Instructional Objectives

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Definition

An instructional objective is an intent communicated by a statement describing a proposed change in the learner:

……..a statement of what the learner will be able to do upon completion of the learning experience.

------ Thus an instructional objective requires a demonstrable behavioral change in the learner.

Armstrong and Savage (1983):

ABCD Rule:

A ----- Audience (e.g. each student)
B ----- Behavior (e.g. will be able to define)
C ----- Condition (e.g. after completion of the teaching unit)
D ----- Degree of Competence (e.g. 8 out of 10 items)

Kim and Kellough (1991)

Behavior --- that should result (it should specify an acceptable level)

Condition ---- e.g. by calculating with paper and pencil or by computer?

Criteria ----- e.g. if it is the number of items correct or time taken

Good learning objectives address…

Basic Elements

1. *What* the student is expected to do after learning. (performance)
2. The *circumstances* under which the student will be able to perform.(condition).
3. The *level* of acceptable performance. (standard)

Writing Instructional Objectives

Instructional objectives, including behavioral objectives, can be written for any of the domains of instruction

- **Cognitive**
- **Affective**
- **Psychomotor**

The Cognitive Domain

A mnemonic device for remembering the six levels:

Killing	Knowledge
Cats	Comprehension
Almost	Application
Always	Analysis
Seems	Synthesis
Evil	Evaluation

The Cognitive Domain

Knowledge

Student recalls or recognizes information, ideas, and principles in the approximate form in which they were learned.

The Cognitive Domain

Knowledge

Write
List
Label
Name
State
Define

The Cognitive Domain

Knowledge

The student will define the 6 levels of Bloom's taxonomy of the cognitive domain.

The Cognitive Domain

Comprehension

Student translates, comprehends, or interprets information based on prior learning.

The Cognitive Domain

Comprehension

Explain
Summarize
Paraphrase
Describe
Illustrate

The Cognitive Domain

Comprehension

The student will explain the purpose of Bloom's taxonomy of the cognitive domain.

The Cognitive Domain

Application

Student selects, transfers, and uses data and principles to complete a problem or task with a minimum of direction.

The Cognitive Domain

Application

Use
Compute
Solve
Demonstrate
Apply
Construct

The Cognitive Domain

Application

The student will write an instructional objective for each level of Bloom's taxonomy.

The Cognitive Domain

Analysis

Student distinguishes, classifies, and relates the assumptions, hypotheses, evidence, or structure of a statement or question.

The Cognitive Domain

Analysis

Analyze
Categorize
Compare
Contrast
Separate

The Cognitive Domain

Analysis

The student will compare and contrast the cognitive and affective domains.

The Cognitive Domain

Synthesis

Student originates, integrates, and combines ideas into a product, plan or proposal that is new to him or her.

The Cognitive Domain

Synthesis

Create
Design
Hypothesize
Invent
Develop

The Cognitive Domain

Synthesis

The student will design a classification scheme for writing educational objectives that combines the cognitive, affective, and psychomotor domains.

The Cognitive Domain

Evaluation

Student appraises, assesses, or critiques on a basis of specific standards and criteria.

The Cognitive Domain

Evaluation

Judge
Recommend
Critique
Justify

The Cognitive Domain

Evaluation

The student will judge the effectiveness of writing objectives using Bloom's taxonomy.

