BLOOM'S TAXONOMY OF LEARNING

Dr. Akhtar RASOOL

Assistant Professor & Director
Quality Enhancement Cell

Sharif College of Engineering & Technology, Lahore

HISTORY OF BLOOM'S TAXONOMY

- **Benjamin Samuel Bloom – An American Educational Psychologist**
- **Theory of Mastery Learning (or Effective Learning Process)**
- **Classification of Educational Objectives**
- **Books:**
- **1956 - Taxonomy of Educational Objectives: The Classification of Educational Goals**
- **1964 - Stability and Change in Human Characteristics**
- **1964 - Compensatory Education for Cultural Deprivation**
- **1971 - Mastery Learning: Theory and Practice**
- **1971 - Handbook on Formative and Summative Evaluation of Student Learning**
- **1976 - Human Characteristics and School Learning**
- **1981 - All Our Children Learning: A Primer for Parents, Teachers, and Other Educators**
- **1981 - Evaluation to Improve Learning**
- **1982 - New York**
- **1993 - The Home Environment & School Learning: Promoting Parental Involvement in the Education of Children**
- **2010 - Modern Neuroanesthesia**

MEANING OF BLOOM'S TAXONOMY

Bloom - Benjamin Bloom

Taxonomy - Classification

Bloom’s Work - Outcomes-oriented learning system

So, Bloom’s Taxonomy means:

“Classification of the Learning System”

MORE INTERPRETATIONS/MEANINGS OF BLOOM'S TAXONOMY

Taxonomy of Educational Objectives/Outcomes

Classification of Educational Goals

Classification of the Learning System

Classification of the Thinking Levels

Classification of Educational Levels

Note: Bloom's Taxonomy has since become a standard tool for developing educational objectives, assessments, and activities.

PURPOSE OF BLOOM'S TAXONOMY

It helps educators develop critical thinking and higher order cognitive abilities in students.

It helps to provide a framework or organization for classifying classroom lesson objectives so that to gauge the competence of the students/graduates.

LEARNING DOMAINS/ LEARNING PROCESS

- **COGNITIVE:** Related to **Brain/mental** activity such as Cramming
- **AFFECTIVE:** Related to **Emotions/Feelings** such as interests/fascinating
- **PSYCHOMOTOR:** Related to Conative such as body movements/active processes/manual or **physical skills**

Note: Involving **all three above domains** actually **accomplishes or ensures** the successful learning or learning process.

LEARNING DOMAINS CONT.

Further in different words,

the **cognitive part** of the brain has **to do with intelligence**,

the **affective part deals with emotions/attitudes** and

the **psychomotor/conative part drives how one acts on those thoughts and feelings**.

Note: It has further levels related to each domain, which determine/ ensure the expertise/ proficiency level of the students' learning.

COGNITIVE DOMAIN OF LEARNING

Relating to mental processes of memory, judgement, perception, reasoning etc.

Consists of the lowest, lower, low, high, higher and the highest levels of thinking processes (6 Levels).

Thinking levels lead to learning levels or LEARNING.

Learning levels are like Learning Stairs, students need to climb to become the best performers.

COGNITIVE DOMAIN CONT.

Lower levels are relatively simple ones and higher levels are the complex ones.

Without mastering the lower levels, higher levels cant be reached, it is that simple to understand.

Lower levels are concrete/solid and the higher levels are relatively becoming abstract until these becomes completely abstract (existing in thoughts only).

