## Learning Domains: The Three Types of Learning<sup>1</sup>

Three domains of educational activities are identified:

- Cognitive: mental skills (Knowledge)
- Affective: growth in feelings or emotional areas (Attitude)
- Psychomotor: manual or physical skills (Skills)

Bloom and colleagues created a taxonomy for each of the Cognitive and Affective domains. It was left to others to suggest a taxonomy for the Psychomotor domain. The inevitable overlap in the three Domains is apparent in that several of the "levels" could be interpreted in light of other Domains.

**Cognitive**—The cognitive domain involves recall or recognition of specific facts, procedural patterns, and concepts that serve in the development of intellectual abilities and skills. Bloom (1956) identified six levels, which are listed in order below, starting from the simplest behavior to the most complex.

Level	Example and Key Words
Knowledge: Recall data or information.	Examples: Recites a doctrinal statement. Quotes steps in budgeting. Knows the geographical areas of  Key Words: defines, describes, identifies, knows, labels, lists, matches, names, outlines, recalls, recognizes, reproduces, selects, states.
Comprehension: Understand the meaning, translation, interpolation, and interpretation of instructions and problems. State a problem in one's own words.	Examples: Rewrites the principles of discipleship Explain in one's own words the steps for performing a complex task. Paraphrase a chapter from Scripture.  Key Words: comprehends, converts, defends, distinguishes, estimates, explains, extends, generalizes, gives Examples, infers, interprets, paraphrases, predicts, rewrites, summarizes, translates.
<b>Application</b> : Use a concept in a new situation or unprompted use of an abstraction. Applies what was learned in the classroom into novel situations in the work place.	Examples: Uses a manual to approve a sabbatical request. Applies principles of care to hospital visitation.  Key Words: applies, changes, computes, constructs, demonstrates, discovers, manipulates, modifies, operates, predicts, prepares, produces, relates, shows, solves, uses.
Analysis: Separates material or concepts into component parts so that its organizational structure may be understood. Distinguishes between facts and inferences.	Examples: Troubleshoots a conflict situation. Recognizes logical fallacies in reasoning. Gathers information from a department and selects the required tasks for training.  Key Words: analyzes, breaks down, compares, contrasts, diagrams, deconstructs, differentiates, discriminates, distinguishes, identifies, illustrates, infers, outlines, relates, selects, separates.
Synthesis: Builds a structure or pattern from diverse elements. Put parts together to form a whole, with emphasis on creating a new meaning or structure.	Examples: Examines a series of incidents and prepares a set of guiding principles. Designs a new process to perform a specific task. Integrates training from several sources to solve a problem. Revises a process to improve the outcome.  Key Words: categorizes, combines, compiles, composes, creates, devises, designs, explains, generates, modifies, organizes, plans, rearranges, reconstructs, relates, reorganizes, revises, rewrites, summarizes, tells, writes.

 $<sup>^{1}\</sup>mbox{Adapted from Donald Clark, } \mbox{\underline{http://www.nwlink.com/}{$\sim$ donclark/index.html}} \mbox{\ Learning $<$ Bloom's Taxonomy}$ 

<b>Evaluation</b> : Make judgments about the value of ideas or materials.	<b>Examples</b> : Selects the most effective solution. Hires the most qualified candidate. Explains and justifies a new budget. <b>Key Words</b> : appraises, compares, concludes, contrasts, criticizes,
	critiques, defends, describes, discriminates, evaluates, explains, interprets, justifies, relates, summarizes, supports.

**Affective.** This domain includes the manner in which we deal with things emotionally, such as feelings, values, appreciation, enthusiasms, motivations, and attitudes. The five major categories listed the simplest behavior to the most complex:

