

Bloom's Taxonomies Illustrations and Tables

References:

Anderson, L. W., Krathwohl, D. R., Airasian, P. W., Cruikshank, K. A., Mayer, R. E., Pintrich, P. R., Raths, J., & Wittrock, M. C. (2013). *A Taxonomy for Learning, Teaching, and Assessing: A Revision of Bloom's Taxonomy of Educational Objectives* (Abridged, International). Pearson.

Churches, A. (2009). *Bloom's Digital Taxonomy v3.01.pdf*. Educational Origami.
<http://edorigami.wikispaces.com/file/view/bloom%27s+Digital+taxonomy+v3.01.pdf>.

Clark, D. R. (2015a, January 12). *Bloom's Taxonomy of Learning Domains*. Big Dog and Little Dog's Performance Juxtaposition.
<http://knowledgejump.com/hrd/bloom.html>.

Clark, D. R. (2015b, January 12). *Bloom's Taxonomy: The Affective Domain*. Big Dog and Little Dog's Performance Juxtaposition.
http://knowledgejump.com/hrd/Bloom/affective_domain.html.

Clark, D. R. (2015c, January 12). *Bloom's Taxonomy: The Psychomotor Domain*. Big Dog and Little Dog's Performance Juxtaposition.
http://knowledgejump.com/hrd/Bloom/psychomotor_domain.html.

Huitt, W. (n.d.). *Bloom et al.'s Taxonomy of the Cognitive Domain*. Educational Psychology Interactive. Retrieved February 27, 2023, from
<https://www.edpsycinteractive.org/topics/cognition/bloom.html>.

Bloom's Taxonomy: The Cognitive Domain

Figure 1: Steps in the Cognitive Domain (Wording from D. R. Clark, 2015)

