

## **BLOOM ABSTRACT**

In 1956, Benjamin S. Bloom and his colleagues borrowed from biology the practice of classifying animals and plants into phyla and species and applied that practice to levels of learning. The primary classification distinguishes learning as cognitive, affective, or psychomotor. Each domain, to use Bloom's terminology, is further broken into subcategories, or classes, with an end result of learning behaviors/educational objectives identifiable at their simplest level. (Bloom, 1956, p1-8)

Within cognitive learning, Bloom lists in ascending complexity: knowledge, comprehension, application, analysis, synthesis, and evaluation. Within affective learning, he lists: receiving, responding, valuing, organization, and characterization. Bloom acknowledged a psychomotor domain, but did not create a classification breakdown. Others who find the domain useful have identified classifications.

### **Important Terms**

#### **Cognitive**

##### Knowledge:

“those behaviors and test situations which emphasize the remembering, either by recognition or recall, of ideas, materials, or phenomena.” (Bloom, 1956, p62)

“Exhibit memory of previously-learned material by recalling facts, terms, basic concepts, and answers. (Barton, 1997, Level I)

##### Comprehension:

This class deals with understanding and making use of communication, knowledge, and information. (Bloom, 1956, p89-90)

“Demonstrate understanding of facts and ideas by organizing, comparing...interpreting...stating main ideas.” (Barton, 1997, Level II)

##### Application:

Bloom makes a distinction between this domain and comprehension by recognizing comprehension as being able to correctly demonstrate, but application being able to apply knowledge when given a new problem. (Bloom, 1956, p120)

“Solve problems to new situations by applying acquired knowledge, facts...rules in a different way.” (Barton, 1997, Level III)

##### Analysis:

Involves recognizing and understanding how the parts relate to each other and the whole; how organization is established, meaning is conveyed and conclusion is drawn. (Bloom, 1956, p144-145)

“Examine and break information into parts by identifying motives or causes. Make inferences and find evidence to support generalizations.” (Barton, 1997, Level IV)

##### Synthesis:

Here, the previously studied pieces are placed together to create a new whole. Instead of pulling from within a set or given category, understanding must be taken from many sources when putting together the new compilation. (Bloom, 1956, p162-164)

“Compile information together in a different way by combining elements in a new pattern or proposing alternative solutions.” (Barton, 1997, Level V)

#### Evaluation:

Involves examining, valuing, creating ideas, solutions etc. to obtain greater understanding. But more importantly, evaluation combines the preceding 5 classes into new attempts to acquire knowledge and understanding. (Bloom, 1956, p185-187)

“Present and defend opinions by making judgments about information, validity of ideas or quality of work based on a set of criteria.” (Barton, 1997, Level VI)

### **Affective**

#### Receiving:

Being aware of and possessing a willingness to receive information or perspective. Three subclasses run along a continuum with the learner starting as a passive participant, to the learner directing or controlling the attention being given. (Bloom, 1956, p98-113)

#### Responding:

The learners are no longer just giving their attention; they now take some form of action. Again the subclasses fall along a continuum. Actions occur without acceptance or understanding of necessity, voluntary action, and ends with a positive emotional element involved with the action. (Bloom, 1956, p98-131)

#### Valuing:

The subdivision on this class moves an individual from assigning tentative yet consistent worth toward having conviction with certainty. (Bloom, 1956, p140-149)

#### Organization:

As value becomes commitment, organization will need to take place. Attention is given to how commitments are connected and which take precedent. (Bloom, 1956, p154)

#### Characterization by Value or Value Complex:

Individuals will react to similar situations in a constant manner based upon the values they have developed and nurtured. Then they will internalize those values and actions to create an identification of self and philosophy for their future actions. (Bloom, 1956, p184-185)

### **Psychomotor**

Educational objectives which deal with “manipulative or motor-skill.” (Bloom, 1956, p7)

Bloom and his team did not create a classification for this domain, believing it wouldn't be useful since so little is done concerning this area in colleges and universities. (Bloom, 1956, p7-8) Others have created a classification for this domain and some of those are listed as further reading.

### **Reference**

Barton, Linda. *Quick Flip Questions for Critical Thinking* (1997) Dana Point, CA: Edupress

Bloom, Benjamin S. et al (1956) *Taxonomy of Educational Objectives: Cognitive and Affective Domains*. New York: David McKay.

**Further Reading**

Harrow, Anita. (1972) *A Taxonomy of Psychomotor Domain: A Guide for Developing Behavioral Objectives*. New York: David McKay.

Simpson, E J. (1972) *The Classification of Educational Objectives in the Psychomotor Domain*. Washington, DC: Gryphon House.

Robert, Armstrong J., et al. (1970) *Developing and Writing Behavioral Objectives*. Arizona: Educational Innovators.