Category	Example and Key Words
Receiving Phenomena: Awareness, willingness to hear, selected attention.	Examples: Listen to others with respect. Listen for and remember the name of newly introduced people.  Key Words: asks, chooses, describes, follows, gives, holds, identifies, locates, names, points to, selects, sits, erects, replies, uses.
Responding to Phenomena: Active participation on the part of the learners. Attends and reacts to a particular phenomenon. Learning outcomes may emphasize compliance in responding, willingness to respond, or satisfaction in responding (motivation).	Examples: Participates in class discussions. Gives a presentation. Questions new ideals, concepts, models, etc. in order to fully understand them.  Key Words: answers, assists, aids, complies, conforms, discusses, greets, helps, labels, performs, practices, presents, reads, recites, reports, selects, tells, writes.
Valuing: The worth or value a person attaches to a particular object, phenomenon, or behavior. This ranges from simple acceptance to the more complex state of commitment. Valuing is based on the internalization of a set of specified values, while clues to these values are expressed in the learner? Overt behaviors are often identifiable.	Examples: Demonstrates faith or belief in something. Is sensitive towards individual and cultural differences (value diversity). Proposes a plan for social improvement and follows through with commitment. Informs leadership about matters that one feels strongly about.  Key Words: completes, demonstrates, differentiates, explains, follows, forms, initiates, invites, joins, justifies, proposes, reads, reports, selects, shares, studies, works.
Organization: Organizes values into priorities by contrasting different values, resolving conflicts among them, and creating an unique value system. The emphasis is on comparing, relating, and synthesizing values.	Examples: Recognizes the need for balance between freedom and responsible behavior. Accepts responsibility for one's behavior. Explains the role of systematic planning in solving problems. Accepts professional ethical standards. Creates a life plan in harmony with abilities, interests, and beliefs. Prioritizes time effectively to meet the needs of the organization, family, and self.  Key Words: adheres, alters, arranges, combines, compares, completes, defends, explains, formulates, generalizes, identifies, integrates, modifies, orders, organizes, prepares, relates, synthesizes.
Internalizing values (characterization): Has a value system that controls one's behavior. The behavior is pervasive, consistent, predictable, and most importantly, characteristic of the learner. Instructional objectives are concerned with the student's general patterns of adjustment (personal, social, emotional).	Examples: Shows self-reliance when working independently. Cooperates in group activities (displays teamwork). 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. Values people for what they are, not how they look.  Key Words: acts, discriminates, displays, influences, listens, modifies, performs, practices, proposes, qualifies, questions, revises, serves, solves, verifies.

**Psychomotor Domain.** The psychomotor domain includes physical movement, coordination, and use of the motor-skill areas. Development of these skills requires practice and is measured in terms of speed, precision, distance, procedures, or techniques in execution. The seven major categories listed the simplest behavior to the most complex: Simpson (1972) described the Psychomotor Domain as follows:

Category	Example and Key Words
<b>Perception</b> : The ability to use sensory cues to guide motor activity. This ranges from sensory stimulation, through cue selection, to translation.	<b>Examples</b> : Detects non-verbal communication cues. Estimates how many will attend a meeting and prepares accordingly. Adjusts aspects of a workshop in light of participant response. <b>Key Words</b> : chooses, describes, detects, differentiates, distinguishes, identifies, isolates, relates, selects.
<b>Set</b> : Readiness to act. It includes mental, physical, and emotional sets. These three sets are dispositions that predetermine a person's response to different situations (sometimes called mindsets).	<b>Examples</b> : Knows and acts upon a sequence of steps in preaching. Recognizes one's abilities and limitations. Shows desire to learn a new process (motivation). <b>Key Words</b> : begins, displays, explains, moves, proceeds, reacts, shows, states, volunteers.
Guided Response: The early stages in learning a complex skill that includes imitation and trial and error. Adequacy of performance is achieved by practicing.	Examples: Performs a process as demonstrated. Follows instructions to staff a Nursery.  Key Words: copies, traces, follows, react, reproduce, responds
Mechanism: This is the intermediate stage in learning a complex skill. Learned responses have become habitual and the movements can be performed with some confidence and proficiency.	<b>Examples</b> : Uses a personal computer. Repairs a leaking faucet. <b>Key Words</b> : assembles, calibrates, constructs, dismantles, displays, fastens, fixes, grinds, heats, manipulates, measures, mends, mixes, organizes, sketches.
Complex Overt Response: Skillful performance of acts that involve complex movement patterns. Proficiency is indicated by a quick, accurate, and highly coordinated performance, requiring a minimum of energy. This category includes performing without hesitation, and automatic performance.	Examples: Operates a sophisticated sound system. Operates a computer quickly and accurately. Displays competence in  Key Words: assembles, builds, calibrates, constructs, dismantles, displays, fastens, fixes, grinds, heats, manipulates, measures, mends, mixes, organizes, sketches.
Adaptation: Skills are well developed and the individual can modify movement patterns to fit special requirements.	<b>Examples</b> : Responds effectively to unexpected experiences. Modifies instruction to meet the needs of learners. <b>Key Words</b> : adapts, alters, changes, rearranges, reorganizes, revises, varies.
<b>Origination</b> : Creating new movement patterns to fit a particular situation or specific problem. Learning outcomes emphasize creativity based upon highly developed skills.	Examples: Constructs a new theory. Develops a new and comprehensive training programming. Creates a new gymnastic routine.  Key Words: arranges, builds, combines, composes, constructs, creates, designs, initiate, makes, originates.

## References

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