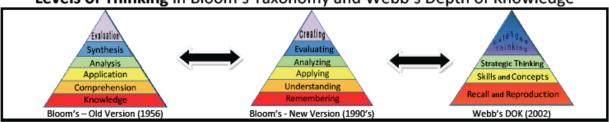
Levels of Thinking in Bloom's Taxonomy and Webb's Depth of Knowledge



Bloom's six major categories were changed from noun to verb forms in the new version which was developed in the 1990's and released in 2001. The knowledge level was renamed as remembering. Comprehension was retitled understanding, and synthesis was renamed as creating. In addition, the top two levels

of Bloom's changed position in the revised version.	
Bloom's Taxonomy	Revised Bloom's Taxonomy
Knowledge	Remembering
Recall appropriate information.	
Comprehension	Understanding
Grasp the meaning of material.	
Application	Applying
Use learned material in new and concrete situations.	
Analysis	Analyzing
Break down material into component parts so that its	
organizational structure may be understood.	
Synthesis	Evaluating
Put parts together to form a new whole.	Make judgments based on criteria and standards.
Evaluation	Creating (Previously Synthesis)
Judge value of material	Put elements together to form a
for a given purpose.	coherent or functional whole;
	reorganizing elements into a new
	pattern or structure through
	generating, planning, or producing.

Norman L. Webb of Wisconsin Center for Educational Research generated DOK levels to aid in alignment analysis of curriculum, objectives, standards, and assessments.

Webb's Depth of Knowledge & Corresponding Verbs

*Some verbs could be classified at different levels depending on application

Recall and Reproduction Correlates to Bloom's 2 Lowest Levels

Recall a fact, information, or procedure.

arrange, calculate, define, draw, identify, list, label, illustrate, match, measure, memorize, quote, recognize, repeat, recall, recite, state, tabulate, use, tell who-what-when-where-

Skill/Concept

Engages mental process beyond habitual response using information or conceptual knowledge. Requires two or more steps.

apply, categorize, determine cause and effect, classify, collect and display, compare, distinguish, estimate, graph, identify patterns, infer, interpret, make observations, modify, organize, predict, relate, sketch, show, solve, summarize, use context clues

Strategic Thinking

Requires reasoning, developing plan or a sequence of steps, some complexity, more than one possible answer, higher level of thinking than previous 2 levels.

apprise, assess, cite evidence, critique, develop a logical argument, differentiate, draw conclusions, explain phenomena in terms of concepts, formulate, hypothesize, investigate, revise, use concepts to solve non-routine problems

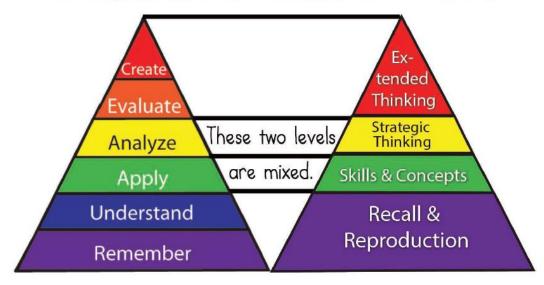
Extended Thinking Correlates to Bloom's 2 Highest Levels

Requires investigation, complex reasoning, planning, developing, and thinking-probably over an extended period of time. *Longer time period is not an applicable factor if work is simply repetitive and/or does not require higher-order thinking.

analyze, apply concepts, compose, connect, create, critique, defend, design, evaluate, judge, propose, prove, support, synthesize

Bloom's Vs. DOK?

This is an over-simplification of the correlations, but it is SOMETIMES works!



DOK needs more complexity at each higher level. Generally for primary children, if you can get kids to think about more than one text at at time and get them to form opinions AND support them, you'll hit level three in DOK. The Extended Thinking level in DOK needs multiple texts, complexity, and a project completed over time, such as in Project Based Learning Activities.