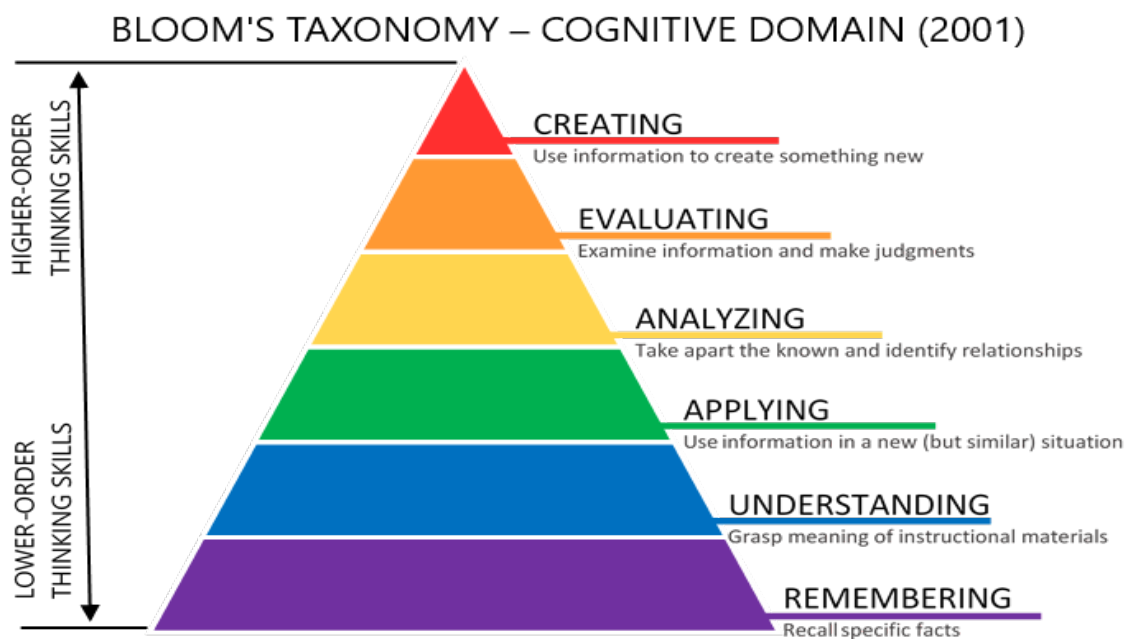


Figure 1: Illustration of Blooms Taxonomy of the Cognitive Domain.

Source: University of Florida Center for Instructional Technology and Training via [ZME Science](#).

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An important note here is that Bloom's Taxonomy is traditionally conceptualized as a pyramid, with lower-order thinking at the base, and higher-order thinking at the peak. However, this hierarchical representation often leads users to the conclusion that lower-order thinking is less important than higher-order thinking. Instead, remember that the lower levels of the pyramid are foundational to the upper-levels, and the upper levels cannot exist without the lower levels. For example, in order for learners to create a final project at the end of their course, they need to be able to remember what they have learned. Therefore, when you select a higher-order level on the pyramid, you are including some or all of the levels below.

When crafting learning outcomes and objectives, use Bloom's Taxonomy to select the most appropriate verb for the highest level of cognitive rigor that will be required of your learner during the course or the lesson. By selecting one of the verbs provided, you are ensuring that your outcome or objective will effectively capture what it is your learner must demonstrate. In this way, expectations are well communicated to the learners, they make sense for the learning that is required, and teaching and learning activities logically dovetail in a way that seamlessly guides the learner towards mastery of the outcomes and objectives.

Please see the next page for a helpful verbs list.

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Action Verbs Mapped to Bloom's Taxonomy, Cognitive Domain

	I. Remembering	II. Understanding	III. Applying	IV. Analyzing	V. Evaluating	VI. Creating
Bloom's Definition	Exhibit memory of previously learned material by recalling facts, terms, basic concepts, and answers.	Demonstrate understanding of facts and ideas by organizing, comparing, translating, interpreting, giving descriptions, and stating main ideas.	Solve problems to new situations by applying acquired knowledge, facts, techniques and rules in a different way.	Examine and break information into parts by identifying motives or causes. Make inferences and find evidence to support generalizations.	Present and defend opinions by making judgments about information, validity of ideas, or quality of work based on a set of criteria.	Compile information together in a different way by combining elements in a new pattern or proposing alternative solutions.
Verbs	<ul style="list-style-type: none"> • Choose • Define • Find • How • Label • List • Match • Name • Omit • Recall • Relate • Select • Show • Spell • Tell • What • When • Where • Which • Who • Why 	<ul style="list-style-type: none"> • Classify • Compare • Contrast • Demonstrate • Explain • Extend • Illustrate • Infer • Interpret • Outline • Relate • Rephrase • Show • Summarize • Translate 	<ul style="list-style-type: none"> • Apply • Build • Choose • Construct • Develop • Experiment with • Identify • Interview • Make use of • Model • Organize • Plan • Select • Solve • Utilize 	<ul style="list-style-type: none"> • Analyze • Assume • Categorize • Classify • Compare • Conclusion • Contrast • Discover • Dissect • Distinguish • Divide • Examine • Function • Inference • Inspect • List • Motive • Relationships • Simplify • Survey • Take part in • Test for • Theme 	<ul style="list-style-type: none"> • Agree • Appraise • Assess • Award • Choose • Compare • Conclude • Criteria • Criticize • Decide • Deduct • Defend • Determine • Disprove • Estimate • Evaluate • Explain • Importance • Influence • Interpret • Judge • Justify • Mark • Measure • Opinion • Perceive • Prioritize • Prove • Rate • Recommend • Rule on • Select • Support • Value 	<ul style="list-style-type: none"> • Adapt • Build • Change • Choose • Combine • Compile • Compose • Construct • Create • Delete • Design • Develop • Discuss • Elaborate • Estimate • Formulate • Happen • Imagine • Improve • Invent • Make up • Maximize • Minimize • Modify • Original • Originate • Plan • Predict • Propose • Solution • Solve • Suppose • Test • Theorize

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