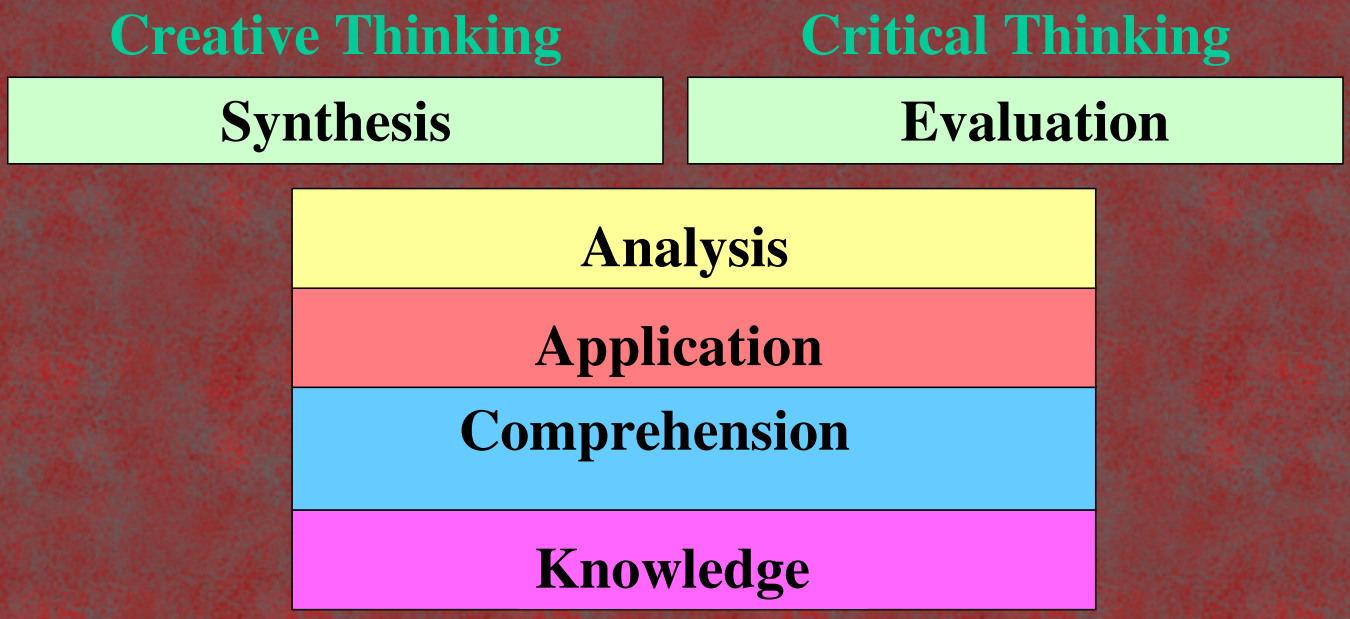
The Cognitive Domain

In general, research over the last 40 years has confirmed the taxonomy as a hierarchy with the exception of the last two levels.

It is uncertain at this time whether synthesis and evaluation should be reversed (i.e., evaluation is less difficult to accomplish than synthesis) or whether synthesis and evaluation are at the same level of difficulty but use different cognitive processes.

The Cognitive Domain

I believe the latter is more likely as it relates to the differences between creative and critical thinking.



The Affective Domain

Receiving

----- Attention to particular phenomena or stimuli (activities, textbook, music etc.).
----- Attention ranges from simple awareness to selective attention.
Attend, Reply, Receive etc.

Krathwohl, D., Bloom, B., & Masia, B. (1956). Taxonomy of educational objectives. Handbook II: Affective domain. New York: David McKay.

Responding

------ Active participation that involves attention (receiving) and reaction.
------ Interest and emotion are exhibited.
Cooperate, Respond etc.

The Affective Domain

Valuing

------- Value attached to objects, people or process.

------- Ranges from acceptance of value to complex levels of emotional commitment and responsibility toward values.

-------- Behavior and emotions are consistent with values.

Accept, Defend, Devote etc.

Organization

------ Convergence of different values, resolution of value conflicts and internally consistent value system.

------ Emphasis is on comparing, relating and synthesis of values.

------- Organize, Systematize etc.

The Affective Domain

Characterization ------- Behavior is consistent, value-driven and predictable. Internalize, Live according to etc.

The Psychomotor Domain

Perception — **Process of becoming aware of objects, qualities, etc by way of senses. Basic in situation-interpretation-action chain leading to motor activity.**

Set — **Readiness for a particular kind of action or experience; may be mental, physical or emotional.**

Simpson, J. S. (1966). The classification of educational objectives, psychomotor domain. Office of Education Project No. 5-85-104. Urbana, IL: University of Illinois.

The Psychomotor Domain

Guided Response	Overt behavioral act under guidance of an instructor, or following model or set criteria.
Mechanism	Learned response becomes habitual; learner has achieved certain confidence and proficiency or performance.

The Psychomotor Domain

Complex Overt Response	Performance of motor act considered complex because of movement pattern required.
Adaptation	Altering motor activities to meet demands of problematic situations.

The Psychomotor Domain

Origination

Creating new motor acts or ways of manipulating materials out of skills, abilities and understandings developed in the psychomotor area.