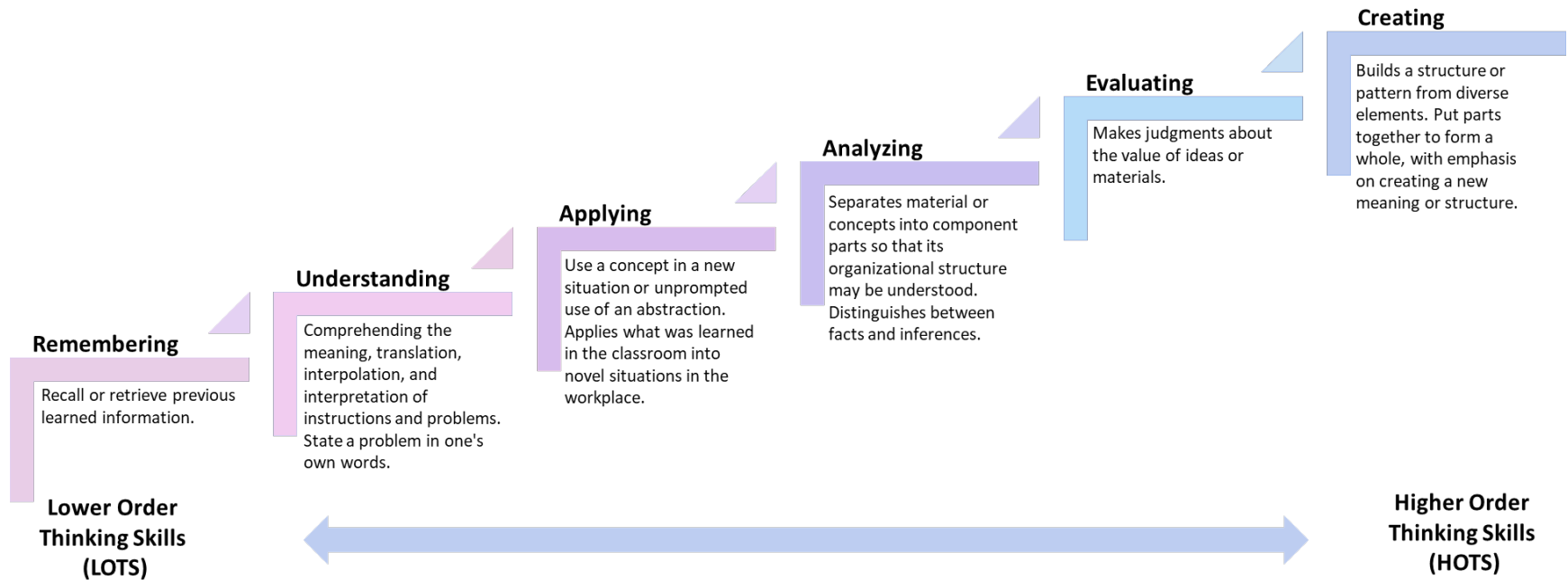


Table 1: Cognitive Domain Categories (Wording from Churches, 2009; D. R. Clark, 2015)


Remembering	Understanding:	Applying:	Analyzing:	Evaluating:	Creating:
Key Words: defines, describes, identifies, knows, labels, lists, matches, names, outlines, recalls, recognizes, reproduces, selects, states	Key Words: comprehends, converts, defends, distinguishes, estimates, explains, extends, generalizes, gives an example, infers, interprets, paraphrases, predicts, rewrites, summarizes, translates	Key Words: applies, changes, computes, constructs, demonstrates, discovers, manipulates, modifies, operates, predicts, prepares, produces, relates, shows, solves, uses	Key Words: analyzes, breaks down, compares, contrasts, diagrams, deconstructs, differentiates, discriminates, distinguishes, identifies, illustrates, infers, outlines, relates, selects, separates	Key Words: appraises, compares, concludes, contrasts, criticizes, critiques, defends, describes, discriminates, evaluates, explains, interprets, justifies, relates, summarizes, supports	Key Words: categorizes, combines, compiles, composes, creates, devises, designs, explains, generates, modifies, organizes, plans, rearranges, reconstructs, relates, reorganizes, revises, rewrites, summarizes, writes
Digital Key Words: Bullet pointing, highlighting, bookmarking, social networking, social bookmarking, favoriting/local bookmarking, searching, googling	Digital Key Words: Advanced searches, Boolean searches, blog journaling, twittering, categorizing, commenting, annotating, subscribing	Digital Key Words: running, loading, playing, operating, hacking, uploading, sharing, editing	Digital Key Words: Mashing, linking, tagging, validating reverse-engineering, cracking	Digital Key Words: (Blog/vlog) commenting reviewing, posting, moderating, collaborating, networking, refactoring, (alpha & beta)testing	Digital Key Words: programming, filming, animating, blogging, video blogging, mixing, remixing, wiki-ing, publishing, videocasting, podcasting, directing/producing
Examples: Recite a policy. Quote prices from memory to a customer. Recite the safety rules.	Examples: Rewrite the principles of test writing. Explain in one's own words the steps for performing a complex task. Translate an equation into a computer spreadsheet.	Examples: Use a manual to calculate an employee's vacation time. Apply laws of statistics to evaluate the reliability of a written test.	Examples: Troubleshoot a piece of equipment by using logical deduction. Recognize logical fallacies in reasoning. Gather information from a department and selects the required tasks for training.	Examples: Select the most effective solution. Hire the most qualified candidate. Explain and justify a new budget.	Examples: Write a company operations or process manual. Design a machine to perform a specific task. Integrates training from several sources to solve a problem. Revises and process to improve the outcome.
Lower order Thinking Skills (LOTS)					Higher order Thinking Skills (HOTS)

Table 2: Cognitive Taxonomy Cognitive & Knowledge Dimensions(Adapted from Huitt, n.d.)

