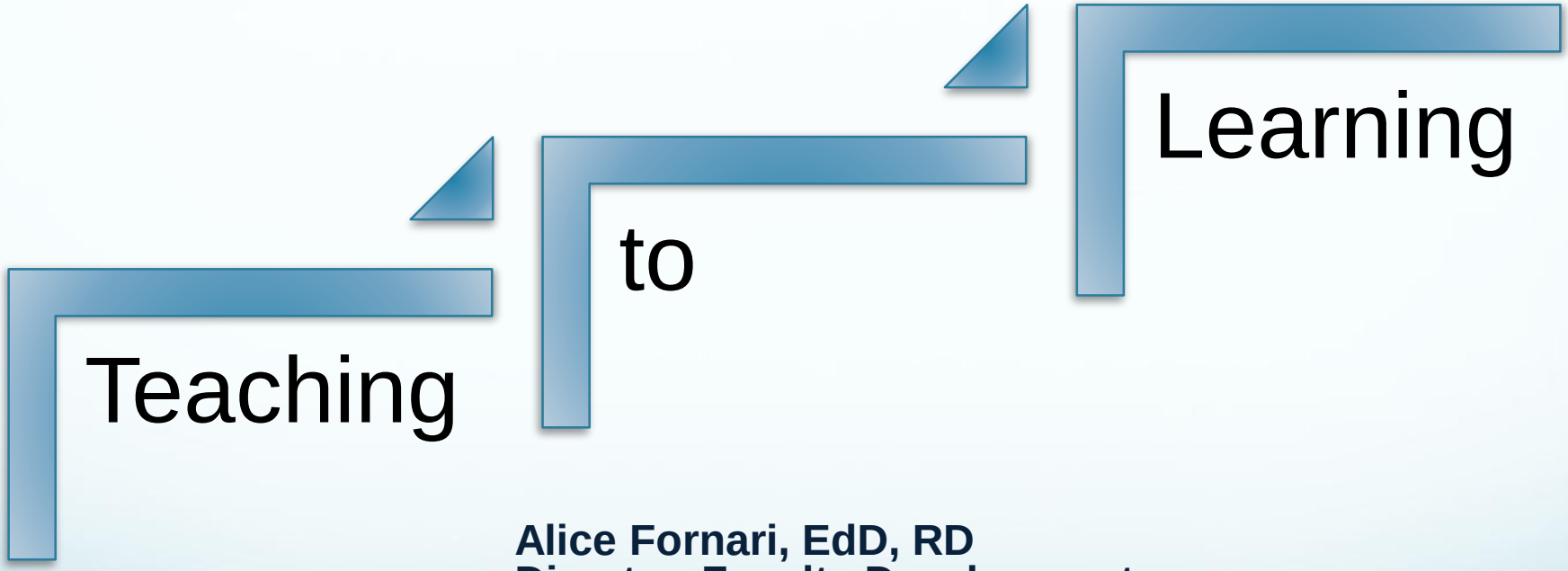
Learner Centered Approaches in Medical Education *Adding Significance*

"From Teaching to Learning"



Alice Fornari, EdD, RD
Director, Faculty Development
Associate Dean, Educational Skills Development
Hofstra North Shore LIJ School of Medicine

North Shore LIJ

HOFSTRA NORTH SHORE-LIJ SCHOOL of MEDICINE AT HOFSTRA UNIVERSITY

Objectives

In a teaching moment,

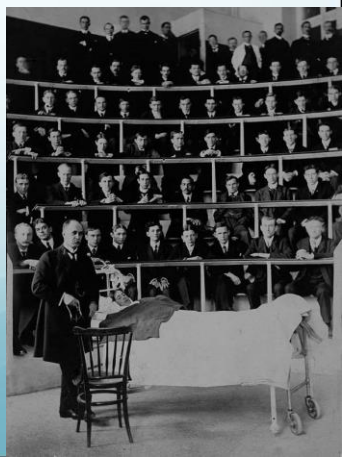
- Align teaching with knowledge, skills and attitudes for the 6 ACGME competencies
- Identify the diversity of questions to be used when teaching
- Identify observable behaviors
- Value collaborative feedback as a coaching/feedback model
- Identify key steps in collaborative feedback
- Assess competence

Father of Modern Medicine

Sir William Osler ……

"In what may be called the natural method of teaching the *learner* begins with the patient, continues with the patient, and ends his studies with the patient, using books and lectures as tools, as means to an end." 1901

"How can we make the work of the student…practical…? The answer is, take him from the lecture room, take him from the amphitheater — put him in the outpatient department — put him in the wards." 1903



Abraham Flexner (1910)

"On the pedagogic side, modern medicine, like all scientific teaching, is characterized by activity. The 'student' no longer merely watches, listens, memorizes: he does. His own activities in the laboratory and in the clinic are the main factors in his instruction and discipline. Since education nowadays involves both learning and learning how; the 'student' cannot effectively know, unless he knows how."

Neuro Teaching Case

- A 64-year-old man suffers a sudden loss of consciousness while walking through an airport. Several bystanders rush to his side, ascertain that he is not breathing, and initiate CPR. Paramedics are called and arrive 6 minutes later. Under the guidance of medical command at a local hospital, the paramedics initiate an ACLS protocol without hypothermic protocol. Resuscitation continues for a total of 30 minutes, and eventually a pulse and stable rhythm are obtained, after which the patient is transported rapidly to the hospital.

- The patient is brought directly to the intensive care unit, where he is evaluated by a critical care specialist and a neurologist. The first evaluation in the unit reveals that the patient has no purposeful movements, is unarousable and non responsive to any stimuli- either verbal or noxious. There is intermittent jerking movements of arms and legs. CT scan reveals massive swelling of the brain and sulcal effacement.

- What is your teaching goal for this case? What is your learner level?

- How will you assess knowledge and skills?
  - Specific knowledge? Which skills?

- What are observable behaviors to assess competence?

- Which competencies do you want to address?

