TLC
TEACHING & LEARNING CENTER
for NTCC FACULTY & STAFF

Domains of Learning

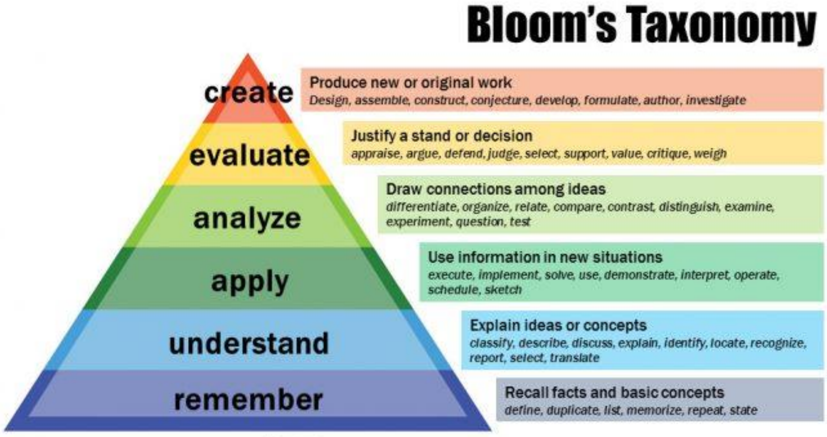
In order to construct a well-written Student Learning Outcome, it is important that a strong and application action verb is chosen from the appropriate domain of learning. Based on research inspired by Benjamin Bloom, taxonomies of student learning have been developed (and continue to be revised) in order to communicate levels and categories of learning. At NTCC, the following domains of learning are commonly used when creating and reviewing SLOs: **Cognitive, Affective, and Psychomotor.**

When creating student learning outcomes, it is critical that **a strong and measurable action verb** is utilized based on the appropriate domain of learning. Verb statements such as "understand", "appreciate", "become familiar with", and "gain an awareness of" are often **too vague** and therefore do not allow faculty to meaningfully assess or measure learning.

Review the domains descriptions below and place specific focus action verbs that can be used within each domain.

The Cognitive Domain:

The cognitive domain of learning involves thinking about facts, terms, concepts, ideas, relationships, patterns, conclusions, etc. A common taxonomy utilized to document learning within the cognitive domain is Bloom's Taxonomy (as revised by Krathwohl, et al.). Bloom's Taxonomy organizes cognitive levels of learning into the following domains, escalating in complexity from remember to create:



Vanderbilt University Center for Teaching

Review the following external resources for additional information related to Bloom's Taxonomy:

- Overview of Bloom's Taxonomy *(Vanderbilt University Center for Teaching and Learning)*
- Bloom's Taxonomy Action Verbs *(Northeastern University – Center for Advanced Teaching & Learning Through Research)*

The Affective Domain

“The affective domain includes the manner in which we deal with things emotionally, such as feelings, values, appreciation, enthusiasms, motivations, and attitudes” – Donald Clark

The five major categories are as follows:

- **Receiving Phenomena:** Awareness, willingness to hear, selected attention.
- **Responds to Phenomena:** Active participation on the part of the learners. Attend and react to a particular phenomenon. Learning outcomes may emphasize compliance in responding, willingness to respond, or satisfaction in responding (motivation).
- **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's overt behavior and are often identifiable.
- **Organization:** 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.
- **Internalizes Values** (characterization): 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).

The content above stems both from Bloom’s Taxonomy and Don Clark's page on the affective domain.

The Psychomotor Domain:

“The psychomotor domain (Simpson, 1972) 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. Thus, psychomotor skills rage from manual tasks, such as digging a ditch or washing a car, to more complex tasks, such as operating a complex piece of machinery or dancing.” - Donald Clark

The seven major categories are as follows:

- **Perception (awareness):** The ability to use sensory cues to guide motor activity. This ranges from sensory stimulation, through cue selection, to translation.
- **Set:** 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).
- **Guided Response:** The early stages in learning a complex skill that includes imitation and trial and error. Adequacy of performance is achieved by practicing.

- **Mechanism (basic proficiency):** 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.

- **Complex Overt Response (Expert):** The skillful performance of motor 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. For example, players are often utter sounds of satisfaction or expletives as soon as they hit a tennis ball or throw a football, because they can tell by the feel of the act what the result will produce.

- **Adaptation:** Skills are well developed and the individual can modify movement patterns to fit special requirements.

- **Origination:** Creating new movement patterns to fit a particular situation or specific problem. Learning outcomes emphasize creativity based upon highly developed skills.

The content above stems from Bloom's Taxonomy; Simpson, 1972; and Don Clark's page.