

DONALD AND BARBARA
ZUCKER SCHOOL *of* MEDICINE
AT HOFSTRA/NORTHWELL

Clinical Teaching

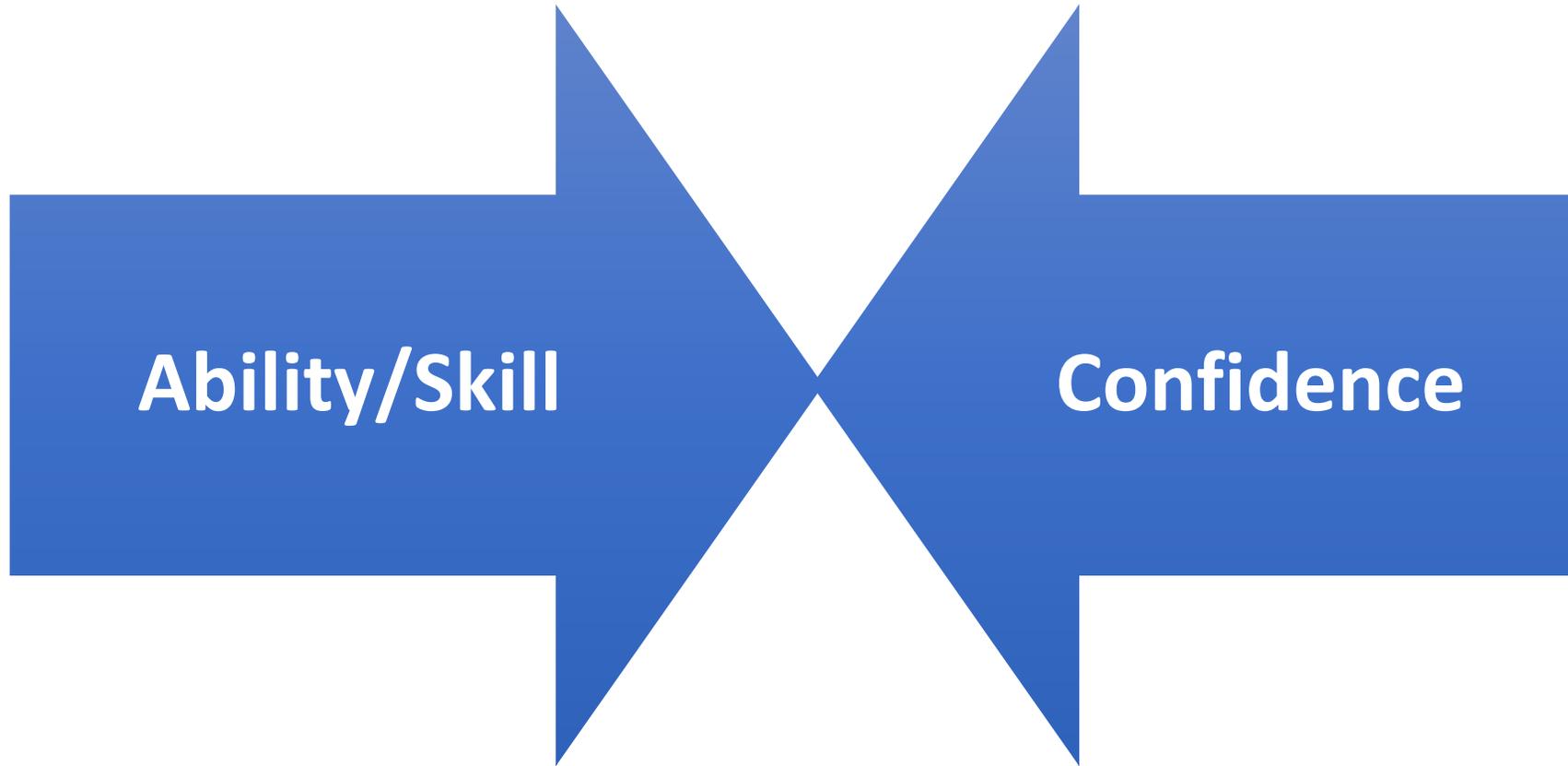
Clinical Teaching

Alice Fornari, EdD, RDN

VP, Faculty Development

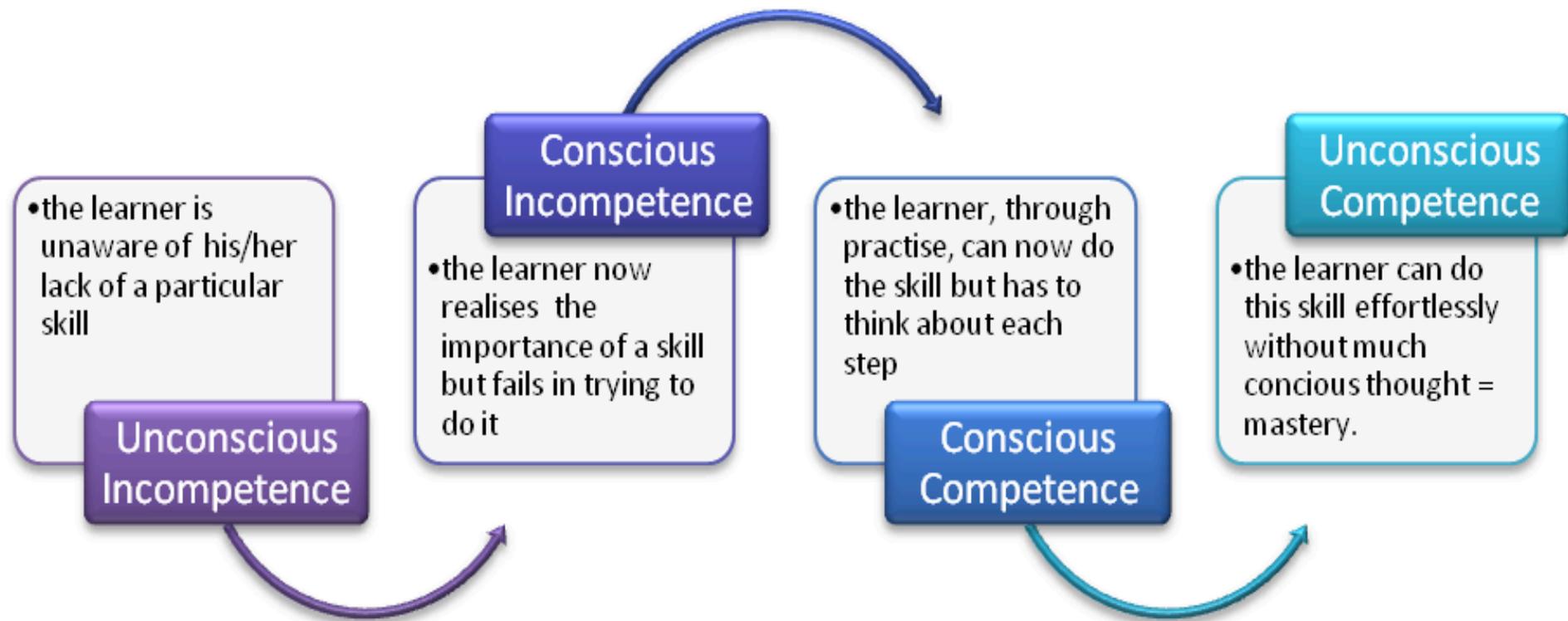
Associate Dean, Educational Skills Development

Your Goal



Objectives-Clinical Teaching

Identify	Identify the core principles of clinical teaching
Apply	Apply three steps of setting expectations to a precepting scenario
Describe	Describe the types of questions to use when precepting a clinical case with learners
Apply	Apply questioning skills to create a learning environment that supports psychological safety
Describe	Describe a learning environment that is conducive to both the student and preceptor
Review	Review JITT Tip Sheets as a resource tool



