Evaluation

A. Definition: Evaluation is the process by which the teacher assesses the learners’ knowledge, skills and attitudes, based on criteria related to educational goals.

B. Educational Purpose of This Category

C. Types of Evaluation (summative, formative)

D. Key Components & Specific Teaching Behaviors

1. Observation of Learners
   Teaching behavior:
   • Observe learner’s performance

2. Questioning
   • Forms of Questions
     - open-ended questions (what? how? why?)
     - closed-ended questions (do? can? have?)
   • Wait Time

   Teaching behaviors:
   • Ask questions to assess knowledge
     Types: - Fundamental (basic, foundational, background)
     - Applied (practical, problem solving, operational)
     Levels: Cognitive complexity required for answering
     - Recall (lower complexity)
     - Analysis or synthesis (higher complexity)
     (1) Fundamental x Recall Knowledge
        (memorization/retrieval of scientific/medical information)
        Ex: “What are the major causes of renal failure?”
     (2) Fundamental x Analysis/Synthesis
        (higher cognitive processing; e.g., determine relationship between aspects
        of a topic; combine diverse concepts into a coherent whole; apply deductive reasoning)
        Ex: “How would you contrast the etiologies of renal failure?”
     (3) Applied x Recall
        (application of recalled knowledge to a specific patient, case, clinical scenario)
        Ex: “What is this patient’s BUN?”
     (4) Applied x Analysis/Synthesis
        (application of analyzed/synthesized knowledge to a specific patient, case, clinical scenario)
        Ex: “What is your diagnostic plan for this patient?”

   • Ask questions to assess skills
     Level of difficulty
     - Simple Ex: “Can you show me how me how to percuss the abdomen?”
     - Complex Ex: “Can you demonstrate placement of a central line?”

   • Ask questions to assess attitudes
     Exs: “What behaviors do you feel are important for showing collegial respect?”
     “What factors are influencing your choice of medical subspecialty?”
     “How are your feelings about patients with prescription narcotics dependency affecting your treatment
     of this patient?”

3. Assessing Self-Assessment
   Teaching behavior:
   • Ask learner to self-assess
     Exs: Knowledge:
     Fundamental Recall – “How would you assess your memory of the major causes of hepatic coma?”
     Applied An/Synth – “Do you think your knowledge base is adequate to take care of this patient?”
     Skill: “Are you comfortable with your skill in placing an arterial line?”
     Attitude: “How would you assess the level of respect you showed to the patient we just saw?”