Institutional Reasons
ACGME: Competency-Based Education

Learning

Teaching

Educational
Outcomes

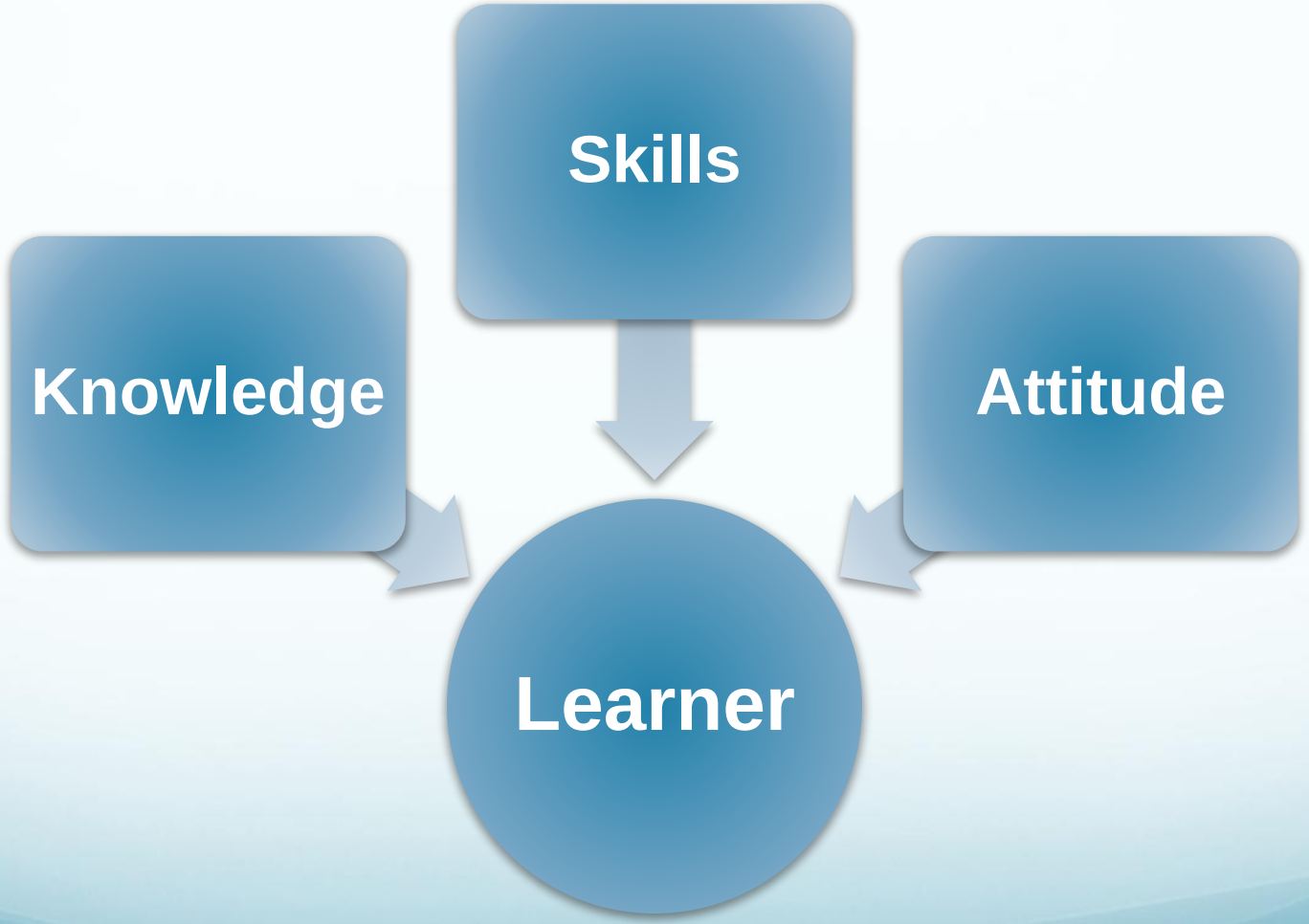
Outcome project: Six Competencies

Focuses on learner performance in reaching specific goals and objectives in a curriculum

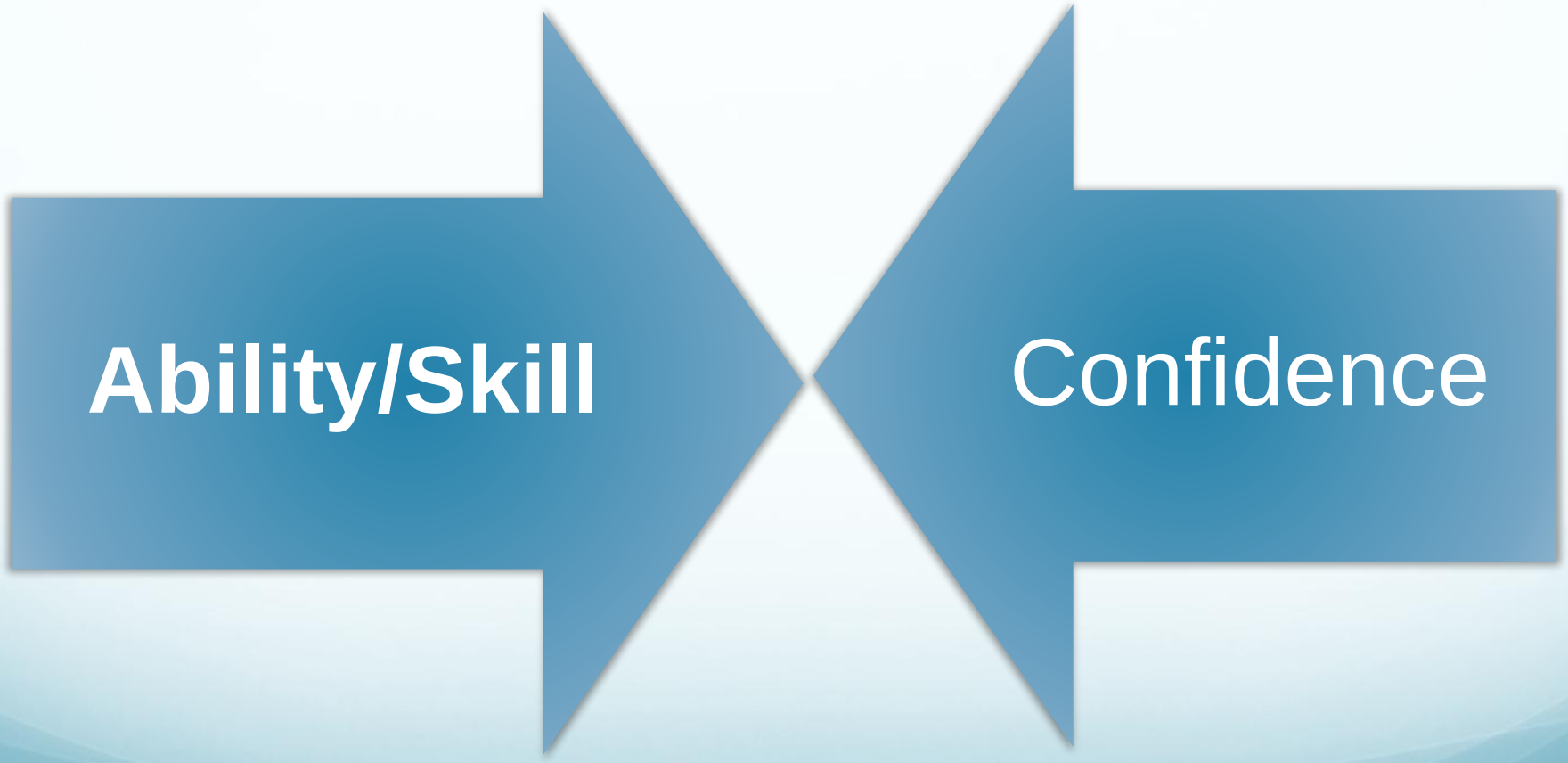
1. **Medical Knowledge**
2. **Patient Care**
3. **Practice Based Learning & Improvement**
4. **Systems Based Practice**
5. **Professionalism**
6. **Interpersonal & Communication Skills**