The Conscious Competence Learning Model

The way we acquire a new skill

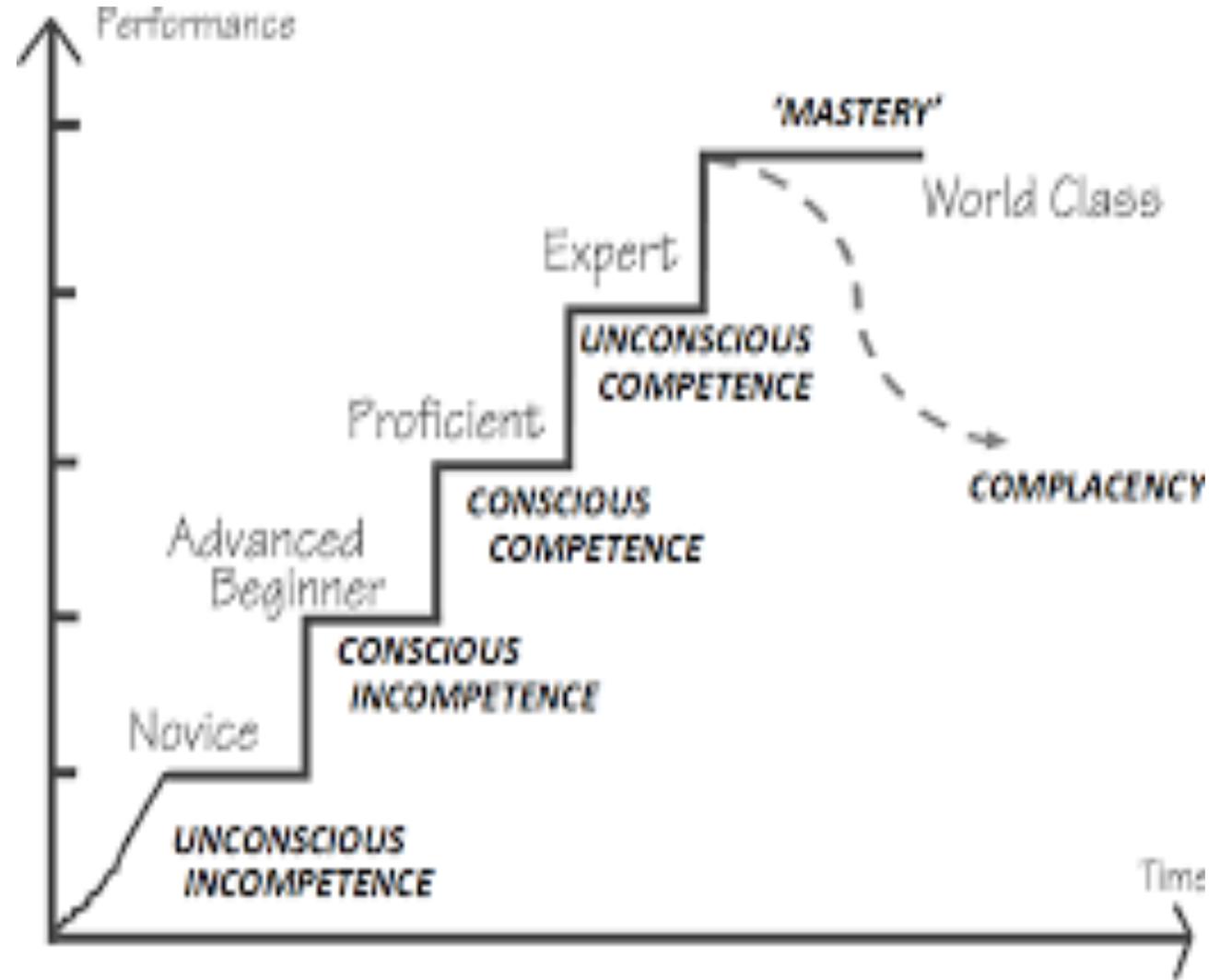
Stages of Learning

Stage 1: Unconscious Incompetence

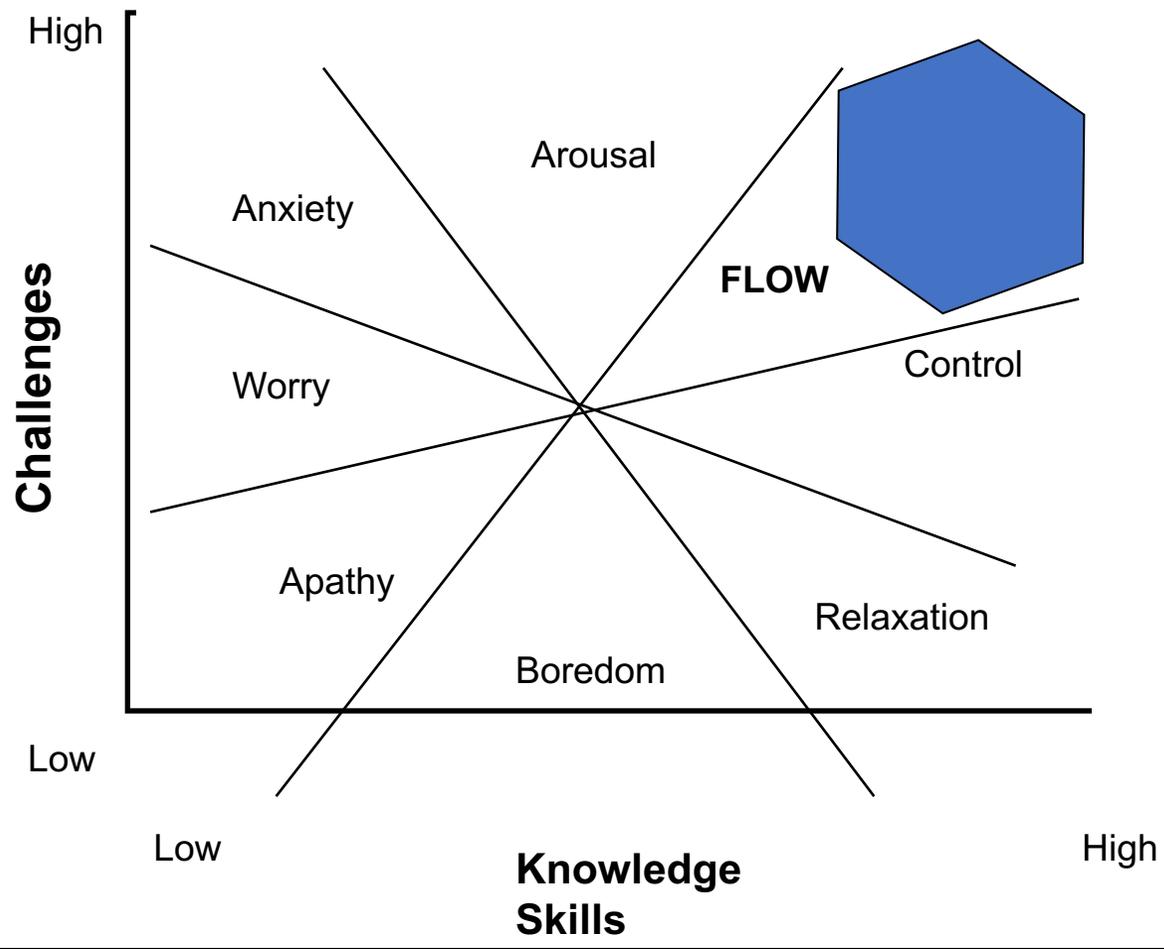
Stage 2: Conscious Incompetence

Stage 3: Conscious Competence

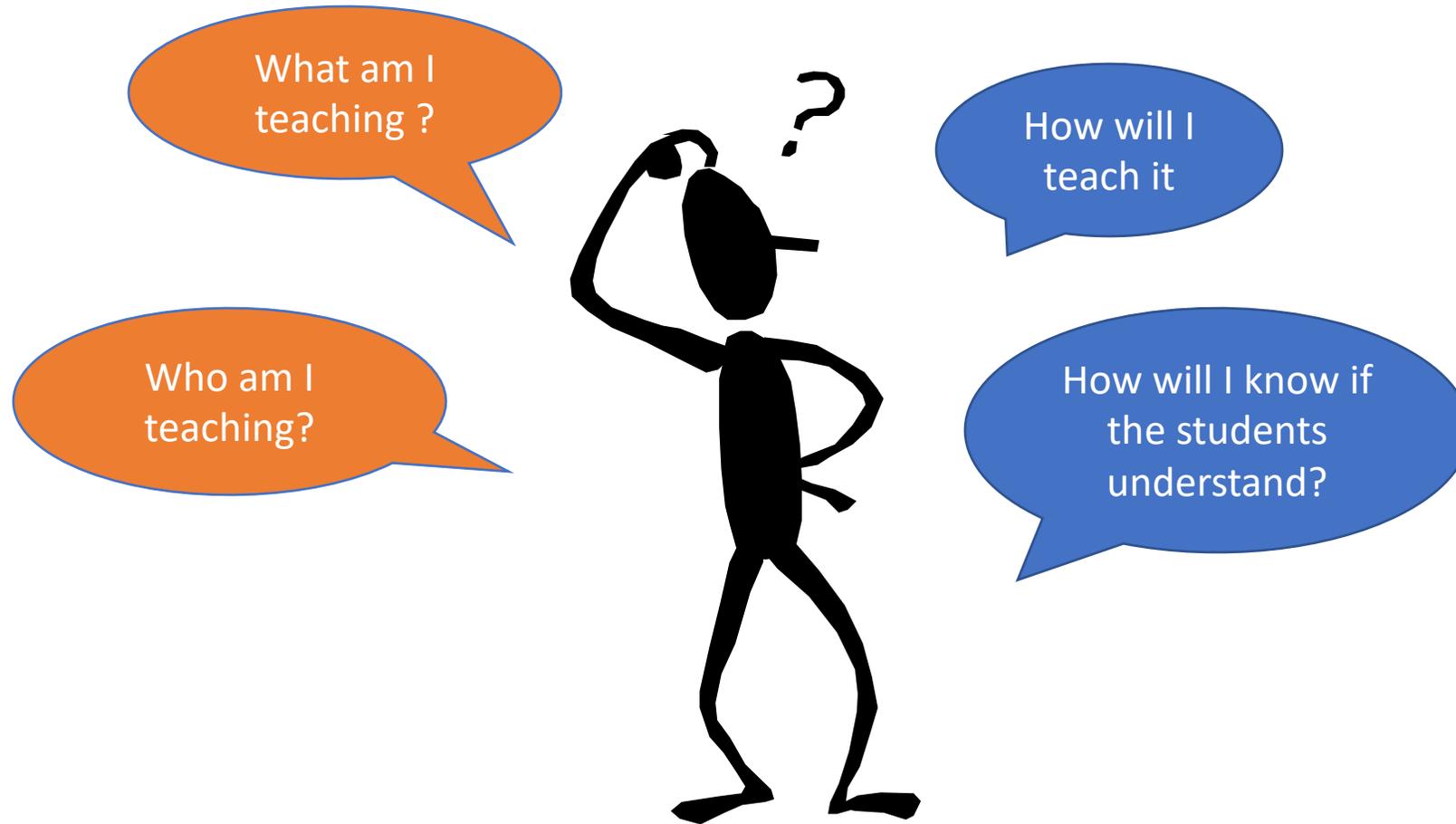
Stage 4: Unconscious Competence



“FLOW” EXPERIENCES IN RELATION TO CHALLENGES AND SKILLS



