

Learning Domains

Identifying Learning Domains and Levels of Learning

Course designers/developers must understand the various domains and levels of learning when writing objectives, and developing the training methodology. The domains are also important in determining what has been learned and how to measure the success of the instruction.

Learning as initially described by Bloom contained three domains; Cognitive, Affective, and Psychomotor. These domains were later revised by various researchers, but still provide an excellent way to identify various levels fo participant learning. Each domain has various levels ranging from simple to complex.

Cognitive Domain Levels- The cognitive domain reflects thinking and mental processes. **Source-** Bloom; and Anderson, Krathwohl, et. al

1. Remembering

Previously referred to as Knowledge, remembering involves the recall of facts or the act of remembering information. This level represents the lowest, and simplest level of learning.

 Verbs associated with this level include but are not limited to: Defines, describes, lists, identifies, matches, names, recalls, recognizes, selects, and states.

2. Understanding

Previously referred to as Comprehension, this level involves the ability to understand or explain ideas or concepts.

 Verbs associated with this level include but are not limited to: Converts, defends, distinguishes, estimates, explains, generalizes, gives examples, of, infers, interprets, paraphrases, rewrites, and summarizes.

3. Applying

Previously referred to as Application, this level involves using or applying a concept in a new situation.

 Verbs associated with this level include but are not limited to: Applies, changes, computes, constructs, demonstrates, manipulates, modifies, operates, predicts, prepares, produces, shows, solves, and uses.

4. Analyzing

Previously referred to as Analysis, this level addresses the separation of material or information into component parts so that its organization structure can be understood.

 Verbs associated with this level include but are not limited to: Analyses, breaks down, compares, contrasts, diagrams, differentiates, distinguishes, identifies, illustrates, relates, and separates.



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5. Evaluating

Previously referred to as Evaluation and listed as the highest level of learning, this level is currently the next to highest level and is related to making judgments about the value of ideas, products, procedures, concepts, or materials.

 Verbs associated with this level include but are not limited to: Appraises, compares, concludes, contrasts, criticizes, critiques, defends, evaluates, interprets, justifies, summarizes, and supports.

6. Creating

Previously referred to as Synthesis, this level includes building a concept, process, structure, or pattern from diverse elements, putting parts together to form a new whole with emphasis on creating a new meaning, process, patter, concept, or structure.

 Verbs associated with this level include but are not limited to: Categorizes, combines, compiles, composes, creates, devises, designs, explains, generates, modifies, organizes, plans, rearranges, reconstructs, relates, reorganizes, revises, rewrites, summarizes, and writes.

Psychomotor Domain Levels source- Dave This domain involves the performance of motor skills and pertains to such skill sets as firearms, defensive tactics, and driving. The levels of skills are as follows:

1. Imitation

This level of competency involves copying the movements and actions of another by repeating the action or movements. This is the lowest level of skill performance.

 Verbs associated with this level include but are not limited to: Copy, follow, replicate, repeat, mimic, imitate, and reenact.

2. Manipulation

This level of competency involves the reproduction of an activity or movement by following written or verbal instructions.

 Verbs associated with this level include but are not limited to: Recreate, build, perform, execute, and implement.

3. Precision

At this performance level, the individual can execute the skill reliably, independent of assistance. The movement, skill, or sequence becomes habitual and is performed with confidence and proficiency. Individuals can demonstrate the skill, movement or procedure to other learners using quick, smooth, accurate performance.

 Verbs associated with this level include but are not limited to: Demonstrates, completes, controls, perfects, performs, and shows.



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4. Articulation

At this performance level, an individual can adapt, modify, and integrate the skill to fit the special requirements of a given situation. They can combine the skill with other skills and methods to meet new conditions or requirements.

 Verbs associated with this level include but are not limited to: Construct, solve, combine, coordinate, integrate, adapt, develop, formulate, modify, or improve.

5. Naturalization

This level of development allows the individual to perform a skill in an automatic manner without the necessity of a conscious thinking process.

 Verbs associated with this level include but are not limited to: Design, specify, manage, and react.