Introduction to Competency-Based Residency Education. ACGME. Joyce, 2006

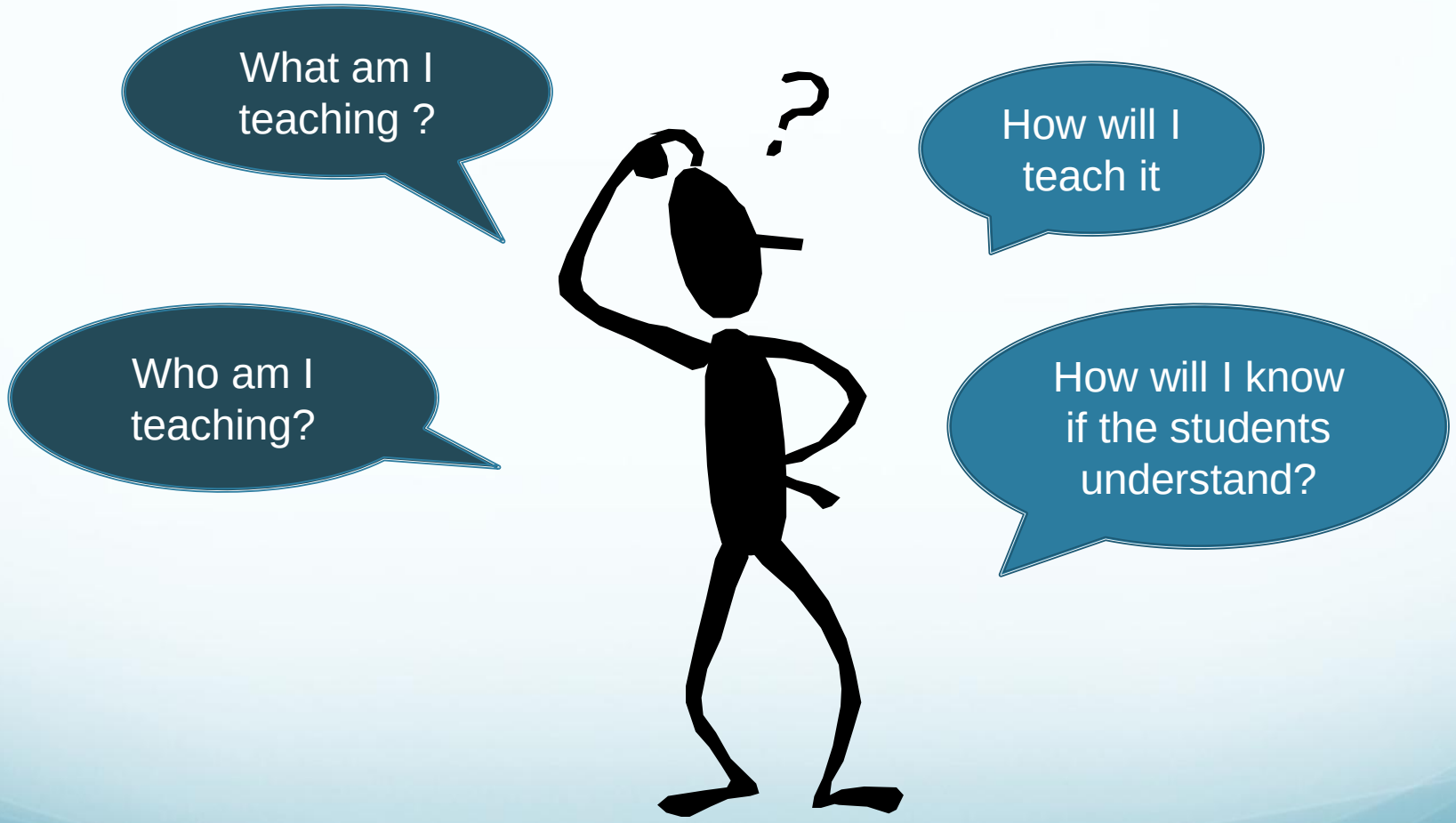
What is Your Role as a Teacher?



Our Goal



Questions to ask yourself when planning a clinical teaching session



Diagnosis Your Learner:
How to use learning theory in teaching?

