

Blooms + Assessment

The following chart builds upon Bloom's Cognitive Taxonomy, Revised (Anderson & Krathwohl, 2001). Additions and expansions included: expanding the knowledge dimension, and including the instructional foci. Strategies for ensuring the effective assessment include:

- Clearly stated, and aligned objectives with activity, product, or outcome of instructional event.
- Development of rubrics that describe levels of achievement.
- Learner constructed rules, conventions, protocols, or grading schemes.
- Identified levels of attainment. This accommodates different entry-level knowledge and skills of the learner. If using this approach, you cannot excuse the learner for **not** learning course content, but learners may be able to demonstrate their learning in different ways. Consider attainment levels related to:
 - Grades. "In order to get an A, B, C, D, F you will be expected to do..."
 - Proficiency: novice, intermediate, approaching expertise.
 - Academic goals. Helping students understand where they have been in their understanding, where they are now and where they can go can be motivating in achieving academic goals.

In part taken from Anderson, L. W., & Krathwohl, D. R. (Eds.). (2001). *A taxonomy for learning, teaching and assessing: A revision of Bloom's Taxonomy of educational objectives. Complete edition*. New York : Longman.

An Overview of Bloom's Taxonomy, Revised

Instructional Focus	Knowledge Dimension	Cognitive Process Dimension					
		Remember	Understand	Apply	Analyze	Evaluate	Create
Memorization	Factual Knowledge	Recognition Recalling	Interpreting	Executing	Differentiating	Checking	Generating
Providing examples and non-examples, identify attributes	Conceptual Knowledge	Recognition Recalling	Exemplifying Classifying Summarizing Comparing	Executing	Differentiating	Checking	Generating
Illustrations in different contexts, generalize to many instances	Principle Knowledge	Recalling	Summarizing Comparing	Executing	Differentiating	Checking	Generating
Provide steps, re-order, practice, order	Procedural Knowledge	Recalling	Explaining	Executing	Differentiating	Checking	Generating
Presentation or introduction of the problem, analysis of problem, means-end or difference reduction	Problem Solving	Recognition Recalling	Comparing Explaining	Executing Implementing	Differentiating, Organizing, Attributing	Critiquing	Planning
Assign tasks, accountability, clear procedure, strategy for oversight of parts as relate to the whole	Collaboration		Comparing Explaining	Executing Implementing	Organizing Attributing	Critiquing	Planning, Producing
Assign roles, accountability, clear procedure	Cooperation		Comparing Explaining	Executing Implementing	Organizing Attributing	Critiquing	Planning, Producing

Examples of Technology Applications + Bloom’s Taxonomy, Revised

Instructional Focus	Knowledge Dimension	Cognitive Process Dimension					
		Remember	Understand	Apply	Analyze	Evaluate	Create
Memorization	Factual Knowledge	Clickers- Fill in the blank Quiz	Slideshow	Games	Games	Simulation	Simulation Animation
Providing examples and non-examples, identify attributes	Conceptual Knowledge	Clickers- Matching Quiz	Bookmarking Slideshow Concept Mapping	Presentation Animation	Concept Mapping Visualization	Bookmarking	Simulation Animation
Illustrations in different contexts, generalize to many instances	Principle Knowledge	Clickers- Multiple choice Quiz	Podcast Slideshow	Games Mashups	Concept Map Polling/Surveying	Bookmarking	Animation Podcast
Provide steps, re-order, practice, order	Procedural Knowledge	Clickers- - Ordering Quiz	Concept Mapping	Games Simulations	Concept Mapping Visualization	Video	Video Vlogging
Presentation or introduction of the problem, analysis of problem, means-end or difference reduction	Problem Solving	Polling/ Surveying	Concept Mapping Video Presentation	Games Simulation	Polling/Surveying	Video Bookmarking	Vlogging Publication Presentation
Assign tasks, accountability, clear procedure, strategy for oversight of parts as relate to the whole	Collaboration	Blog Wiki RSS	Wiki Concept Mapping Discussion	Virtual Worlds VCOP	VCOP Concept Mapping	Blog VCOP Wiki	Publication Presentation
Assign roles, accountability, clear procedure	Cooperation	Blog Wiki RSS	Wiki Discussion	Virtual Worlds	VCOP	Blog VCOP Wiki	Publication Presentation