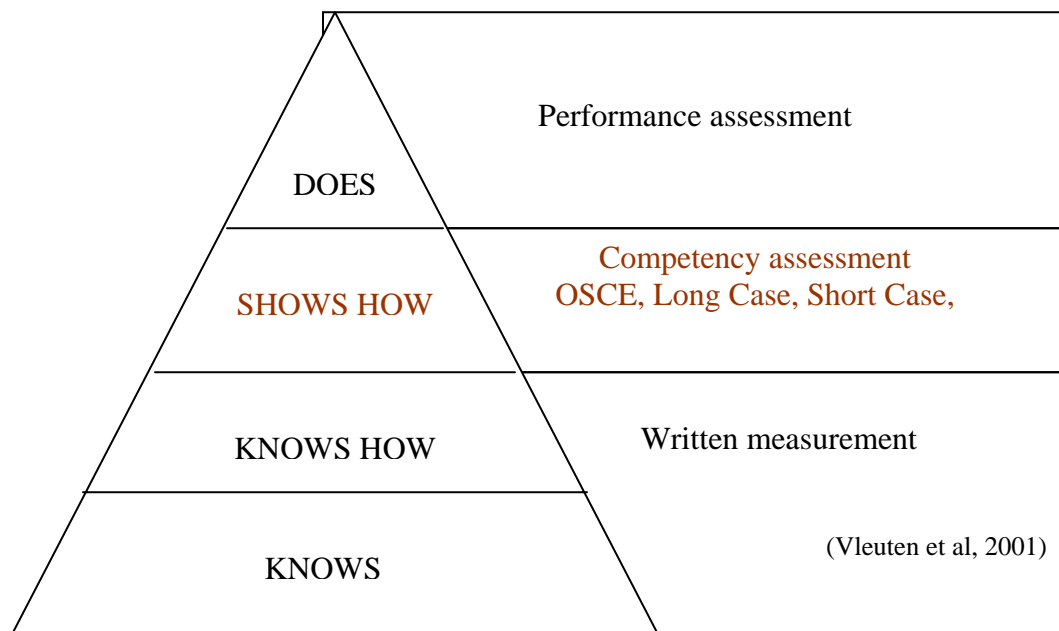
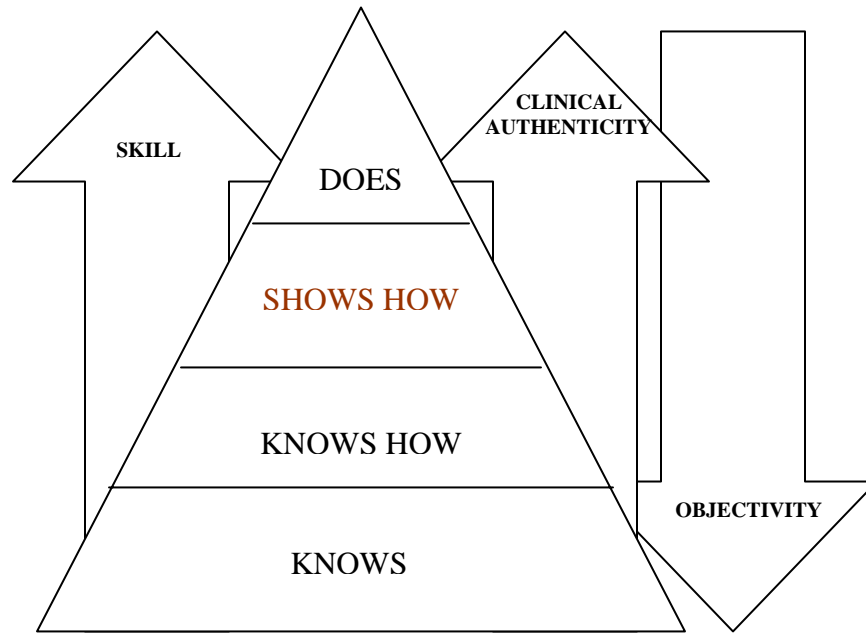


## ASSESSMENT OF “SHOW HOW”

Miller’s Pyramid (1990)



We will discuss more about **OSCE** (Objective, Structured, Clinical, Examination)

## OSCE

1. Objective, Structured, Clinical (competence?) Examination
  - Developed in 1979 (Harden & Gleeson, 1979)
  - Candidates rotate through a series of stations at which they carry out the task
  - All candidates are given the same task and judged by the same judges using the same preset standards
  - Not a method but a framework
2. Some Basic Ground Rules:
  - Multiple stations; each testing different competencies
  - Each station has a time limit
  - All candidates rotate through all stations
  - All candidates judged by the same preset standards e.g.
    - Checklist
    - Rating scale
3. The OSCE can test:
  - Skills
    - History-taking, physical examination, procedures, communication, interpersonal skills
  - Knowledge and understanding
  - Data interpretation
  - Problem-solving
  - Attitude (caution)
4. Using many methods
  - Short-case
  - Oral exam
  - Interpretation of laboratory results and images
  - Specimens
  - Diagrams

- Standards patients.... Etc

#### 5. OSCE strengths

- Sampling
  - Higher than traditional methods
  - Samples across all sources of variability
    - 1 examiner for 1 station for all students better than 1 examiner for 1 student for all stations
  - Role of blueprinting and number of stations
- Objective
  - Objectivity vs. objectification
    - Objective not equal with reliable
    - Global ratings vs. checklist
- Authentic
  - Role of blueprinting
- Educational impact
  - Caution: can be negative or positive impact

#### 6. OSCE disadvantages

- Compartmentalization of the skills
- Sampling is critical
- Resource intensive
  - Facilities
  - Training

#### 7. OSCE blueprinting

- Critical to ensure sampling of competencies
- Can be simple list to complex grid
- According to role/competencies expected

Blueprint: determining competencies

	Take relevant history	Perform relevant examination	Communicates effectively with patient	Able to interpret investigations
CARDIOVASCULAR SYSTEM				
Bluish discoloration of lips	SP of mother complaining about baby			
Chest pain		Examine for signs of risk factors for heart disease on SP/patient		
Shortness of breath			Advises SP on taking sublingual GTN	
Fever and joint pain				Reading CXR with cardiomegaly
Calf pain on walking		√		
RESPIRATORY SYSTEM				
GASTROINTESTINAL SYSTEM				

8. Developing stations

- Station types
  - Marker stations
    - Students answer written questions, recode findings or interpret patient data
    - Does not need observer
  - Examiner stations
    - Observer scores student performance
    - Usually involves SP or mannequin
    - Global rating scales
      - Broad categories for marking
      - Use of expert raters

- Discriminates better than using checklist
- Checklist
  - Danger of trivialisation/atomization
  - Use of non-expert
- Stations
  - Problem of content specificity
    - Large number of stations required (around 20)
  - Time per station: 5 – 30 minutes
  - Achieving acceptable reliability of 0.8
    - 4 to 8 hours of testing needed
    - Overcoming
      - Combination with other formats
      - Even with written tests

9. End notes:

- It needs to be emphasized that
  - The OSCE does not replace all other examination formats
  - Knowledge testing and writing skills are still more efficiently tested in written examinations
  - There is still a place for other 'traditional formats'