Help trainees to identify what they already know

- "Activate" prior knowledge through brainstorming and briefing

Help trainees elaborate their knowledge

- Provide a bridge between existing a new information- for example, use of clinical examples, comparisons, analogies
- Debrief with trainees afterwards
- Promote discussion and reflection
- Provide relevant but variable contexts for the learning

Neuro Teaching Case

- **A 64-year-old man suffers a sudden loss of consciousness while walking through an airport. Several bystanders rush to his side, ascertain that he is not breathing, and initiate CPR. Paramedics are called and arrive 6 minutes later. Under the guidance of medical command at a local hospital, the paramedics initiate an ACLS protocol without hypothermic protocol. Resuscitation continues for a total of 30 minutes, and eventually a pulse and stable rhythm are obtained, after which the patient is transported rapidly to the hospital.**

- **The patient is brought directly to the intensive care unit, where he is evaluated by a critical care specialist and a neurologist. The first evaluation in the unit reveals that the patient has no purposeful movements, is unarousable and non responsive to any stimuli- either verbal or noxious. There is intermittent jerking movements of arms and legs. CT scan reveals massive swelling of the brain and sulcal effacement.**

- **What is your teaching goal for this case? What is your learner level?**

- **How will you assess knowledge? Skills? Which skills?**

- **What are observable behaviors to assess competence?**

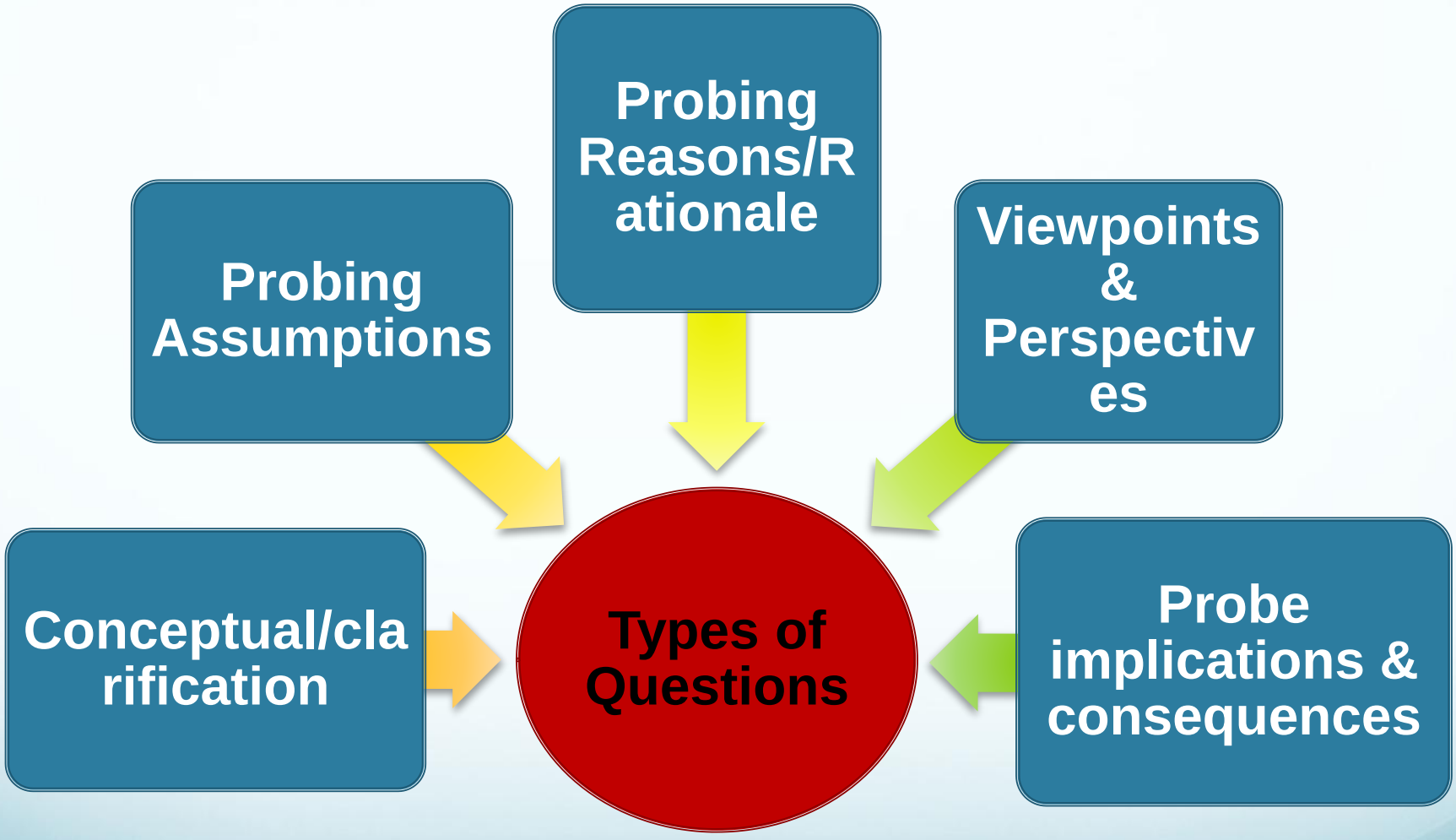
- **Which competencies do you want to address?**

Common Problems with Teaching

- Lack of clear objectives and expectations
- Focus on factual recall rather than on development of problem solving skills and attitude
- Teaching pitched at the wrong level (usually too high)
- Passive observation rather than active participation of learners
- Inadequate supervision and provision of feedback
- Little opportunity for reflection & discussion

Challenges of Teaching

- Time Pressures
- Competing demands-clinical (especially when needs of patients and trainees conflict); administrative; research
- Often Opportunistic-makes planning more difficult
- Increasing numbers of diverse learners
- Often under-resourced
- Environment not “teaching friendly”
- Rewards and recognition for teachers poor