Questions to ask yourself when planning a clinical teaching session



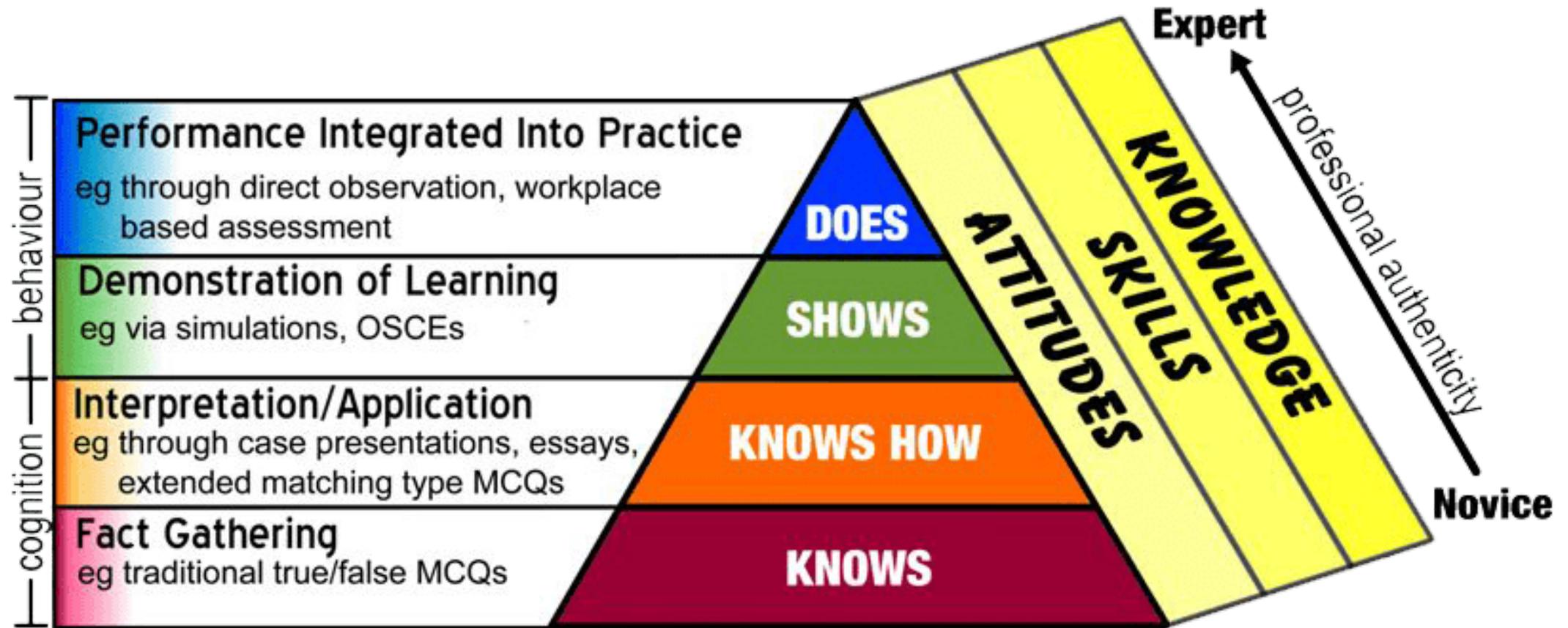
How to give effective explanations??

- **Check understanding & grasp of the topic**
- **Give information in “bite size” chunks**
- **Put things in a broader context when appropriate**
- **Summarize periodically (“so far, we’ve covered...”)**
- **Reiterate the take home messages; again, asking students...**

Notable Tensions

