Educational Objectives: Taxonomy Of Learning & Specific Learning Objectives.

Objectives

At the end of this session the learner should be able to:

- Define educational objectives
- 2. Differentiate the types of educational objectives.
- Define terms cognitive, affective and psychomotor domains.
- 4. Relate these terms to intellectual skills, communication skills and manipulative skills respectively.
- 5. Formulate educational objectives belonging to the three domains.

Education

It is a process, the chief goal of which is to bring about desirable changes in the behavior of learner in the form of acquisition of knowledge, proficiency in skills & development of attitudes.

Components:

- Development of educational objectives
- Organization of T-L activities
- Evaluation

WHAT IS AN....?



 Something that one's efforts or actions are intended to attain or accomplish;
 purpose; goal; target



Educational Objectives

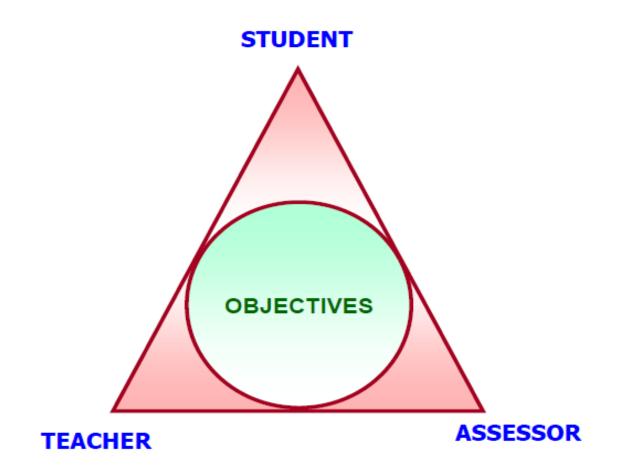
- Are written statements
- Describes what the student should be able to – know, do, think or feel- at the end of a learning experience (that he/ she could not do earlier)

Definition

• Educational objectives are the results sought by the learner at the end of the educational program, that is "what the students should be able to do at the end of a learning period that they could not do beforehand."

-J.J. GUILBERT

• Educational objectives are the statements of those changes in behavior that are desired as a result of specific learner and teacher activity which is a two way process.



Purposes:

- Preparing teaching/ learning program:
- Facilitates course planning.
- Communicates desirable emphasis of treatment.
- Provides for selective approach.
- Helps in curriculum design.
- Facilitates evaluation.
- Facilitates learning.

Purpose of writing educational objectives

- Foster a common understanding or expectation among instructors, students and administrators regarding what an educational activity aims to accomplish.
- Define an activity's place or role within a broader program.
- Guide students about where they should focus their learning efforts.

Characteristics

SMART

S- Specific

- M- Measurable
- A- Attainable
- **R- Realistic**
- T- Time bound

FOCUSED

- F- Feasible
- O- Observable
- **C-** Centered on student
- U- Unequivocal (leaving no doubt)
- **S-** Sequentially appropriate
- E- Ever relevant
- **D-** Developmentally appropriate

TYPES OF OBJECTIVES

- According to the level of educational objectives:
 - 1. General / Institutional objectives
 - 2. Intermediate / Departmental objectives
 - 3. Specific Learning / Instructional Objective (SLO)
- According to the domains of learning:
 - 1. Cognitive domain
 - 2. Affective domain
 - 3. Psychomotor domain

Types of educational objectives:

- Institutional/ general objective: A set of statements identifying the major skills that all the graduates of the program should posses at the completion of their studies.
- Intermediate/Departmental objectives: A set of statements identifying the skills to be acquired by all students who are taught within a particular school/department/division, of a nursing college. These skills must be consistent with the institutional objective.

- Instructional objectives:
- 1. Basic instructional objective (BIO): A brief, clear statement of basic skill/ competence which is to be demonstrated at the conclusion of a unit instruction.
- 2. Specific instructional objective (SIO): A brief, clear statement of a single skill, directly related to BIO and stated in terms of observable student behavior.

TAXONOMY OF EDUCATIONAL DOMAIN

Taxonomy means 'a set of classification principles', or 'structure', and **Domain** simply means 'category'.

The most well known description of learning domains was developed by Benjamin Bloom (1956).

It is known as:

"Bloom's Taxonomy"

- Taxonomy is a hierarchical classification in a given field. It provides a classification of various instructional objectives at suitable levels and in given spheres.
- The systematic organization of objectives into three domains to help the teachers in precise formulation and evaluates the result of a system of education, helps students to prepare for examinations to obtain the desired end results.

