Bloom’s Taxonomy

Caren M. Stalburg, MD MA
Clinical Assistant Professor
Obstetrics and Gynecology and Medical Education

Unless otherwise noted, this material is made available under the terms of the Creative Commons Attribution Share Alike-3.0 License: http://creativecommons.org/licenses/by-sa/3.0/
Module 2: Intended Learning Outcomes

• Understand the variety of learning domains within health professions education
• Apply Bloom’s Taxonomy to cognitive learning outcomes
• Understand Miller’s pyramid as it relates to clinical competence outcomes
• Apply Dreyfus’ model of skill acquisition to your context of medical education
Learning Domains

• Cognitive
  – Knowledge
• Psychomotor
  – Skills
  – Behavior
• Affective
  – Attitudes
Hierarchical domains

- Knowledge: data recall
- Comprehension: understands for meaning
- Application: uses learning in a novel situation
- Analysis: understands elements and relationships
- Synthesis: formulates new knowledge
- Evaluation: judge information or ideas
Bloom’s Taxonomy, 1956

Knowledge

Comprehension

Application

Analysis

Synthesis

Evaluation

Simple/Concrete

Complex/Abstract
Knowledge
Define, describe, identify, know, label, list, match, outline, recall, select, state

Comprehension
Comprehend, convert, describe, discuss, explain, give example(s), paraphrase, recognize

Application
Apply, construct, demonstrate, discover, modify, prepare, show, solve, write

Analysis
Analyze, compare, contrast, diagram, differentiate, illustrate, outline, select, separate

Synthesis
Categorize, combine, compose, explain, organize, relate, revise, summarize

Evaluation
Appraise, compare, conclude, defend, describe, evaluate, judge, interpret, predict, support
Modification to Bloom’s

• Factual knowledge
  – Terminology, dates, elements
• Conceptual knowledge
  – Classifications, categories, principles, generalizations, theories, models, structures
• Procedural knowledge
  – Subject specific skills, algorithms, techniques, methods, criteria for use of specific techniques
• Metacognitive knowledge
  – Strategic, contextual and conditional knowledge, self-knowledge

Krathwohl, 2001
Revised Taxonomy

- Create
- Evaluate
- Analyze
- Apply
- Understand
- Remember

Krathwohl, 2001