- **When to ask and when to tell**
- **When to model and when to watch**
- **When to discuss process and when to discuss content**
- **When to see a patient and when to follow from afar**

it is only in the "does" triangle that the doctor truly performs



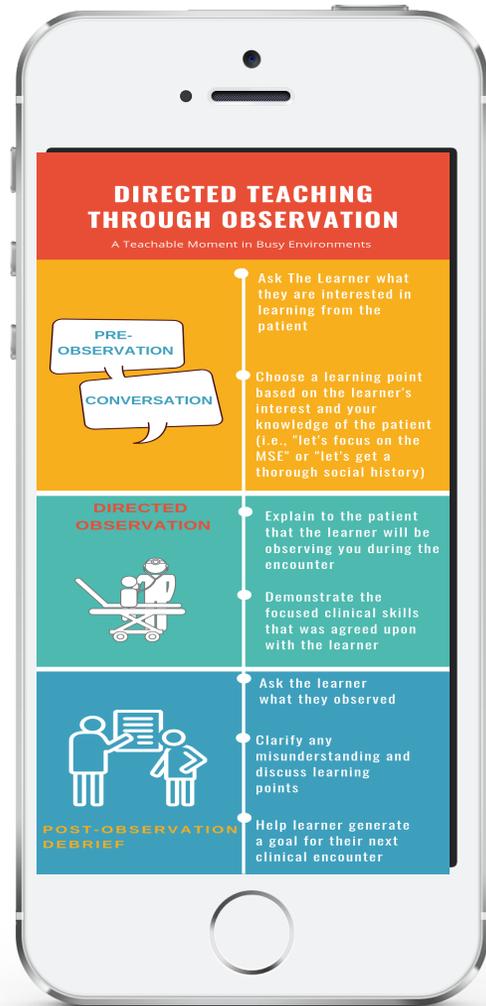
*Based on work by Miller GE, The Assessment of Clinical Skills/Competence/Performance; Acad. Med. 1990; 65(9); 63-67
Adapted by Drs R. Mehav & R. Burns UK (Jan 2009)*

Dreyfus Model of Skill Acquisition



• JITT TIPS Templates





Basic Teaching Tip Sheets

- ❖ Setting Expectations and Goals
- ❖ Learning Huddle
- ❖ Beside Teaching
- ❖ Directed Teaching Through Observation
- ❖ How to use "RIME" With Your Learners
- ❖ How to use the SFED Model of Feedback with your learners
- ❖ Using Questioning as a Tool for Effective Precepting

