

Revised by

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2001.

For better teaching, learning & assessing



The new framework /revised taxonomy of objectives helps the teacher to deliver appropriate instruction & design valid assessment strategies.



The revised framework explains the objective in detailed 2 dimensional way.

According to RBT an objective contains a **verb** & a **noun**.

The verb generally describes the intended cognitive process where as the noun describes the knowledge students are expected to acquire.



For eg the pupil will be able to distinguish (cognitive process) physical change from chemical change (the knowledge).

The revised framework utilizes these two dimensions in the form of matrix to exactly locate the level of cognitive complexity involved in instruction & learning



The two dimensional matrix include,

- The Knowledge dimension &
- The Cognitive process dimension



## The Knowledge dimension

This includes 4 general type of knowledge viz

- Factual knowledge
- Conceptual knowledge
- Procedural knowledge
- Meta-cognitive knowledge



# Factual knowledge

The knowledge that is basic to specific disciplines.

This dimension refers to essential facts, terminology, details or elements students must know or be familiar with in order to understand a discipline or solve a problem in it.



# Factual knowledge

- Knowledge of terminology
- Knowledge of specific details & elements



# Conceptual knowledge

The knowledge of classifications, principles, generalizations, theories, models, or structures pertinent to a particular disciplinary area.



# Conceptual knowledge

- Knowledge of classification & categories.
- Knowledge of principles & generalizations.
- Knowledge of theories, models, and structures



# Procedural knowledge

It refers to information or knowledge that helps students to do something specific to a discipline, subject, or area of study.

It also refers to methods of inquiry, very specific or finite skills, algorithms, techniques, and particular methodologies.



# Procedural knowledge

- Knowledge of subject specific skills & algorithms.
- Knowledge of subject specific techniques & methods.
- Knowledge of criteria for determining when to use appropriate procedures.



# Meta-cognitive knowledge

The awareness of one's own cognition and particular cognitive processes.

It is strategic or reflective knowledge about how to go about solving problems, cognitive tasks, to include contextual and conditional knowledge and knowledge of self.



# Meta-cognitive knowledge

- Strategic knowledge- use of heuristics
- Knowledge about cognitive tasks- including appropriate contextual and conditional knowledge.
- Self knowledge.



## The Cognitive process dimension

This includes 6 categories namely



# The Cognitive process dimension

## Remembering :

Retrieve relevant knowledge from long term memory.



# The Cognitive process dimension

## Understanding :

Constructing meaning from acquired knowledge.

May be oral, written or graphic messages or activities like interpreting, exemplifying, summarizing, inferring, or explaining..



# The Cognitive process dimension

## Applying :

Means using a procedure in a given situation.

Applying refers to situations where learned material is used through products like models, presentations, interviews or simulations.



# The Cognitive process dimension

## Analyzing :

Breaking materials or concepts into parts, determining how the parts relate to one another or how they interrelate, or how the parts relate to an overall structure.



## The Cognitive process dimension

### Evaluating :

Making judgments based on criteria and standards through checking and critiquing.

In the newer taxonomy, evaluating comes before creating as it is often a necessary part of the precursory behavior before one creates something.

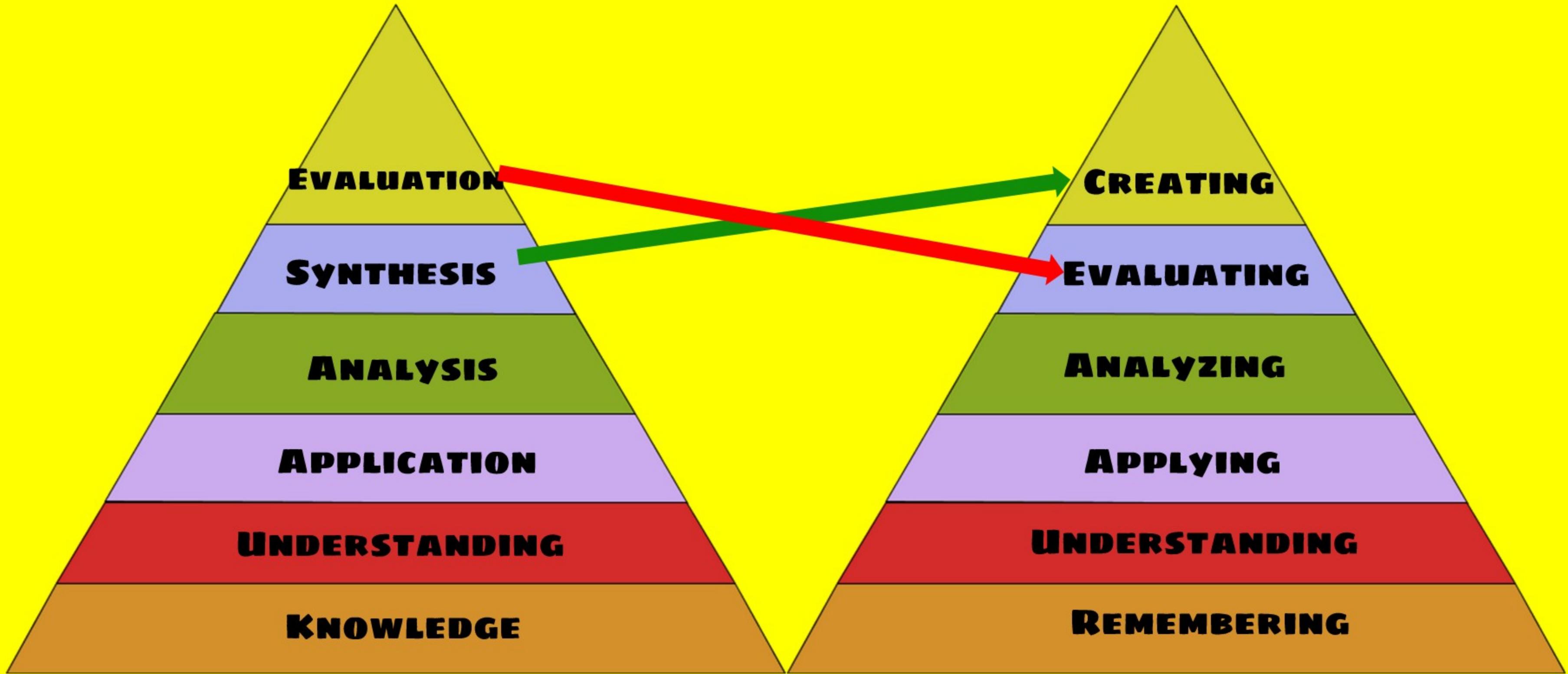


# The Cognitive process dimension

## Creating:

Putting elements together to form a new pattern, coherent whole or to make an original product.





**BT**

**RBT**

KNOWLEDGE DIMENSION	COGNITIVE PROCESS DIMENSION					
	REMEMBERING	UNDERSTANDING	APPLYING	ANALYSING	EVALUATING	CREATING
FACTUAL						
CONCEPTUAL						
PROCEDURAL						
META-COGNITIVE						

The 2 dimensional matrix exactly locates the instructional objective in taxonomy table and thereby helps the teacher to judge the cognitive complexity and knowledge density associated with a segment of learning.



## Main changes in BT.

- Terminology change
- Structural change



## Terminology change

Earlier version listed the objectives in the cognitive domain in noun form whereas verb form in revised.



## Structural change

BT in one dimensional form whereas RBT in 2D  
form - knowledge & cognitive process dimension.

Also a change in the hierarchical classification.

On the older version, evaluation was at the top position,  
whereas in the revised version creating occupies the top  
order.



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