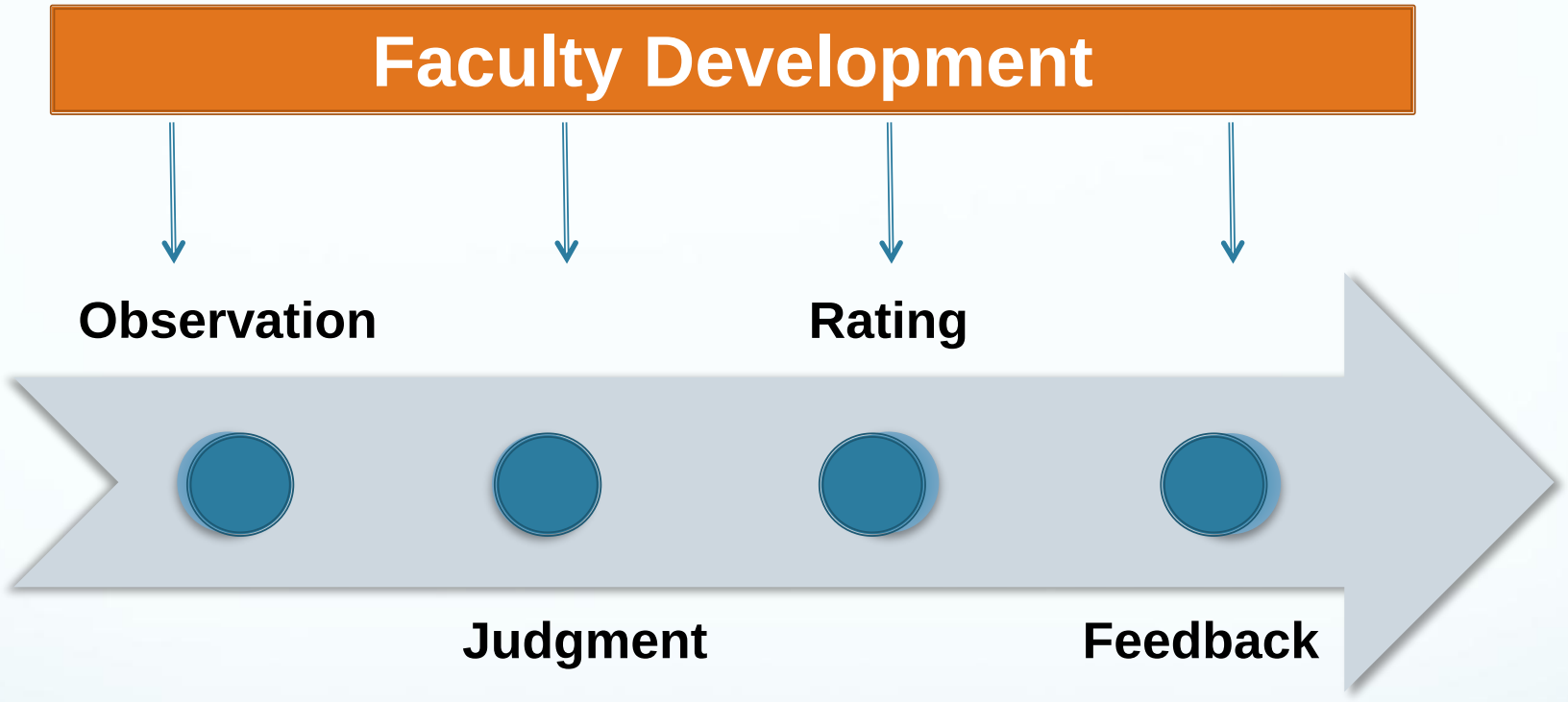

Probing Reasons/Rationale
Probing Assumptions
Viewpoints & Perspectives
Conceptual/clarification
Types of Questions
Probe implications & consequences

General Guidelines for Questioning

- Think along with the learner
- There are Always a Variety of Ways You Can Respond
- Do Not Hesitate to Pause and Reflect Quietly
- Keep Control of the Discussion
- Periodically Summarize
- Assess where the discussion Is:
  - What Questions are Answered; What Questions are Yet Unresolved

Question of Competence

What is Competence, one of the biggest shifts in medical education?


Faculty Development
Observation
Rating
Judgment
Feedback

Observation → Rating

- These lenses influence the interpretation and synthesis of the observation data into a rating (1…9 scale)
- Often, the process is not neat, predictable or straight forward?
- Is a ripe area for faculty development

How do we as educators accept the complexity of this high stakes task?

- What is the conversation/discourse required to approach and implement the task of assessing competence?
- Who is in the conversation/discourse?
- What is the role of direct observation?

*Overall Assessment of Yourself:

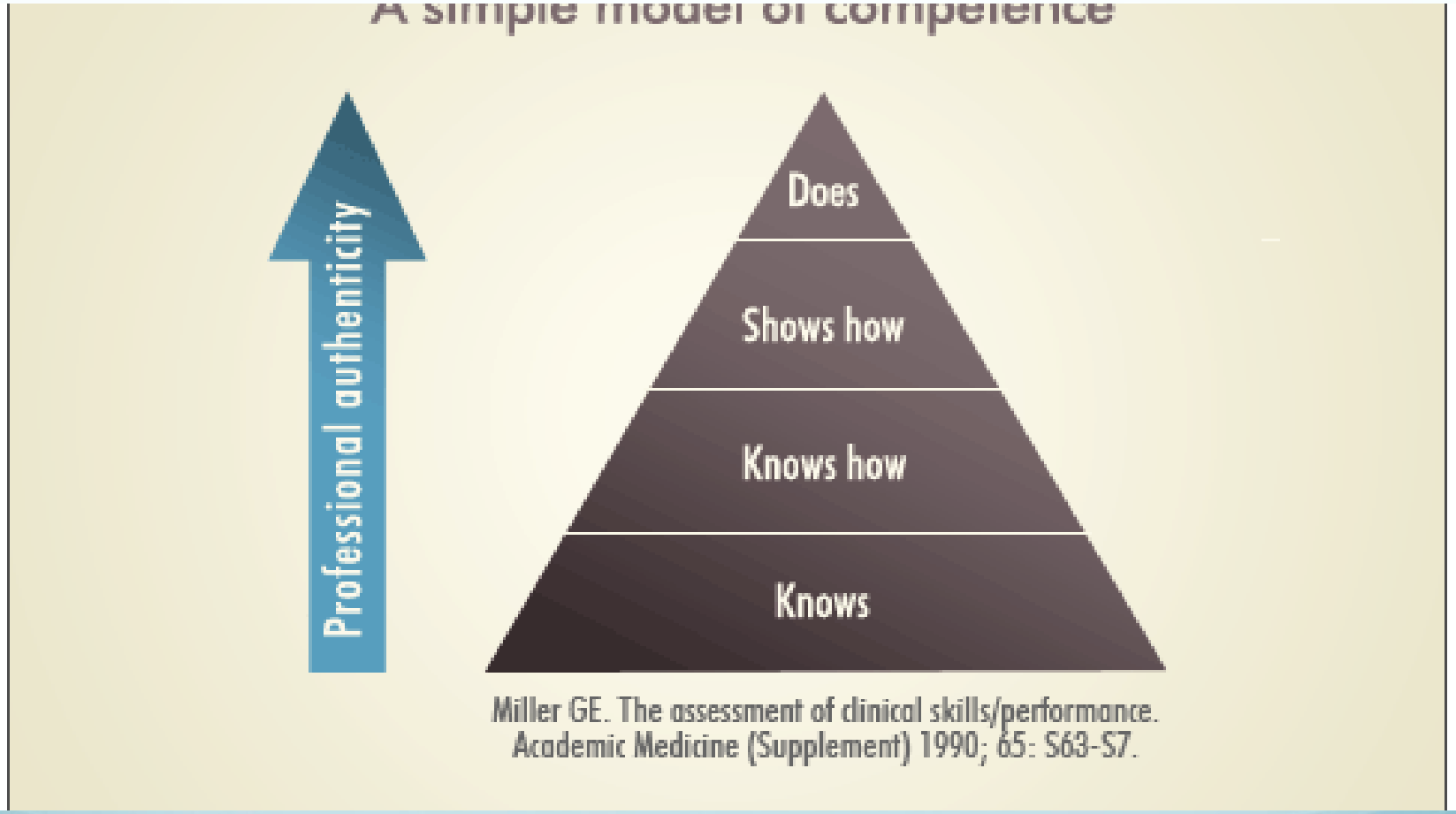
Rate your skill level as an assessor in a competency-based education