Program Specific Tip Sheets

- ❖ How To Perform an OB/GYN History
- ❖ How To Teach To Evaluate for Rupture of Membrane/Amniotic Fluid
- ❖ Teaching Neurologic Imaging
- ❖ Teaching the Neurologic Exam
- ❖ How To Teach Conducting Abdominal Exam for Surgery
- ❖ Teaching to Prepare a Student for the Operating Room
- ❖ Teaching Functional History
- ❖ How To Deliver Challenging News
- ❖ Teaching in the Operating Room
- ❖ Bedside Teaching for Mobility Assessment
- ❖ Teaching Manual Muscle Testing
- ❖ Teaching How to Conduct PM&R Consults
- ❖ Teaching Family centered Rounds with Patients and Families
- ❖ Teaching Pre-Family Centered Rounds Outside of the Room
- ❖ Teaching Psychotherapies
- ❖ A Framework for teaching the Biosocial Formulation
- ❖ Using the Socratic Method in Teaching
- ❖ Teaching Abdominal Imaging
- ❖ How to Interpret an Abdominal Image



Step #1-Setting Expectations

- Three step process

- 1. Pre-meet
- 2. In session
- 3. End of session

CLEAR AND
REASONABLE
EXPECTATIONS



SETTING EXPECTATIONS AND GOALS

Take the time to get to know your learners!



Introduce yourself and orient your learner to the environment (clerical staff, workflow, facilities)

1. INTRODUCTIONS

LEARN SOMETHING ABOUT YOUR LEARNER AND ASK YOUR LEARNER ABOUT PRIOR EXPERIENCES



Help the learner identify expectations particular for this unit

2. EXPECTATIONS & GOAL SETTING

HELP THE LEARNER SET GOALS THAT ARE SPECIFIC, REALISTIC EXPECTATIONS



Address any questions and concerns

3. WRAP UP



Exchange preferred contact information

CHECK IN EACH WEEK TO ASSESS PROGRESS TOWARD GOALS

4. FOLLOW-UP

Psychological Safety in Medical Education

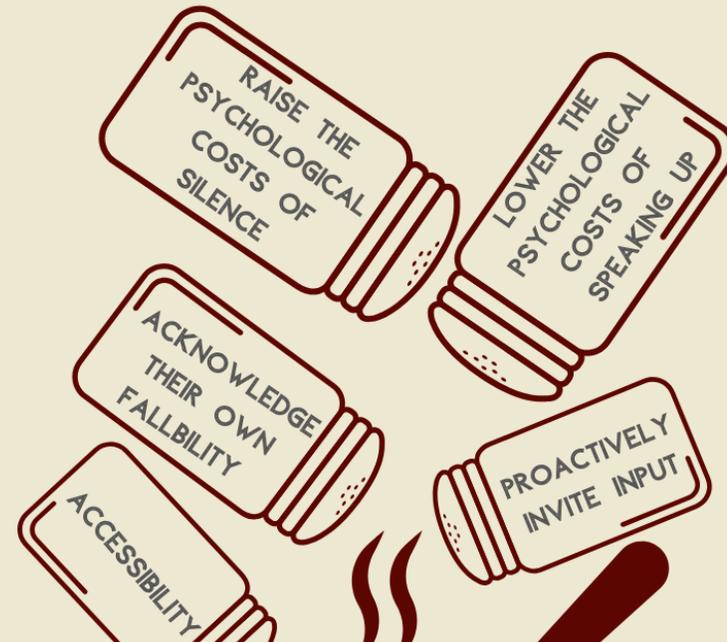
<https://youtu.be/eP6guvRt0U0>

one will not be punished or humiliated for speaking up with ideas, questions, concerns or mistakes.

**HIGH ACCOUNTABILITY + PSYCHOLOGICAL SAFETY
=
THE "LEARNING ZONE"**

THIS LEARNING ENVIRONMENT SUPPORTS EFFECTIVE FEEDBACK AND ENCOURAGING STUDENTS TO ENGAGE IN THE ACTIVE LEARNING STRATEGIES THAT "MAKE IT STICK"

**STRATEGIES FOR INCLUSIVE LEADERS
THAT ARE APPLICABLE TO EDUCATORS**



USING THE SOCRATIC METHOD IN TEACHING!

