

Blooms Taxonomy

The verbs used to define the outcome statements are classified in terms of a series of lower-order to higher-order thinking skills (cognitive domains), in accordance with **Bloom's Taxonomy of Educational Objectives** (Bloom, BS and Krathwohl, DR, *Taxonomy of Educational Objectives. Handbook 1. Cognitive domain*, Addison-Wesley: 1984):

The characterisation of the cognitive domain is given in the table below.

Level of cognition	Definition	Typical action verbs	Skills demonstrated
1. Knowledge	Remembering previously learned information	arrange, define, describe, identify, label, list, match, name, outline, show, label, collect, examine, tabulate, quote	<ul style="list-style-type: none"> • observe and recall information; • knowledge of dates, events, places; • knowledge of major ideas; • mastery of subject matter.
2. Comprehension	Understanding the meaning of information	classify, discuss, estimate, explain, give example(s), identify, predict, report, review, select, summarise, interpret, 'in your own words', contrast, predict, associate, distinguish, estimate, differentiate	<ul style="list-style-type: none"> • understand information; • grasp meaning; • translate knowledge into new context; • interpret facts, compare, contrast; • order, group, infer causes; • predict consequences.
3. Application	Using the information appropriately in different situations	apply, calculate, demonstrate, illustrate, interpret, modify, predict, prepare, produce, solve, use, manipulate, put into practice, examine, relate, change, classify	<ul style="list-style-type: none"> • use information; • use methods, concepts and theories in new situations; • solve problems using required skills or knowledge.
4. Analysis	Breaking down the information into the component parts and seeing the relationships	analyse, appraise, calculate, compare, criticise, derive, differentiate, choose, distinguish, examine, subdivide, organise, deduce, separate, order, connect, infer, divide	<ul style="list-style-type: none"> • seeing patterns; • organisation of parts; • recognition of hidden meanings; • identification of components.
5. Synthesis	Putting the component parts together to form new products and ideas	assemble, compose, construct, create, design, determine, develop, devise, formulate, propose, synthesise, plan, discuss, support, combine, integrate, modify, rearrange, substitute, design, invent, what if?, prepare, generalise, rewrite	<ul style="list-style-type: none"> • use old ideas to create new ones; • generalise from given facts; • relate knowledge from several areas; • predict, draw conclusions.
6. Evaluation	Making judgments of an idea, theory, opinion, etc, based on criteria	appraise, assess, compare, conclude, defend, determine, evaluate, judge, justify, optimise, predict, criticise, assess, decide, rank, grade, test, measure, recommend, convince, select, explain, discriminate, support, summarise	<ul style="list-style-type: none"> • compare and discriminate between ideas; • assess value of theories, presentations; • make choices based on reasoned argument; • verify value of evidence; • recognise subjectivity.