Affective Domain Levels- While it is an important aspect of learning, the affective domain is seldom tested due to the difficulty of constructing valid and verifiable test items. **Source-**Krathwohl, Bloom, Masia

1. Receiving

This level of learning pertains to the participant's awareness of, willingness to hear or consider, and the ability to attend to selected issues.

This level is characterized by the participant's willingness to listen to others' point of view.

 Verbs associated with this level include but are not limited to: Ask, chooses, describes, follows, gives, holds, selects, relies and uses.

2. Responding

This level involves active participation on the part of the learners; attending to and reacting to a phenomenon; learning outcomes may emphases compliance in responding, willingness to respond, or satisfaction in responding; and active participation on the part of the student.

 Verbs associated with this level include but are not limited to: Answers, assists, aids, complies, conforms, performs, practices, presents, reads, recites, reports, selects, tells, and writes.

3. Valuing

This level addresses the worth or value a person attaches to a particular phenomenon, behavior or concept. This ranges from simple acceptance to a more compiles 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's behavior and are identifiable. The student sees worth or value in the subject, activity, assignment, etc.



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> Verbs associated with this level include but are not limited to: Completes, demonstrates, differentiates, explains, follows, forms, initiates, invites, joins, justifies, proposes, reads, reports, selects, shares, studies, and works.

4. Organization by Values

This level of learning reflects the process of organizing values into priorities by contrasting different values, resolving conflicts between them, and creating a unique value system. The student builds an internally consistent value system.

 Verbs associated with this level include but are not limited to: Alters, adheres, arranges, combines, compares, completes, defends, explains, formulates, identifies, integrates, modifies, organizes, prepares, relates, and synthesizes.

5. Characterization by Values

This level is the highest level in the domain and is characterized by having a value system threat controls a participant's behavior.

The behavior is pervasive, consistent, predictable, and most importantly, characteristic of the learner. Through the internalization of values, individuals develop a characteristic "lifestyle."

 Verbs associated with this level include but are not limited to: Acts, discriminates, displays, influences, listens, modifies, performs, practices, proposes, qualifies, questions, revises, serves, solves and verifies.



Learning Domains and Levels

Cognitive Domain	Psychomotor Domain	Affective Domain
Remembering Defines, describes, lists, identifies, matches, names, recalls, recognizes, selects, and states.	Imitation Copy, follow, replicate, repeat, mimic, imitate, and reenact.	Receiving Ask, chooses, describes, follows, gives, holds, selects, relies and uses.
Understanding Converts, defends, distinguishes, estimates, explains, generalizes, gives examples, of, infers, interprets, paraphrases, rewrites, and summarizes	Manipulation Recreate, build, perform, execute, and implement.	Responding Answers, assists, aids, complies, conforms, performs, practices, presents, reads, recites, reports, selects, tells, and writes.
Applying Applies, changes, computes, constructs, demonstrates, manipulates, modifies, operates, predicts, prepares, produces, shows, solves, and uses.	Precision Demonstrates, completes, controls, perfects, performs, and shows.	Valuing Completes, demonstrates, differentiates, explains, follows, forms, initiates, invites, joins, justifies, proposes, reads, reports, selects, shares, studies, and works.
Analyzing Analyses, breaks down, compares, contrasts, diagrams, differentiates, distinguishes, identifies, illustrates, relates, and separates.	Articulation Construct, solve, combine, coordinate, integrate, adapt, develop, formulate, modify, and improve	Organization by Values Alters, adheres, arranges, combines, compares, completes, defends, explains, formulates, identifies, integrates, modifies, organizes, prepares, relates, and synthesizes.
Evaluating Appraises, compares, concludes, contrasts, criticizes, critiques, defends, evaluates, interprets, justifies, summarizes, and supports.	Naturalization Design, specify, manage, and react.	Characterization by Values Acts, discriminates, displays, influences, listens, modifies, performs, practices, proposes, qualifies, questions, revises, serves, solves and verifies.
Creating Categorizes, combines, compiles, composes, creates, devises, designs, explains, generates, modifies, organizes, plans, rearranges, reconstructs, relates, reorganizes, revises, rewrites, summarizes, and writes.		