The Three DOMAINS

Affective

Psychomotor









Three Domains of Learning

Cognitive Domain

"Thinking"

Affective Domain

"Feeling"

Psychomotor Domain

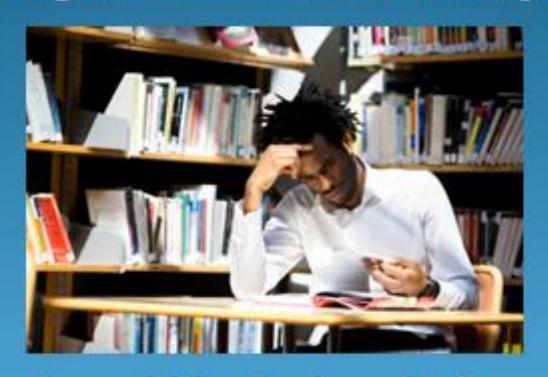
"Doing"

1.Cognitive domain

 The mental or intellectual thinking behaviors demonstrated by an individual

(Formulated by BLOOM)

Cognitive: mental skills (Knowledge)



(intellectual capability, ie., knowledge, or 'think')

COGNITIVE DOMAIN

Bloom's Taxonomy
is an order of
learning with six
levels.

Knowledge

Evaluation Synthesis Analysis Application Comprehension

Cognitive Domain

Intellectual skills

- Knowledge Remembering the information
- Comprehension -Understanding the meaning
- Application Using the information
- Analysis Breaking down into parts
- Synthesis Producing a new whole
- Evaluation Judging the value

Cognitive Domain Levels

Level	Description	Verbs
Knowledge	To recall or recognize information in some pre-arranged form.	Define List
Comprehension	To understand meaning of information based on prior learning.	Describe Explain Interpret
Application	To utilize information to complete a task with limited direction.	Compute Solve Use
Analysis	To classify and relate assumptions or evidence.	Contrast Examine
Synthesis	To integrate or combine ideas into a new product or plan.	Design Develop Organize
Evaluation	Critique idea based on specific standards and criteria.	Appraise Judge Justify

Cognitive Domain

- Knowledge Define hypertension
- Comprehension –given a set of B.P. values, classify hypertension
- Application how anti- hypertensive therapy should be modified in angina/CCF
- Analysis able to take cognizance of SE, personal & cultural factors while selecting anti- hypertensive
- Synthesis able to write a rational individualized prescription for hypertension
- <u>Evaluation</u> able to outline prognosis of patient with hypertension

ACTION VERBS APPROPRIATE FOR EACH LEVEL OF Cognitive Domain

Category	Key Words (verbs)
Knowledge	Defines, Describes, Identifies, Knows, Labels, Lists, Matches, Names, Outlines, Recalls, Recognizes, Reproduces, Selects, States.
Comprehension	Comprehends, Converts, Defends, Distinguishes, Estimates, Explains, Extends, Generalizes, Gives An Example, Infers, Interprets, Paraphrases, Predicts, Rewrites, Summarizes, Translates.
Application	Applies, Changes, Computes, Constructs, Demonstrates, Discovers, Manipulates, Modifies, Operates, Predicts, Prepares, Produces, Relates, Shows, Solves, Uses.
Analysis	Analyzes, Breaks Down, Compares, Contrasts, Diagrams, Deconstructs, Differentiates, Discriminates, Distinguishes, Identifies, Illustrates, Infers, Outlines, Relates, Selects, Separates.
Synthesis	Categorizes, Combines, Compiles, Composes, Creates, Devises, Designs, Explains, Generates, Modifies, Organizes, Plans, Rearranges, Reconstructs, Relates, Reorganizes, Revises, Rewrites, Summarizes, Tells, Writes.
Evaluation	Appraises, Compares, Concludes, Contrasts, Criticizes, Critiques, Defends, Describes, Discriminates, Evaluates, Explains, Interprets, Justifies, Relates, Summarizes, Supports.

Cognitive Domain Levels

Creative Thinking

Critical Thinking

Synthesis

Evaluation

Analysis

Application

Comprehension

Knowledge

2. Affective domain

 An individual's emotions, attitudes, appreciations, interests, and/or values about "something" or someone

2. Affective domain

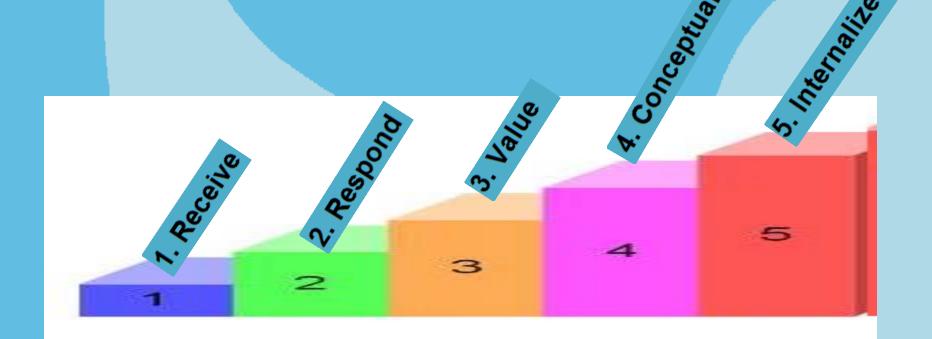
Affective: growth in feelings or emotional areas (*Attitude*)



(feelings, emotions and behaviour, ie., attitude, or 'feel')