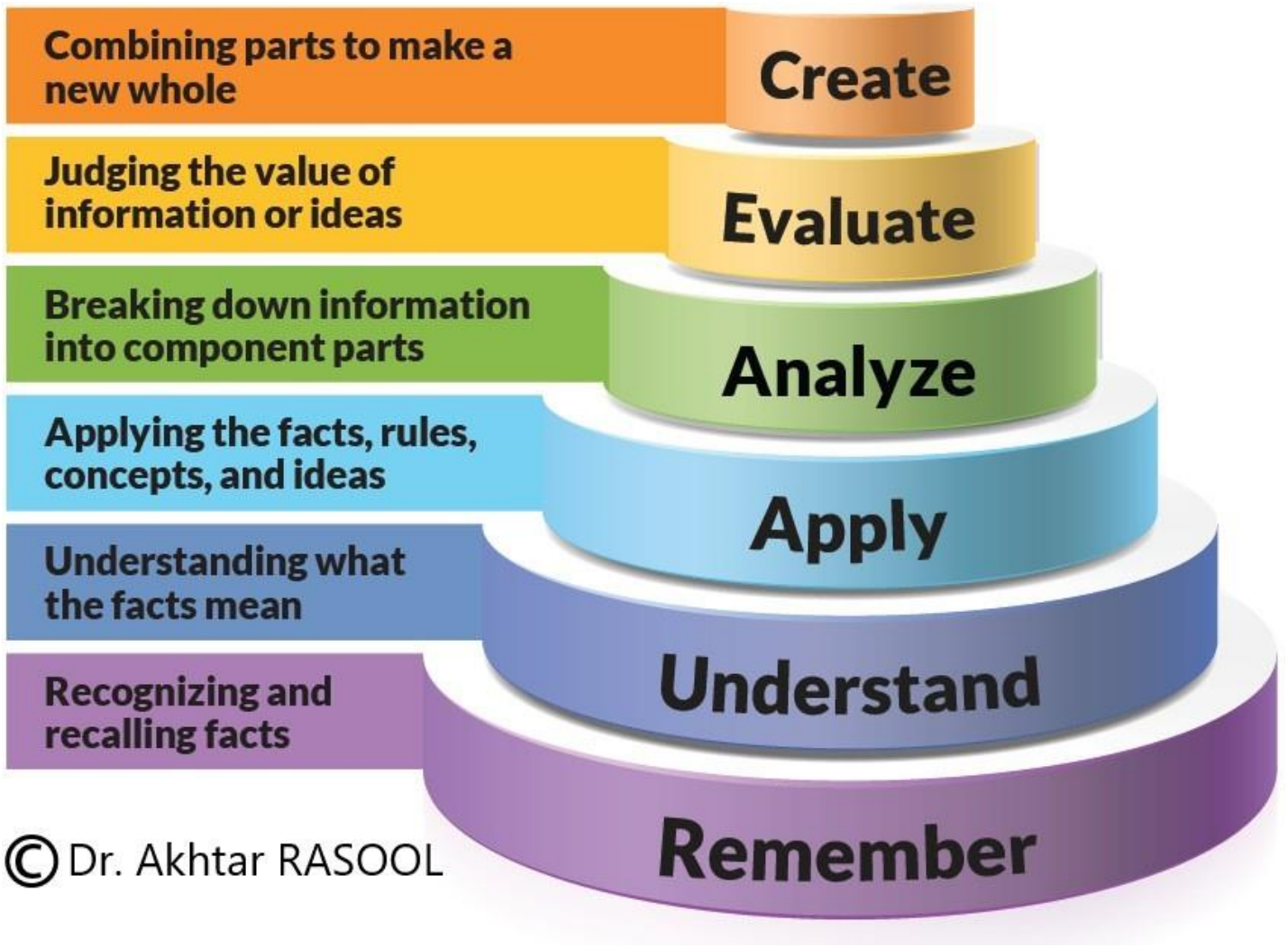
COMPLEXITY LEVELS OF COGNITIVE DOMAIN (KCAASE)

1. **REMEMBER** **(KNOWLEDGE)**	**Remembering something in the same way it is written or told.**
2. **UNDERSTAND** **(COMPREHENSION)**	**Understanding something and describing or writing in own words.**
3. **APPLY** **(APPLICATION)**	**Using learned things in daily life or new situations.**

COMPLEXITY LEVELS OF COGNITIVE DOMAIN (KCAASE) CONT.