- Novice
- Advanced Beginner
- Competent
- Proficient
- Expert

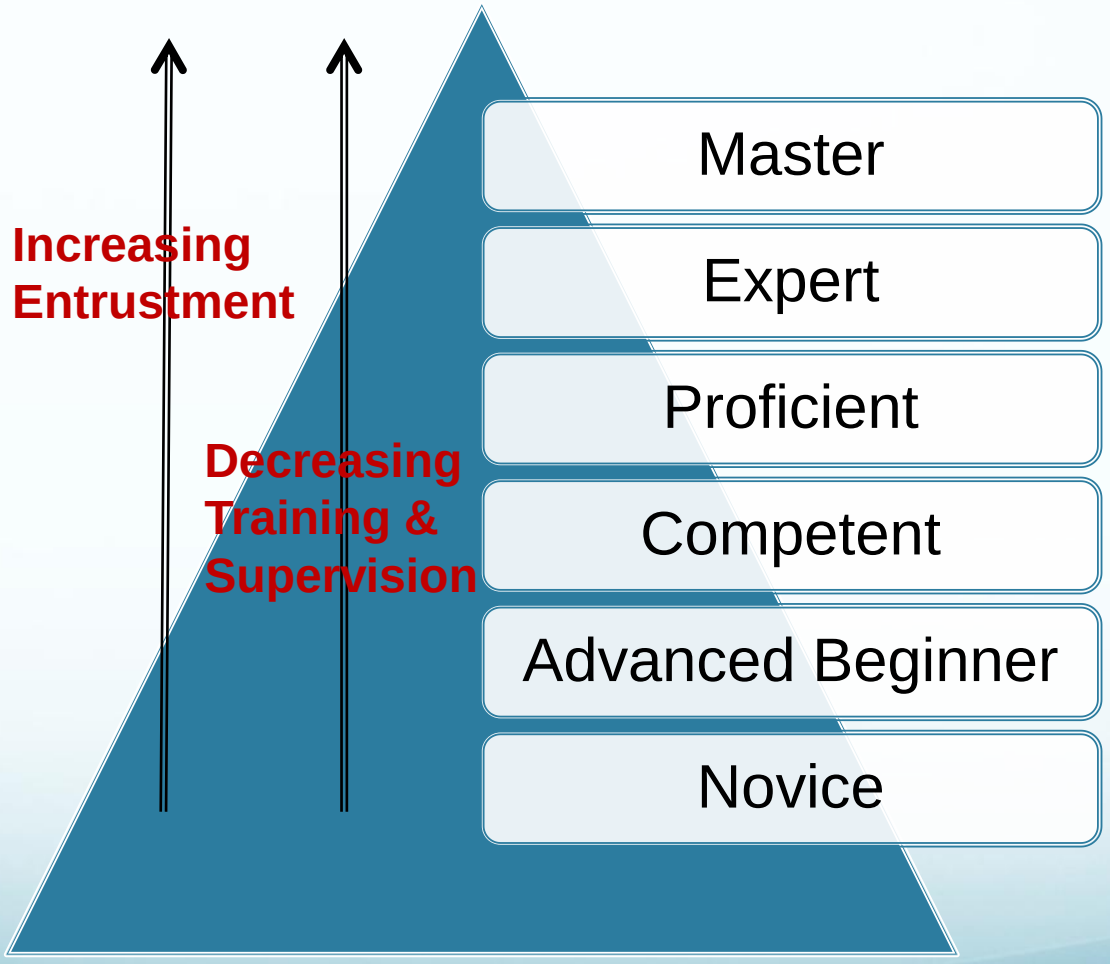
*Courtesy of Deb Simpson, PhD

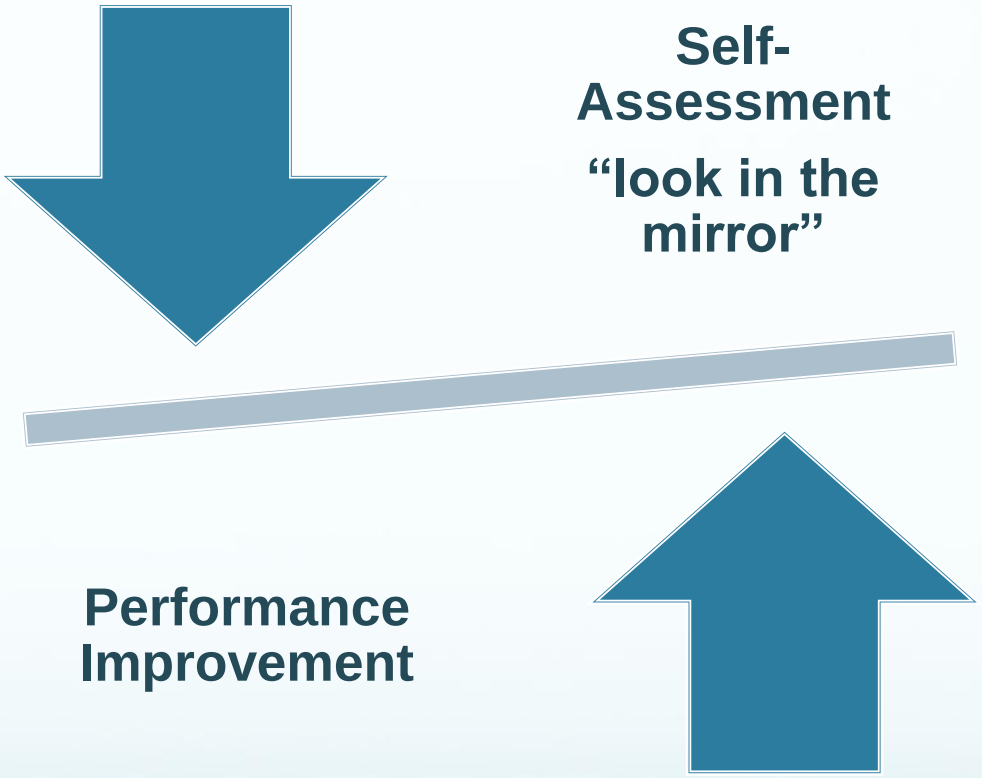
Competency Ladder

A Simple Model of Competence



Spectrum of skills acquisition
(modified Dreyfus & Dreyfus 1980)





