

# OBJECTIVES AND SPECIFICATIONS

Dr. Pooja Manghirmalani Mishra  
Assistant Professor  
Institute of Distance and Open Learning  
University of Mumbai

# OBJECTIVES



**Begin with the End in mind!!**

- An objective is a description of a performance you want learners to be able to exhibit before you consider them competent.
- An objective describes an intended result of instruction, rather than the process of instruction itself.
- A specification is an act of identifying something precisely or of stating a precise requirement.



## Course Description

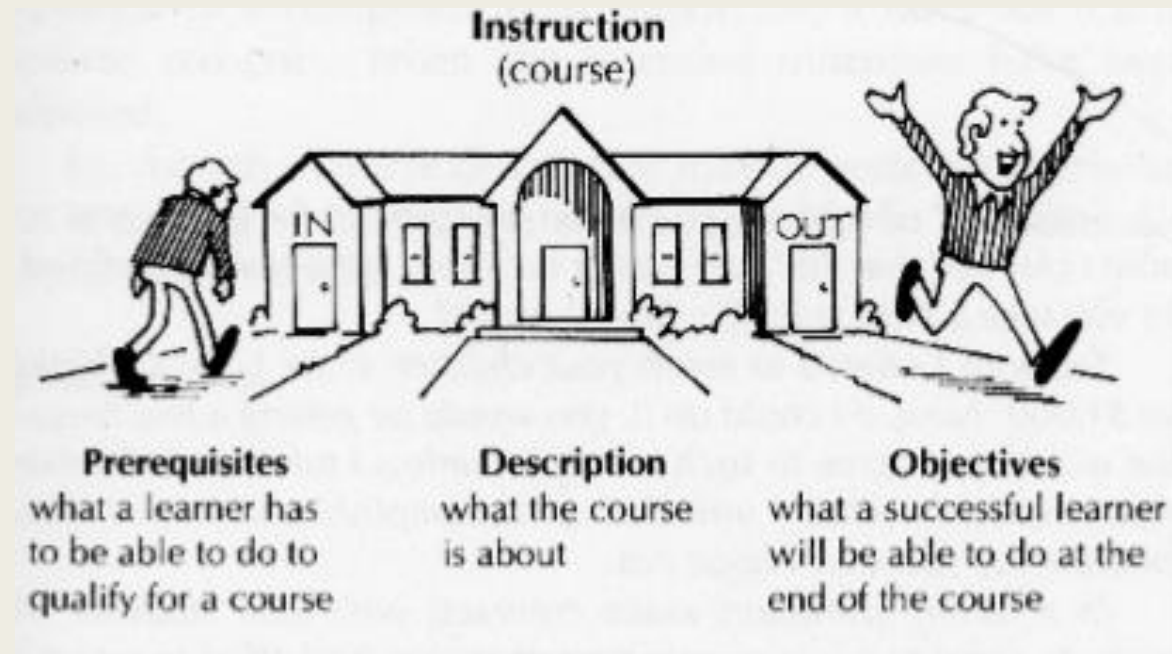
Tells what a course is about.

## Goal

Are broad educational statements fitting the mission and description of the course.

## Objectives

Tell what the learner will be able to do upon successful completion of the course.



# Need for well-written Objectives

1. They provide some basis and guidance for the selection of instructional content and procedures.
2. They help in evaluating the success of the instruction.
3. They help the student organize his/her efforts to accomplish the intent of the instruction.

# How Does One Write a Good Objective?

**OBSERVE TWO RULES!!**

# #Rule1

- A good objective communicates your intent well and leaves little room for interpretation. There are words that we often use that are open to many interpretations, and there are words that we can use that leave less to the imagination.

# #Rule2

- There are three characteristics that help communicate intent when writing an objective: Performance, Conditions, and Criterion.
- Performance: An objective always states what a learner is expected to be able to DO.
- Conditions: An objective often describes the conditions under which a student is able to DO or perform the task.
- Criterion: If possible, an objective clarifies how well the student must perform the task, in order for the performance to be acceptable.



