

Bloom's Taxonomy of Learning – Revised¹

Cognitive Domain

Involves knowledge and the development of intellectual skills.

Levels of learning		Definition:	Verbs used in outcomes:	Evaluating the level:
Low	REMEMBERING	retrieving information from short and long term memory	accumulate, arrange, recognize, list, label, locate, define, describe, identify, retrieve, name, recall, repeat	Can the student recall information?
	UNDERSTANDING	changing from one form of representation to another; illustrating a concept; drawing conclusions, determining cause and effect	choose, interpret, cite, summarize, paraphrase, exemplify, compare, infer, translate, clarify, classify, extrapolate, conclude, match, give an example, discuss, explain, restate, respond, express, describe	Can the student explain ideas or concepts?
Mid	APPLYING	applying or demonstrating knowledge in a routine or non-routine task	apply, implement, carry out, use, utilize, demonstrate, execute, illustrate, generalize, predict, make, clarify why, utilize, show, solve	Can the student use the new knowledge in another situation ?
	ANALYZING	distinguishing relevant from irrelevant; determining fit or function within a structure; determining point of view, bias and/or values of presented material	analyze, appraise, conclude, contrast, correlate, determine, discriminate, distinguish, compare, attribute, deconstruct, integrate, outline, find coherence	Can the student differentiate between fundamental / constituent parts?
High	EVALUATING	determining whether a process/product has internal consistency; inconsistencies or fallacies; detecting appropriateness of a procedure for a task/problem	assess, choose, critique, check, judge, evaluate, hypothesize, test, detect, measure, rate, monitor, rank, score, justify, validate, test	Can the student justify a decision or course of action?
	CREATING	developing a hypothesis; devising a procedure; inventing a product	compose, design, plan, construct, produce, develop, create, devise, modify, organize, predict	Can the student generate new products, ideas or ways of viewing things?

Bloom's Taxonomy of Learning

Affective Domain

Includes the manner in which we deal with things emotionally, such as feelings, values, appreciation, enthusiasms, motivations, and attitudes.

Levels of learning		Definition:	Verbs used in outcomes:	Evaluating example:
Low	RECEIVING	Being aware of or attending to something in the environment.	ask, accept, attend, acknowledge, concentrate, follow, give, identify, select, recognize, retain	Does the student identify ideas or concepts from an experience ?
	RESPONDING	Showing some new behaviors as a result of experience.	complete, contribute, comply, conform, cooperate, discuss, describe, examine, formulate, perform, provide other references/examples, react, respond, seek, use	Does the student participate actively ?
Mid	VALUING	Showing some definite involvement or commitment.	argue, criticize, debate, decide worth, defend, devote, explain, join, justify, persuade, present, propose pursue, refute, share	Does the student express opinions?
	ORGANIZING	Integrating a new value into one's general set of values, giving it some ranking among one's general priorities.	alter, arrange, build, codify, construct, compare, develop, discriminate, display, generalize, modify, order, organize, prioritize, reconcile	Does the student state beliefs and reasons?
High	INTERNALIZING	Acting consistently with the new value.	act, display, influence, internalize, integrate, relate, resolve, qualify, practice, verify	Does the student practice in accordance to their beliefs?

Bloom's Taxonomy of Learning

Psychomotor Domain

Includes physical movement, coordination, and use of the motor-skill areas.

Levels of learning		Definition:	Verbs:	Evaluating example:
Low	IMITATING	Attempted copying of a physical behavior	adhere, copy, duplicate, follow, replicate, repeat, trace	Can the student repeat the action/process/activity?
	MANIPULATING	Reproducing activity from instruction or memory	administer, apply, assist, assemble, build, carry out, collect, configure, contribute, draw, execute, fabricate, graph, implement, locate, measure, perform, re-create, select	Can the student carry out the task from instruction?
Mid	DEVELOPING PRECISION	Fine tuning. Making minor adjustments in the physical activity in order to perfect it.	adjust, calibrate, conduct, control, complete, demonstrate, install, operate, practice, present, simulate	Can the student perform or demonstrate with expertise?
	ARTICULATE	Adapting and integrating expertise to satisfy a non-standard objective	adapt, calculate, coordinate, combine, compile, construct, develop, edit, formulate, integrate, manipulate, modify, replace, repair,	Can the student relate and combine activities for the purpose of developing methods to meet novel requirements?
High	BECOME EXPERT (AUTOMATE)	Automated, unconscious mastery of activity and related skills at strategic level	compose, delegate, design, devise, specify, manage, invent, plan, supervise, troubleshoot	Can the student design elements to meet strategic needs?

ⁱ Adapted from:

Anderson, L. & Krathwohl D. (2001). *A taxonomy for learning and assessing: revision of Bloom's Taxonomy of educational objectives*. New York: Longman.

Atherton J S (2011) *Learning and Teaching; Bloom's taxonomy* [On-line: UK] retrieved 12 April 2011 from

<http://www.learningandteaching.info/learning/bloomtax.htm>

Krathwohl, D. (2002). A revision of Bloom's Taxonomy: An Overview. *Theory into Practice* 41(4), 212-218.

<http://www.businessballs.com/bloomstaxonomyoflearningdomains.htm>

<http://www.personal.psu.edu/bxb11/Objectives/ActionVerbsforObjectives.pdf>