3. AFFECTIVE DOMAIN



Affective Domain

Emotions, feelings & values

- Receiving Willing to listen or see
- Responding Active participation
- Valuing Internalize the worthiness
- Organization Ability to see the value
- Characterization by a value –
- Behavior consistent with a value system

Affective Domain Levels

Level	Description	Verbs
Receiving	Being aware of, or attending to something in the environment.	Listen Notice Tolerate
Responding	Showing some new behavior as a result of experience.	Comply Enjoy Follow
Valuing	Showing some definite involvement or commitment.	Carry out, Express
Organization	Integrating a new value into one's general set of values relative to other priorities.	Choose Consider Prefer
Characterizatio n	Acting consistently with the new value; person is known by the value.	Act on Depict Exemplify

ACTION VERBS APPROPRIATE FOR EACH LEVEL OF AFFECTIVE Domain

Category **Key Words (verbs)** Asks, Chooses, Describes, Follows, Gives, Holds, Identifies, Locates, Names,

Receiving Points To, Selects, Sits, Erects, Replies, Uses.

Answers, Assists, Aids, Complies, Conforms, Discusses, Greets, Helps, Responding Labels, Performs, Practices, Presents, Reads, Recites, Reports, Selects, Tells, Writes.

Completes, Demonstrates, Differentiates, Explains, Follows, Forms, Initiates, Valuing Invites, Joins, Justifies, Proposes, Reads, Reports, Selects, Shares, Studies, Works.

Adheres, Alters, Arranges, Combines, Compares, Completes, Defends, Organization Explains, Formulates, Generalizes, Identifies, Integrates, Modifies, Orders,

Organizes, Prepares, Relates, Synthesizes. Characterization Acts, Discriminates, Displays, Influences, Listens, Modifies, Performs, by Practices, Proposes, Qualifies, Questions, Revises, Serves, Solves, Verifies.

Value

Psychomotor domain

 Physical activities involving gross and/or fine motor skills, such as coordination, dexterity, strength, manipulation, and speed

Psychomotor domain

Psychomotor: manual or physical skills (*Skills*)



(manual and physical skills, ie., **skills**, or '**do**')

Psychomotor domain (manual and physical skills, ie., skills, or 'do')

Le ve l	Category	Behavior description	Examples of activity
1	Imitation	copy action of another; observe and replicate.	watch teacher or trainer and repeat action, process or activity.
2	Manipulation	reproduce activity from instruction and memory.	carry out task from written or verbal instruction.
3	Precision	execute skill reliably, independent of help.	Perform a task or activity with expertise and high quality without assistant or instruction; able to demonstrate an activity to other learners.
4	Articulation	expertise to satisfy a non	Relate and combine association activities to develop methods to meet varying, novel requirement.
5	Naturalization		Define aim, approach and strategy for use of activities to meet strategic need.

ACTION VERBS APPROPRIATE FOR EACH LEVEL OF PSYCHOMOTOR Domain

Level	Category	'key words' (verbs)
1	Imitation	Copy, follow, replicate, repeat, adhere.
2	Manipulation	Re-create, built, perform, execute, implement.
3	Precision	Demonstrate, complete, show, perfect, calibrate, control.
4	Articulation	Construct, solve, combine, co-ordinate, integrate, adapt, develop, formulate, modify, master.
5	Naturalization	Design, specify, manage, invent, project-manage.

Review

Cognitive	Affective	Behavioral
Thinking	Feeling	Doing
Head	Heart	Hands

Goals vs Objectives

- Course goals
 - Describe the overall purpose of the course within the larger curriculum
- Course objectives
 - Break down goals into measurable behaviors that demonstrate competency
 - Ensure successful accomplishment of course goals

Educational aim's

Educational Objectives

Aims are generally difficult to

measure.

Objectives are narrow

Aims are general intentions.

Objectives are precise.

Aims are intangible.

Objectives are tangible.

Aims are abstract.

Objectives are concrete.

Aims are broad

Objectives are measurable.

Characteristic of specific educational objective

- Should be written in behavioral terms (what the student must do)
- Should reflect the condition (under what circumstances)
- Should reflect the standard. (with what degree of skill)
- Should be reasonable in number of behavioral changes expected out of the teaching unit should not be too many or too less usually 4-5 behavioral objectives are stated for a unit.
- Should be consistent (accurate) with unit theme and related to each other and to the unit.
- Should be approximately of some level of generality and specificity.

- Student –teacher objectives
- General objective: At the end of the class or lecture, student will acquire knowledge about lesson plan and can able to plan a lesson.
- **Specific objective**: At the end of the class or lecture, students are able to
 - 1. define lesson plan.
 - 2. know the purposes of lesson plan.
 - 3. understand the prerequisites of lesson plan.
 - 4. enumerate essential characteristics of a good lesson plan.
 - 5. discuss the steps of lesson plan.

Conclusion

It can be said that an educational process without objectives would be like a rudderless ship with neither the teacher nor the learner having any control and final destination may be quite different from the intended.

