AI-04582 Blooms Taxonomy

#problem, #cmp

Explain Blooms Taxonomy. List Examples

Bloom's Taxonomy is a foundational framework in education used to categorize learning objectives by their cognitive complexity. Originally developed in 1956 by educational psychologist Benjamin Bloom and revised in 2001 by Lorin Anderson and David Krathwohl, it arranges learning into six hierarchical levels—moving from lower-order thinking skills (foundational knowledge) to higher-order thinking skills (complex reasoning and creation).

The 6 Levels of Cognitive Learning

The revised framework uses active verbs to represent what learners should be able to do at each stage:

Level	Cognitive Focus	Key Action Verbs	Practical Example
1. Remember	Recalling facts, terms, basic concepts, or answers without necessarily understanding them deeply.	Define, list, state, recall, identify, label	Reciting the periodic table symbols or stating the formula $E = mc^2$.
2. Understand	Grasping the meaning of information by interpreting, summarizing, or explaining it in one's own words.	Explain, summarize, classify, discuss, translate	Explaining the concept of supply and demand in simple terms to a classmate.
3. Apply	Using acquired knowledge, rules, or techniques in new or concrete situations to solve problems.	Execute, implement, calculate, solve, demonstrate	Using a mathematical formula to compute the compound interest on a savings account.
4. Analyze	Breaking information down into component parts to explore structural relationships, patterns, or causes.	Differentiate, compare, contrast, organize, examine	Comparing the efficiency of two sorting algorithms or analyzing a company's financial statements.
5. Evaluate	Making judgments, critiques, or decisions based on specific criteria, evidence, and standards.	Critique, judge, justify, defend, rate, assess	Reviewing a research study to evaluate whether its methodology supports the conclusions drawn.

6. Create	Putting elements together to form a novel product, structure, plan, or original work.	Design, construct, formulate, author, invent	Designing a new mobile application user interface or writing an original business plan.

Why It Matters

- **Curriculum Design:** Helps educators align learning objectives, instruction, and assessment tasks.
- **Scaffolding:** Ensures students master foundational concepts (*Remember/Understand*) before tackling complex tasks (*Analyze/Create*).
- **Targeted Questioning:** Assists in drafting test items and discussion prompts across varying depth levels.