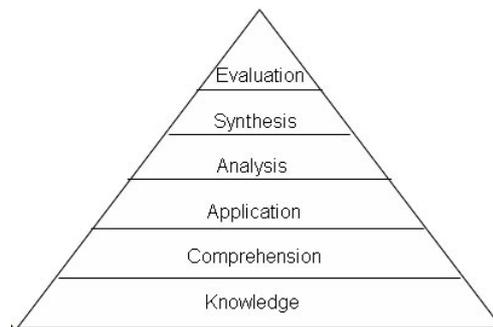


Bloom's Taxonomy and knowledge taxonomy verbs

Although Benjamin Bloom developed his classification of levels of intellectual behavior important in learning, (the now classic Taxonomy of Instructional Objectives) in 1956, research continues to support the value of objectives that involve the understanding and use of knowledge, those that are usually considered the most important goals of education.

In his Taxonomy, Bloom identified three areas in which learning takes place – the cognitive, affective, and psychomotor domains. In the cognitive domain, which deals with the recall or recognition of knowledge and the development of intellectual ability, six major levels are usually identified.

These levels are knowledge, comprehension, application, analysis, synthesis, and evaluation. Each level becomes progressively more complex and builds upon the previous level. So, not only is synthesis a more complex operation than knowledge, but the ability to synthesize depends upon the foundation of knowledge possessed by the learner. By using questions requiring higher-order thinking, teacher questioning moves beyond an assessment tool and becomes a valuable instructional tool as well.



Level	Definition
Knowledge	Remember previously learned information, recognize and recall facts and specifics
Comprehension	Understand the meaning of information, summarize or paraphrase given information
Application	Utilize knowledge in actual situations, use information in a situation different from the original learning context
Analysis	Break down objects or ideas into simpler parts, see how the parts relate and are organized, better understand the organization of the whole and the relationships between the parts
Synthesis	Rearrange component ideas into a new whole, combine elements learned into a new entity
Evaluation	Make judgments based on internal evidence or external criteria, make decisions, judge, or select based on criteria and rationale

Verb List

Knowledge	Comprehension	Application	Analysis	Synthesis	Evaluation
arrange, define, match, check, order, choose, find, recall, group, identify, label, list, select, locate, name, recognize, count, draw, find	calculate, discuss, select, convert, restate, solve, classify, give examples, predict, review, describe, explain, identify, generalize	relate, apply, change, choose, compute, demonstrate, discover, illustrate, predict, relate, show, sketch, solve	analyze, calculate, categorize, compare, contrast, differentiate, discriminate, distinguish, examine, experiment, question, test	arrange, collect, compose, construct, create, design, develop, formulate, organize, plan, prepare, propose, set up	appraise, argue, assess, attach, choose compare, defend estimate, judge, predict, rate, select, support, evaluate