What is Bloom's Taxonomy?

Bloom and his colleagues (1956) proposed that knowing is actually composed of six successive levels arranged in a hierarchy: Knowledge, Comprehension, Application, Analysis, Synthesis, and Evaluation.

Bloom's Taxonomy attempts to divide cognitive objectives into subdivisions ranging from the simplest behavior to the most complex. There are six levels of Bloom's Taxonomy.

1. Knowledge is defined as the remembering of previously learned material. It requires the learners to bring appropriate information to mind. Examples include: knowledge of common terms, specific facts, methods and procedures, basic concepts, and principles, among others.

2. Comprehension is defined as the ability to grasp the meaning of material. This may involve translating material from one form to another (words to numbers), interpreting material (explaining or summarizing), and estimating future trends (predicting consequences or effects). Examples include: to understand facts and principles, to interpret verbal material, to interpret charts and graphs, to translate verbal material to mathematical formulae, and to justify methods and procedures.

3. Application refers to the ability to use learned material in new and concrete situations. This may include the application of such things as rules, methods, concepts, principles, laws, and theories. Examples includes: apply concepts and principles to new situations, apply laws and theories to practical situations, solve mathematical problems, construct graphs and charts, and demonstrate the correct usage of a method or procedure.
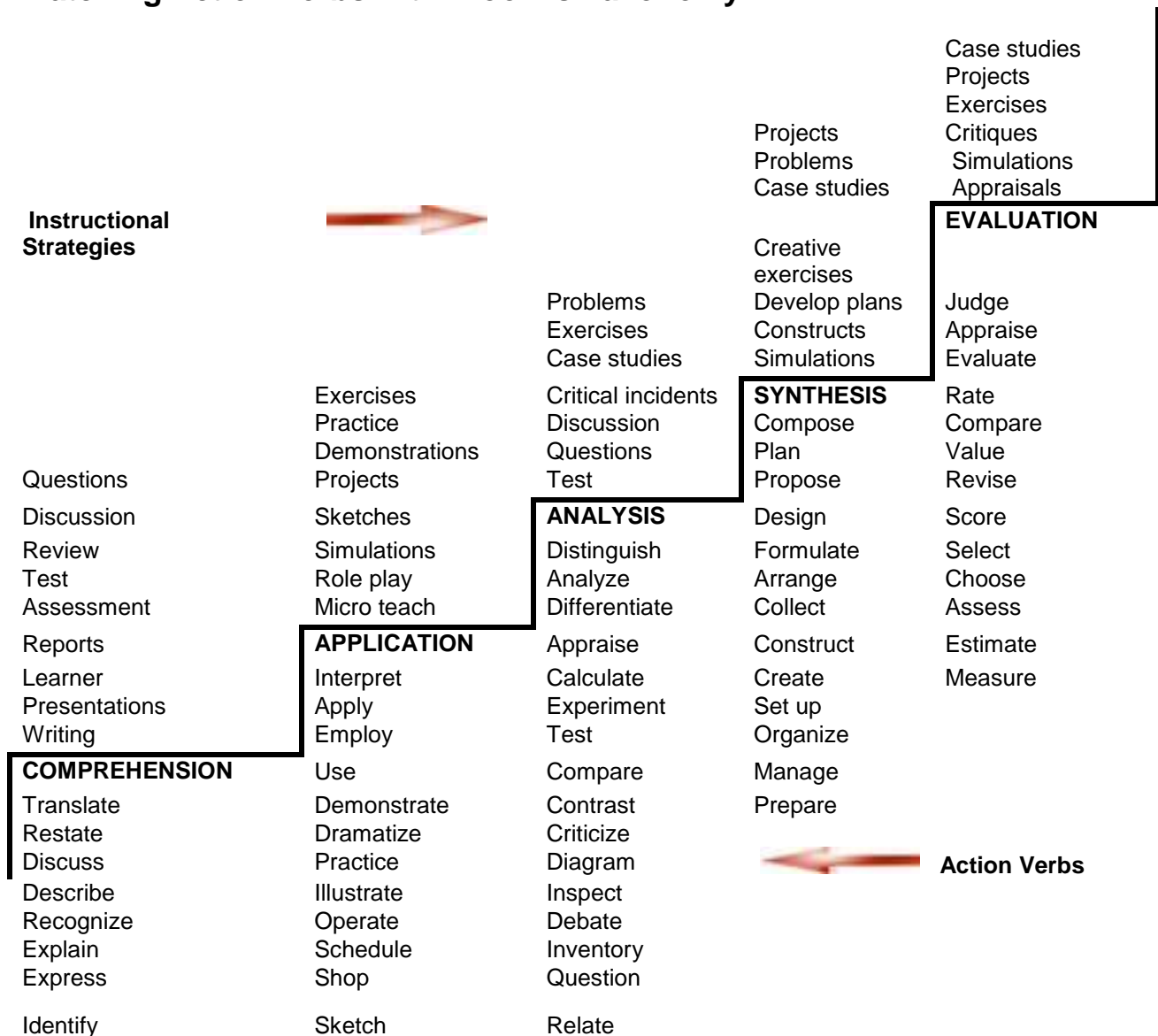
4. Analysis refers to the ability to break down material into its component parts so that its organizational structure may be understood. Analysis may include the identification of parts, the analysis of the relationship between parts, and the recognition of the organizational principles involved. Examples include: to recognize unstated assumptions, to recognize logical fallacies in reasoning, to distinguish between facts and inferences, and to analyze the organizational structure of a work, such as art, music, and writing.