# *ABCDs* of Writing Objectives

- **A-Audience:** The who. "The pupil will be able to..."
- **B-Behavior:** What a learner is expected to be able to do or the product or result of the doing. The behavior or product should be observable.
- **C-Condition:** The important conditions under which the performance is to occur.
- **D-Degree:** The criterion of acceptable performance.

How well the learner must perform in order for the performance to be considered acceptable.

# Statement of Learning

- A statement of a learning objective contains a verb (an action) and an object (usually a noun).
- The **verb** generally refers to [actions associated with] the intended **cognitive process**.
- The **object** generally describes the **knowledge** students are expected to acquire or construct.

1. The pupil is able to remember scientific terms, facts, concepts, phenomena, definitions, procedures.
2. The pupil develops an understanding of the concepts, terms, principles, laws, relationships, functions, processes, phenomena, theories.
3. The pupil applies his/her understanding to a new and unfamiliar situation.



# BLOOM'S TAXONOMY

- Bloom's taxonomy is a set of three hierarchical models used to classify educational learning objectives into levels of complexity and specificity. The three lists cover the learning objectives in cognitive, affective and sensory domains. The cognitive domain list has been the primary focus of most traditional education and is frequently used to structure curriculum learning objectives, assessments and activities.
- The models were named after Benjamin Bloom, who chaired the committee of educators that devised the taxonomy.