		COGNITIVE DIMENSION						
		Remember	Understand	Apply	Analyze	Evaluate	Create	
Concrete knowledge	Factual Knowledge	Knowledge of Terminology, specific details and elements	List	Summarize	Respond	Select	Check For	Generate
			Label map, List names	Interpret paragraph, Summarize book	Use math algorithm	Categorize words	Critique article	Create short story
	Conceptual Knowledge	Categories, principles, generalization, theories, models, & structures	Recognize	Classify	Provide	Differentiate	Determine	Assemble
			Define levels of cognitive taxonomy	Describe cognitive taxonomy in own words	Write objectives using cognitive dimension, identify appropriate knowledge dimension for objectives	Differentiate levels of cognitive taxonomy, differentiate between the knowledge and cognitive dimensions	Critique written objectives	Create objectives using both knowledge and cognitive dimensions
	Procedural Knowledge	Subject-specific skills, techniques, & criteria for use	Recall	Clarify	Carry Out	Integrate	Judge	Design
			List steps in problem solving	Paraphrase problem solving process in own words	Use problem solving process for assigned task	Compare convergent and divergent techniques	Critique appropriateness of techniques used in case analysis	Develop original approach to problem solving
Meta-Cognitive Knowledge	Strategic use, cognitive tasks, & self-knowledge	Identify	Predict	Use	Deconstruct	Reflect	Create	
		List elements of personal learning preferences	Describe implications of learning preferences	Develop study skills appropriate to learning preferences	Compare elements of dimensions in learning preferences	Critique appropriateness of particular learning preferences to own learning	Create an original learning preferences theory	
Abstract knowledge	KNOWLEDGE DIMENSION							

Bloom's Taxonomy: The Affective Domain

Figure 2: Steps in the Affective Domain (Wording from D. R. Clark, 2015a)