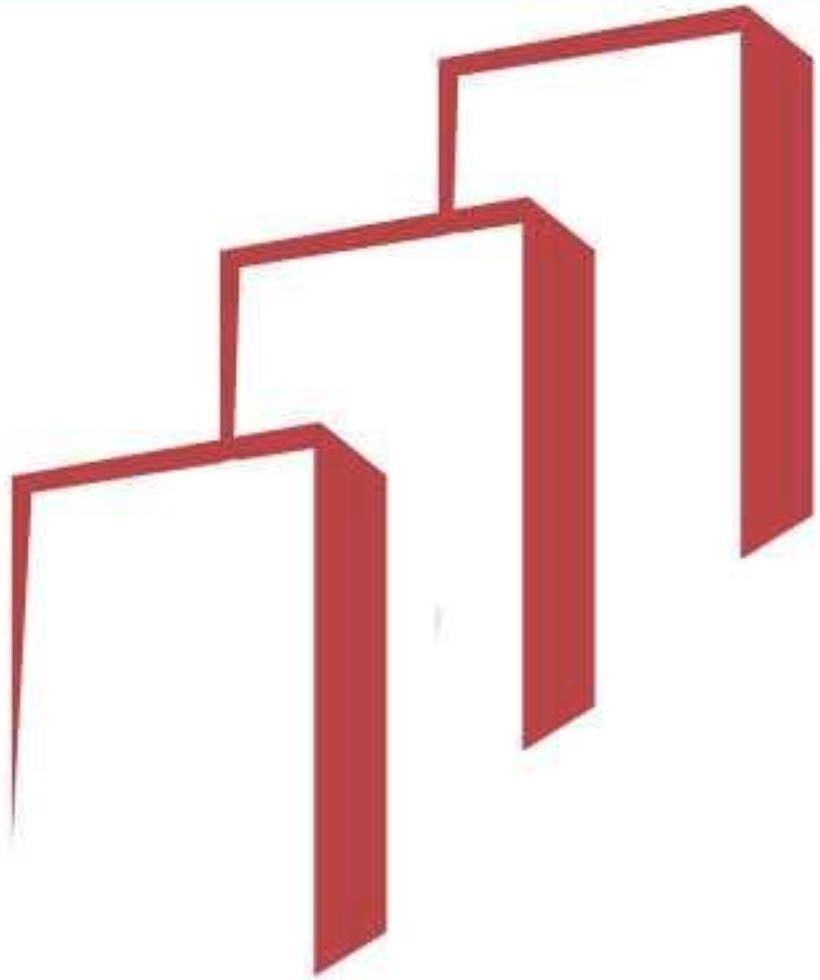
What role does this data play in assessing competence?
Is it reliable?

Faculty Lenses

What influences how you rate this resident?

- Patient outcomes
- Clinical Systems
  - Familiarity with the patient
  - Patient complexity
  - Organization of the clinical care system
- Educational System
  - Institutional culture & oversight
  - Fear of providing feedback
- Your own performance
- Other doctor's performance

It is not about getting the job done, it is a job done well



MILESTONE

Educational Milestones

developmentally based, specialty-specific achievements that residents are expected to demonstrate at established intervals as residents **progress through training**

Neuro Teaching Case

- **A 64-year-old man suffers a sudden loss of consciousness while walking through an airport. Several bystanders rush to his side, ascertain that he is not breathing, and initiate CPR. Paramedics are called and arrive 6 minutes later. Under the guidance of medical command at a local hospital, the paramedics initiate an ACLS protocol without hypothermic protocol. Resuscitation continues for a total of 30 minutes, and eventually a pulse and stable rhythm are obtained, after which the patient is transported rapidly to the hospital.**

- **The patient is brought directly to the intensive care unit, where he is evaluated by a critical care specialist and a neurologist. The first evaluation in the unit reveals that the patient has no purposeful movements, is unarousable and non responsive to any stimuli- either verbal or noxious. There is intermittent jerking movements of arms and legs. CT scan reveals massive swelling of the brain and sulcal effacement.**

- **What is your teaching goal for this case? What is your learner level?**

- **How will you assess knowledge? Skills? Which skills?**

- **What are observable behaviors to assess competence?**

- **Which competencies do you want to address?**

Milestones/Competencies

- History- Patient Care and IP/CS
- Neurological Exam- Patient Care
  - ACCURATELY PERFORMS A NEUROLOGICAL EXAM ON THE COMATOSE PATIENT
  - ACCURATELY PERFORMS A BRAIN DEATH EXAMINATION
- Formulation of the Problem- Medical Knowledge
- Management/ Treatment- Patient Care
- Professionalism
  - Ethical Principles-exploration and application
  - Empathy/Compassion, integrity, accountability and respect

Tasks of the Effective Teacher

Application of the Theories at the Bedside:

1. Orient the learner and patient
2. Diagnose the learner
3. Set-up the learning encounter
4. Active teaching & learning (questioning)
5. Assess & give feedback
6. Inspire & role model

BEFORE ROUNDS

- **Preparation (Prepare)**
  - Know the curriculum/milestones
  - Diagnose learners levels
  - Orient patient/family, if possible
  - Orient learners to style and format & expectations
- **Planning**
  - What is to be taught at the bedside?
  - What aspects are to be emphasized?
  - What is the main theme for the day?
  - Engage everyone
  - Select patients
  - Decide time allocation for a given patient

DURING ROUNDS

- **Introductions**
  - Orient patients about the team, the objectives of the encounter
  - Show respect for patients
  - Show respect for learners
- **Interaction**
  - Model your interactions, clinical reasoning
- **Observation**
  - Observe trainee's patient care interactions, e.g. history & exam techniques