# BLOOM'S TAXONOMY

- THE THREE DOMAINS ARE

Knowledge Domain/  
Mental Skills

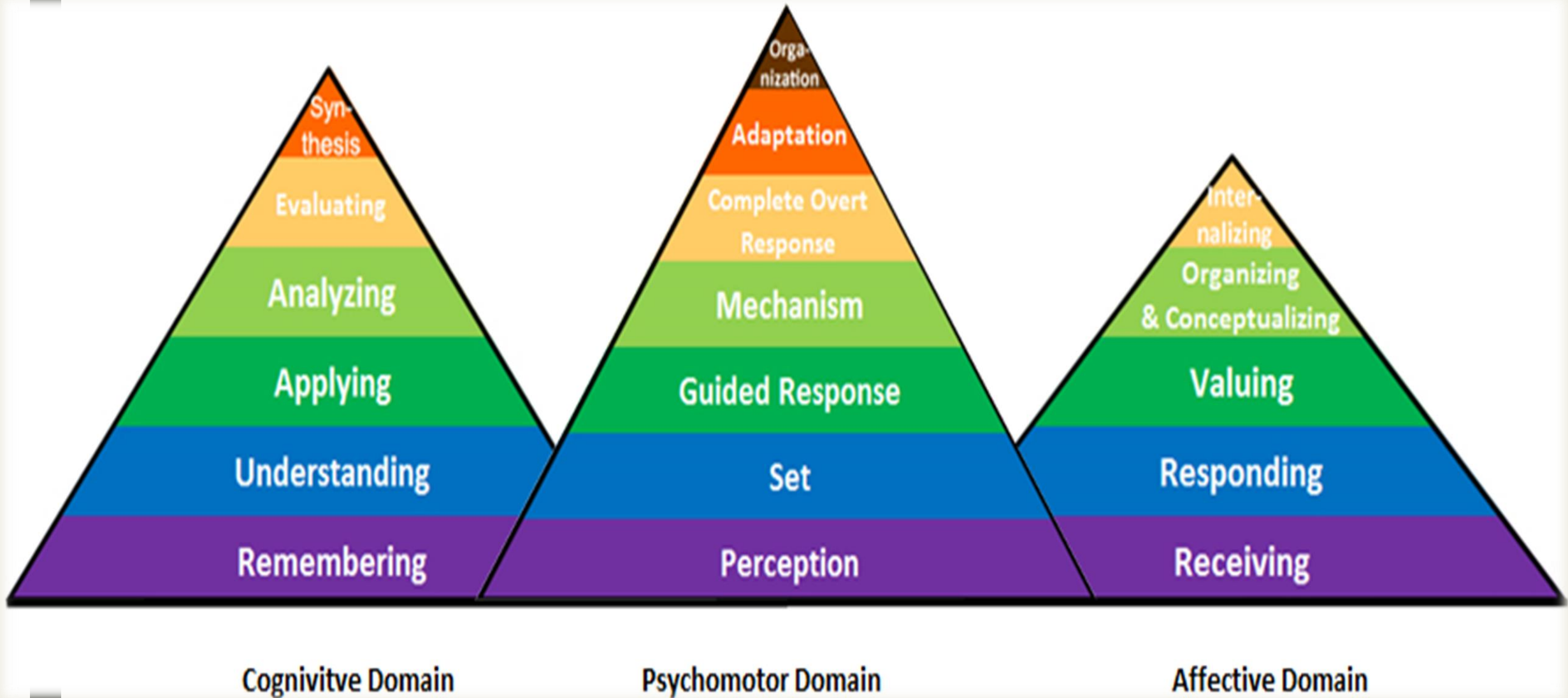
**Cognitive  
Domain**

**Affective  
Domain**

Emotional Domain/  
Values and Feelings

**Psychomotor  
Domain**

Physical Domain/  
Motor Skills



# I COGNITIVE DOMAIN



# THE TAXONOMY TABLE

The Knowledge Dimension	THE COGNITIVE PROCESS DIMENSION						Affective Domain
	1. Remember	2. Understand	3. Apply	4. Analyze	5. Evaluate	6. Create	
A. Factual Knowledge							Psychomotor Domain
B. Conceptual Knowledge							
C. Procedural Knowledge							
D. Metacognitive Knowledge							

# Bloom's Taxonomy



## Creating:

Can students create a new product or point of view?  
They would be able to assemble, construct, create, design, develop, formulate, write, or invent.

## Evaluating:

Can the student justify a stand or decision?  
To evaluate information, a student might: appraise, argue, defend, judge, select, support, value, and evaluate.

## Analyzing:

Can the student distinguish between the different parts?  
They would be able to compare, contrast, criticize, differentiate, discriminate, distinguish, examine, experiment, question, or test.

## Applying:

Can the student use the information in a new way?  
They would be able to choose, demonstrate, dramatize, employ, illustrate, interpret, operate, sketch, solve, use, or write.

## Understanding:

Can the student explain ideas or concepts?  
They would be able to classify, describe, discuss, explain, identify, locate, recognize, report, select, translate, or paraphrase.

## Remembering:

Can the student recall or remember the information?  
They would be able to define, duplicate, list, memorize, recall, repeat, reproduce, or state.



# THE TAXONOMY TABLE

The Knowledge Dimension	THE COGNITIVE PROCESS DIMENSION						Affective Domain
	1. Remember	2. Understand	3. Apply	4. Analyze	5. Evaluate	6. Create	
A. Factual Knowledge							Psychomotor Domain
B. Conceptual Knowledge							
C. Procedural Knowledge							
D. Metacognitive Knowledge							

# THE KNOWLEDGE DIMENSION

- Factual Knowledge - The basic elements students must know to be acquainted with a discipline or solve problems.
- Conceptual Knowledge - The interrelationships among the basic elements within a larger structure that enable them to function together.
- Procedural Knowledge - How to do something, methods of inquiry, and criteria for using skills, algorithms, techniques, and methods.
- Metacognitive Knowledge - Knowledge of cognition in general, as well as awareness and knowledge of one's own cognition.

## The cognitive processes dimension — categories, cognitive processes

<i>lower order thinking skills</i>					<i>higher order thinking skills</i>
<b>remember</b>	<b>understand</b>	<b>apply</b>	<b>analyse</b>	<b>evaluate</b>	<b>create</b>
recognise	interpret	implement	compare/contrast	justify	design
list	summarise	carry out	examine	assess	construct
describe	outline	use	explain	prioritise	imagine
identify	paraphrase	execute	organise	hypothesise	plan
retrieve	compare	complete	deconstruct	critique	produce
name	explain	classify	analyse	experiment	invent
locate	exemplify	illustrate	structure	judge	devise
find	discuss	solve	integrate	test	make
relate	predict	apply	categorise	evaluate	compose
write	review		investigate	debate	

# II AFFECTIVE DOMAIN



Has a value system that controls their behavior. The behavior is pervasive, consistent, predictable, and most important characteristic of the learner.