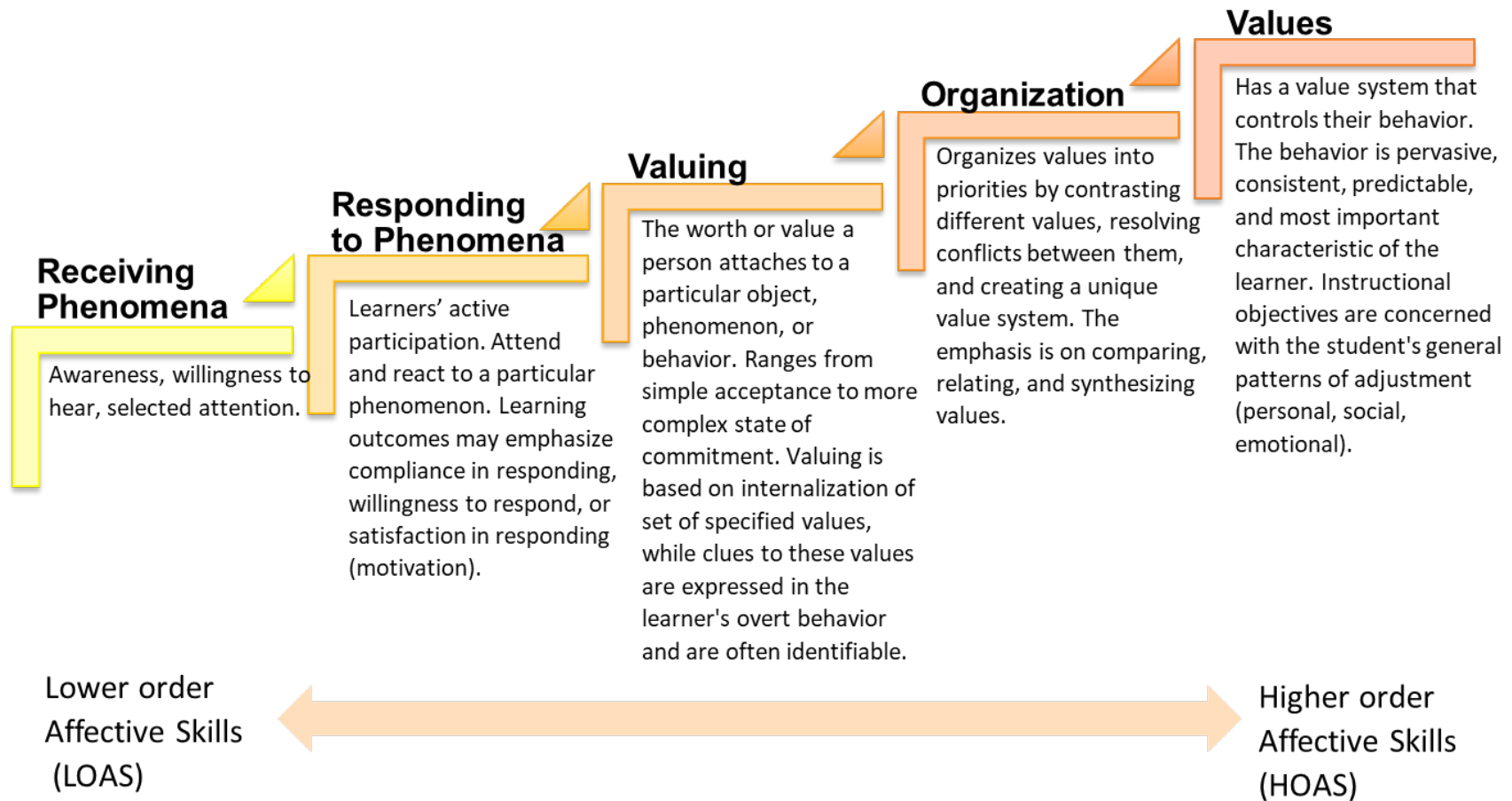


Table 3: Affective Domain Categories (Wording from D. R. Clark, 2015b)

Receiving Phenomena:	Responds to Phenomena:	Organization:	Valuing:	Internalizes Values:
Awareness, willingness to hear, selected attention.	Learners' active participation. Attend and react to a particular phenomenon. Learning outcomes may emphasize compliance in responding, willingness to respond, or satisfaction in responding (motivation).	The worth or value a person attaches to a particular object, phenomenon, or behavior. Ranges from simple acceptance to more complex state of commitment. Valuing is based on internalization of set of specified values, while clues to these values are expressed in the learner's overt behavior and are often identifiable.	Organizes values into priorities by contrasting different values, resolving conflicts between them, and creating a unique value system. The emphasis is on comparing, relating, and synthesizing values.	Has a value system that controls their behavior. The behavior is pervasive, consistent, predictable, and most important characteristic of the learner. Instructional objectives are concerned with the student's general patterns of adjustment (personal, social, emotional).
Examples: Listens to others with respect. Listens for and remember the name of newly introduced people.	Examples: Participates in class discussions. Gives a presentation. Questions new ideals, concepts, models, etc. in order to fully understand them. Knows the safety rules and practice them.	Examples: Recognizes the need for balance between freedom and responsible behavior. Explains the role of systematic planning in solving problems. Creates a life plan in harmony with abilities, interests, and beliefs. Prioritizes time effectively to meet the needs of the organization, family, and self.	Examples: Demonstrates belief in the democratic process. Is sensitive towards individual and cultural differences (value diversity). Shows the ability to solve problems. Proposes a plan to social improvement and follows through with commitment. Informs management on matters that one feels strongly about.	Examples: Shows self-reliance when working independently. Cooperates in group activities. Uses an objective approach in problem solving. Displays a professional commitment to ethical practice on a daily basis. Revises judgments and changes behavior in light of new evidence.
Key Words: acknowledge, asks, attentive, courteous, dutiful, follows, gives, listens, understands	Key Words: answers, assists, aids, complies, conforms, discusses, greets, helps, labels, performs, presents, tells	Key Words: compares, relates, synthesizes	Key Words: appreciates, cherish, treasure, demonstrates, initiates, invites, joins, justifies, proposes, respect, shares	Key Words: acts, discriminates, displays, influences, modifies, performs, qualifies, questions, revises, serves, solves, verifies
Lower order Affective Skills (LOAS)				Higher order Affective Skills (HOAS)

Dave's Taxonomy: The Psychomotor Domain

Figure 3: Steps in the Psychomotor Domain. (Wording from D. R. Clark, 2015c)