4. ANALYZE (ANALYSIS)	**Synthesizing/Breaking something into parts so to understand.**
5. EVALUATE (EVALUATION)	**Comparing to find out which one is best and which one is bad etc., compare to figure out which one to select, to be able to differentiate/categorize.**
6. CREATE (SYNTHESIS)	**Recombining the learned methods/physical objects in a novel way to create something new, possible only if we know everything to the best/ state of the art.**

COGNITIVE DOMAIN LEVELS (BOTTOM-UP APPROACH)

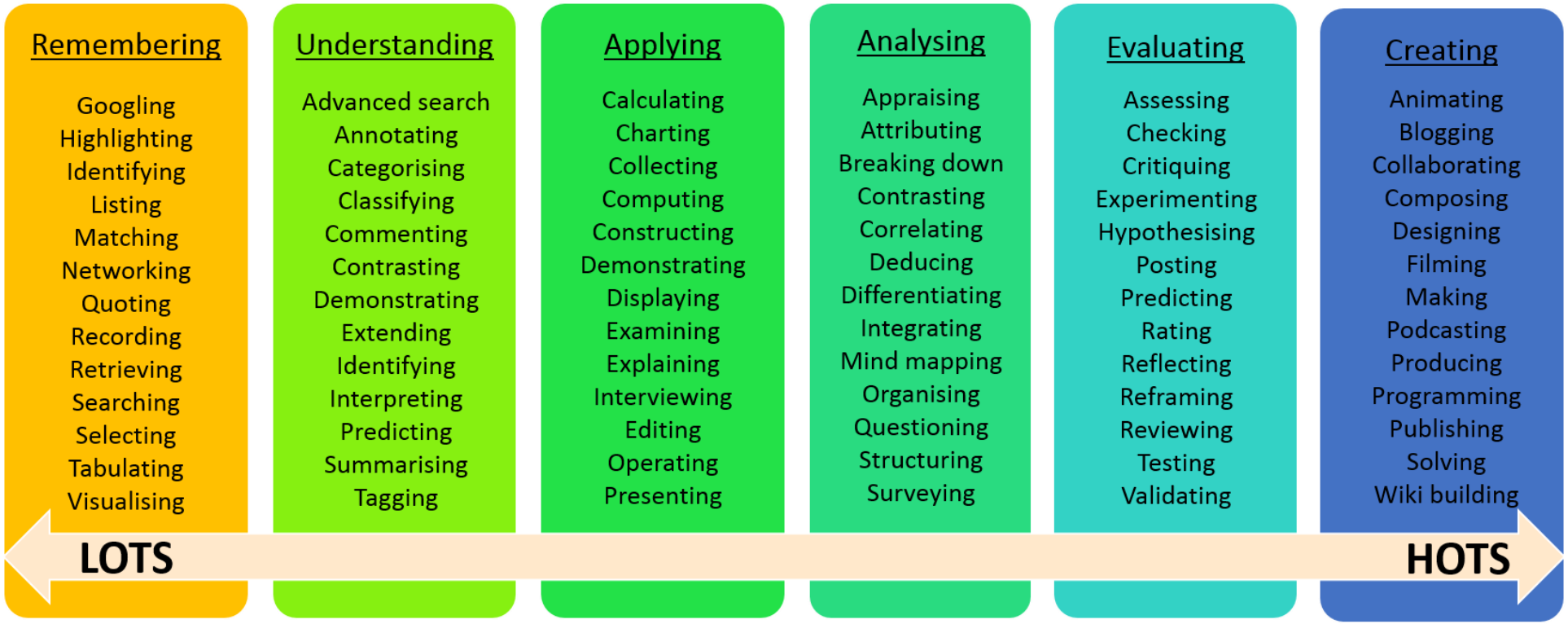


LEVEL-WISE DESCRIPTIVE WORDS & VERBS)

Different levels have descriptive words to help the educators to understand and explain simply.

Verb tables have been created to align with levels of Bloom's taxonomy.

DESCRIPTIVE WORDS OF COGNITIVE LEVELS



Bloom's Digital Taxonomy