Organizes values into priorities by contrasting different values, resolving conflicts between them, and creating an unique value system.

The worth or value a person attaches to a particular object, phenomenon, or behavior.

Active participation on the part of the learners. Attend and react to a particular phenomenon.

Awareness, willingness to hear, selected attention.

Internalizes Values

Organization

Valuing

Responds to Phenomena

Receiving Phenomena

Action	Definition	Verbs
<b>Receiving</b>	<ul style="list-style-type: none"> <li>• Selectively attends to stimuli</li> </ul>	Accept, acknowledge, be aware, listen, notice, pay attention, tolerate
<b>Responding</b>	<ul style="list-style-type: none"> <li>• Responds to stimuli</li> </ul>	Agree, answer, assist, care, communicate, comply, conform, consent, contribute, cooperate, follow, obey, participate, read, respond, visit, volunteer
<b>Valuing</b>	<ul style="list-style-type: none"> <li>• Attaches value or worth to something</li> </ul>	Adopt, assume, behave, choose, commit, desire, exhibit, express, initiate, prefer, seek, show concern, show desire, use resources
<b>Organization</b>	<ul style="list-style-type: none"> <li>• Conceptualizes the value and resolves conflict between it and other values</li> </ul>	Adapt, adjust, arrange, balance, classify, conceptualize, formulate, group, organize, rank, theorize
<b>Internalizing</b>	<ul style="list-style-type: none"> <li>• Integrates the value into a value system that controls behaviour</li> </ul>	Act, advocate, defend, exemplify, influence, justify, maintain, serve, support

# III PSYCHOMOTOR DOMAIN



Creating new movement patterns to fit a particular situation or specific problem.

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

This category includes performing without hesitation, and automatic performance.

Learned responses have become habitual and the movements can be performed with some confidence and proficiency.

The early stages in learning a complex skill that includes imitation and trial and error.

Readiness to act. It includes mental, physical, and emotional sets.

The ability to use sensory cues to guide motor activity. This ranges from sensory stimulation, through cue selection, to translation

Origination

Adaptation

Complex Overt Response

Mechanism

Guided Response

Set

Perception



Action	Definition	Verbs
<b>Perception</b>	<ul style="list-style-type: none"> <li>Senses cues that guide motor activity</li> </ul>	Detect, hear, listen, observe, perceive, recognize, see, sense, smell, taste, view, watch
<b>Set</b>	<ul style="list-style-type: none"> <li>Is mentally, emotionally and physically ready to act</li> </ul>	Achieve, assume, establish, place, position, sit, stand, station
<b>Guided Response</b>	<ul style="list-style-type: none"> <li>Imitates and practices skills, often in discrete steps</li> </ul>	Copy, duplicate, imitate, manipulate, operate, practice, repeat, try
<b>Mechanism</b>	<ul style="list-style-type: none"> <li>Performs acts with increasing efficiency, confidence and proficiency</li> </ul>	Complete, conduct, demonstrate, execute, improve efficiency, increase, make, pace, produce, show
<b>Complete Overt Response</b>	<ul style="list-style-type: none"> <li>Performs automatically</li> </ul>	Act, advance, control, direct, excel, guide, maintain, manage, master, organize, perfect, perform, proceed
<b>Adaptation</b>	<ul style="list-style-type: none"> <li>Adapts skill sets to meet a problem situation</li> </ul>	Adapt, reorganize, alter, revise, change
<b>Organization</b>	<ul style="list-style-type: none"> <li>Creates new patterns for specific situations</li> </ul>	Design, originate, combine, compose, construct

# EXAMPLES

# References

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