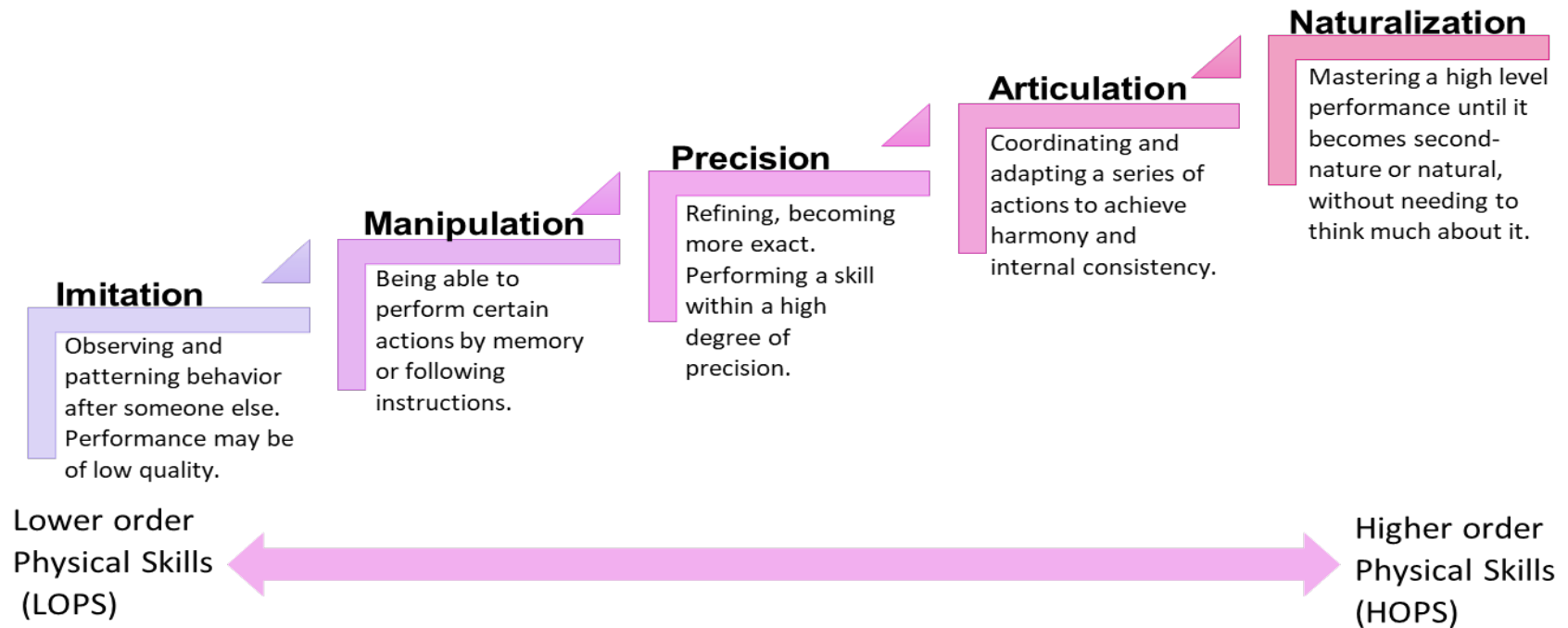



Table 4: Psychomotor Domain Categories (Wording from D. R. Clark, 2015c)

Imitation	Manipulation	Precision	Articulation	Naturalization
Observing and patterning behavior after someone else. Performance may be of low quality.	Being able to perform certain actions by memory or following instructions.	Refining, becoming more exact. Performing a skill within a high degree of precision.	Coordinating and adapting a series of actions to achieve harmony and internal consistency.	Mastering a high level performance until it becomes second-nature or natural, without needing to think much about it.
Examples: Copies a work of art. Performs a skill while observing a demonstrator.	Examples: Performs a skill on one's own after taking lessons or reading about it. Follows instructions to build a model.	Examples: Works and reworks something, so it will be "just right." Performs a skill or task without assistance. Demonstrates a task to a beginner.	Examples: Combines a series of skills to produce a video that involves music, drama, color, sound, etc. Combines a series of skills or activities to meet a novel requirement.	Examples: Maneuvers a car into a tight parallel parking spot. Operates a computer quickly and accurately. Displays competence while playing the piano.
Key Words: copy, follow, mimic, repeat, replicate, reproduce, trace	Key Words: act, build, execute, perform	Key Words: calibrate, demonstrate, master, perfectionism	Key Words: adapt, constructs, combine, creates, customize, modifies, formulate	Key Words: create, design, develop, invent, manage, naturally
<p>Lower order Physical Skills (LOPS) ←  → Higher order Physical Skills (HOPS)</p>				