5. Synthesis refers to the ability to put parts together to form a new whole. This may involve the production of a unique communication (theme or speech), a plan of operations (research proposal), or a set of abstract relations (scheme for classifying information). Examples include: to write a well organized theme, to give a well organized speech, to propose a plan for an experiment, and to formulate a new scheme for classifying objects.

6. Evaluation refers to the ability to judge the value of material (statement, novel, poem, research report). The judgments are to be based on definite criteria, which can be internal criteria (organization) or external criteria (relevance to the purpose). Examples include: to judge the logical consistency of written material, to judge the adequacy with which conclusions are supported by data, and to judge the value of a work.

Oklahoma State University (n.d.). Institute for Teaching and Learning Excellence.
From: http://itle.okstate.edu/fd/online_teaching/effectiveobjectives.html

Matching Action Verbs with Bloom's Taxonomy

Case studies
Projects
Exercises
Critiques
Projects   Simulations
Problems   Appraisals
Case studies

Instructional Strategies ➤

EVALUATION

Creative exercises

Problems   Develop plans   Judge
Exercises   Constructs   Appraise
Case studies   Simulations   Evaluate

Exercises   Critical incidents   **SYNTHESIS**   Rate
Practice   Discussion   Compose   Compare
Demonstrations Questions   Plan   Value
Questions   Projects   Test   Propose   Revise

Discussion   Sketches   **ANALYSIS**   Design   Score

Review   Simulations Distinguish   Formulate   Select
Test   Role play   Analyze   Arrange   Choose
Assessment   Micro teach Differentiate   Collect   Assess

Reports   **APPLICATION** Appraise   Construct   Estimate

Learner   Interpret   Calculate   Create   Measure
Presentations Apply   Experiment   Set up
Writing   Employ   Test   Organize

COMPREHENSION Use   Compare   Manage

Translate   Demonstrate Contrast   Prepare
Restate   Dramatize   Criticize
Discuss   Practice   Diagram
Describe   Illustrate   Inspect   ◄ **Action Verbs**
Recognize   Operate   Debate
Explain   Schedule   Inventory
Express   Shop   Question

Identify   Sketch   Relate

Checklist for Writing Learning Objectives

(√) Focus on outcomes, not processes.
(√) Use an action verb that can be measured; avoid vague verbs such as *know* or *understand.*
(√) Use only one action verb per learning outcome.
(√) Action verbs should reflect the level of learning required.
(√) Begin with "Student will be able to…"
(√) Outcomes are observable and measurable.