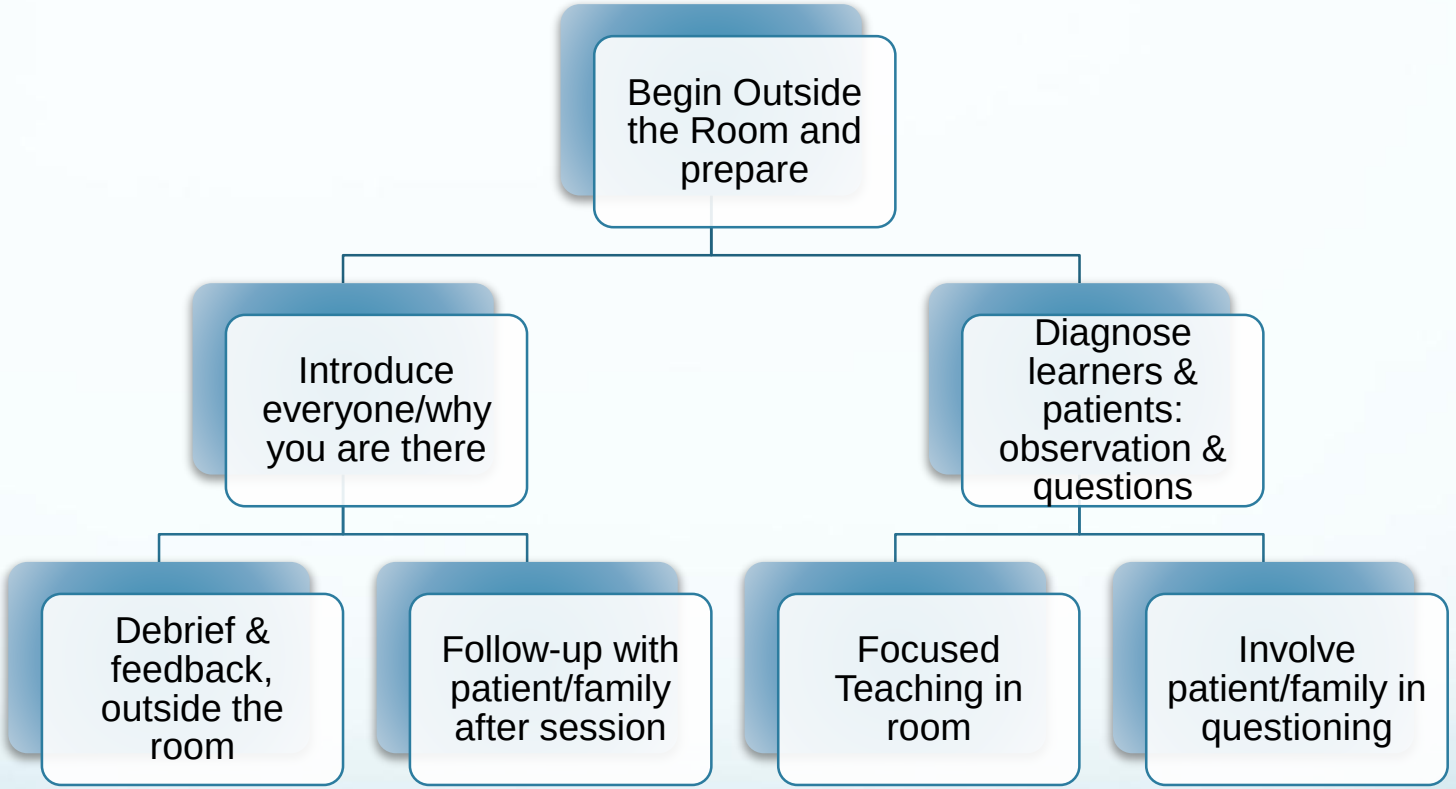
DURING ROUNDS

- **Instruction**
  - Ask questions
  - Engage all learners
  - Teach, demonstrate clinical skills & professionalism
  - Capture teachable moments
  - Admit your limitations
- **Summarization**
  - Summarize key points
  - Patient education

AFTER ROUNDS

- **Debriefing (Debriefing and explanation)**
  - Promote questions and collaborate on answers
  - **Feedback**
    - Behavior based, specific, timely, collborative
- **Reflection**
  - Think about what went well and what did not go well in the teaching session
- **Preparation for next session**
  - Use reflections to prepare for next case

Bedside Teaching Session



Maintain throughout patient centered care

Neuro Teaching Case

- **A 64-year-old man suffers a sudden loss of consciousness while walking through an airport. Several bystanders rush to his side, ascertain that he is not breathing, and initiate CPR. Paramedics are called and arrive 6 minutes later. Under the guidance of medical command at a local hospital, the paramedics initiate an ACLS protocol without hypothermic protocol. Resuscitation continues for a total of 30 minutes, and eventually a pulse and stable rhythm are obtained, after which the patient is transported rapidly to the hospital.**

- **The patient is brought directly to the intensive care unit, where he is evaluated by a critical care specialist and a neurologist. The first evaluation in the unit reveals that the patient has no purposeful movements, is unarousable and non responsive to any stimuli- either verbal or noxious. There is intermittent jerking movements of arms and legs. CT scan reveals massive swelling of the brain and sulcal effacement.**

- **What is your teaching goal for this case? What is your learner level?**

- **How will you assess knowledge? Skills? Which skills?**

- **What are observable behaviors to assess competence?**

- **Which competencies do you want to address?**

Coaching as a Feedback Model

What is feedback?

- **Feedback** is the information you provide to learners about their clinical performance that is intended to guide their future clinical performance.

Types of Feedback

- **Positive:** statements describing appropriate behaviors

- **Negative:** statements describing inappropriate behaviors

- **Collaborative**: faculty solicits feedback from the learner to “level the playing field” and establish bi-directional communication

4 Components of *Feedback

- Level 1: Allow learner to self-assess/reflect
- Level 2: Describing what you saw=**feedback**
  - Description of observed behavior (checklist)
    - Easier to accept by learner
- Level 3: Your personal reaction=**coaching**
- Level 4: Your suggestion of behaviors to practice=**direction**
- Closure: Always remember the E=**encouragement**

Feedback Sandwich

Positive Feedback

Collaborative Feedback

Direction/Coaching

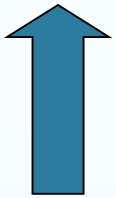
Assess & Give Feedback

Solicit self-assessment

Assess performance

Correct errors/teaching moment

Feedback



Observation

Reflection

Feedback

Encouragement

Direction

Thank you…
Questions…Thoughts