The Socratic Method is an approach to teaching that incorporates thoughtful dialogue between the teacher and student, promoting a deeper process of learning. This encourages the student to listen, think, read ahead, speak critically, and remain curious about the inner-workings of medicine and surgery



Step 1: Formulate a thought-provoking question

- Use open-ended questions predominantly (no yes/no questions)
- Preferentially ask questions that guide a student to a multi-step answer
- Phrase the question clearly and specifically



Step 2: Wait for the student to think

- Maintain silence for at least 5-10 seconds to give the student time



Step 3: Guide the student if necessary

- Follow up on the student's response and invite elaboration if in the right direction
- Guide the student with more specific or probing questions
- Follow-up on a poor answer with a clarifying question, not a correction



Step 4: Summarize the student's response and elaborate on the correct answer

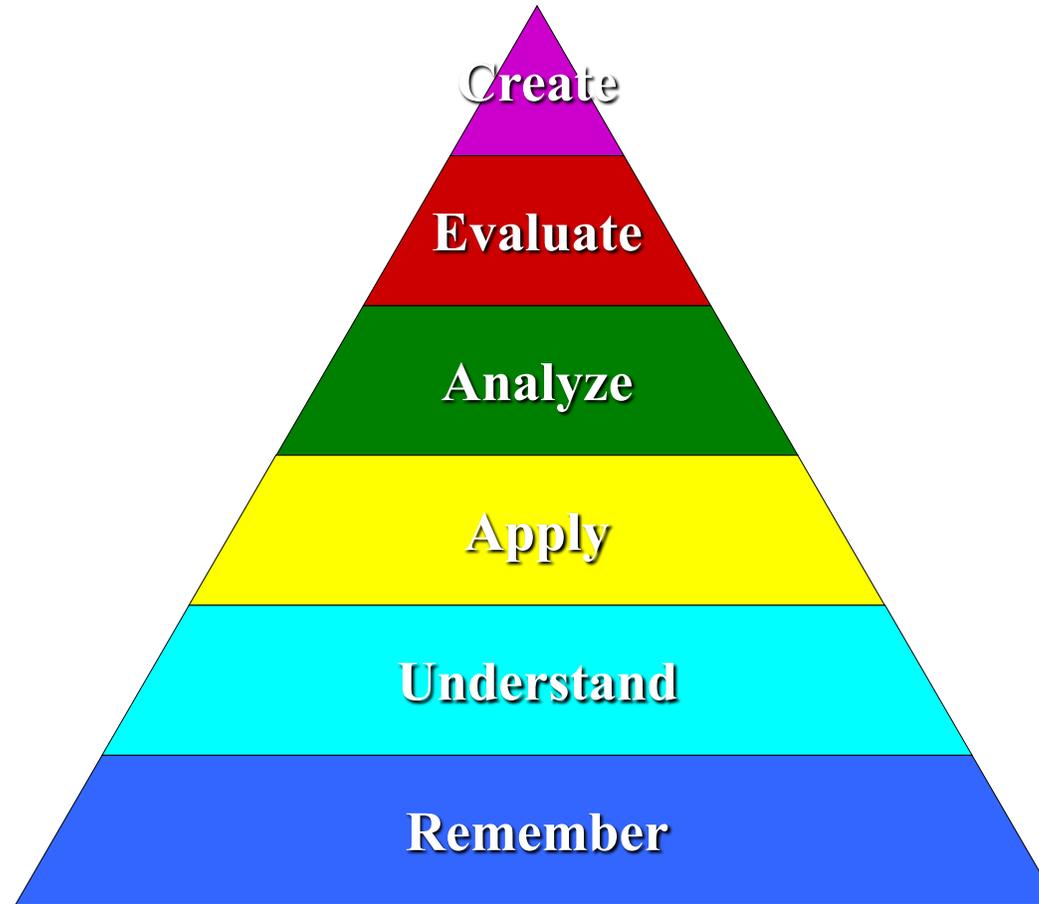


Step 5: Repeat!

- Continuing with multiple questions along a trajectory of thought can be beneficial

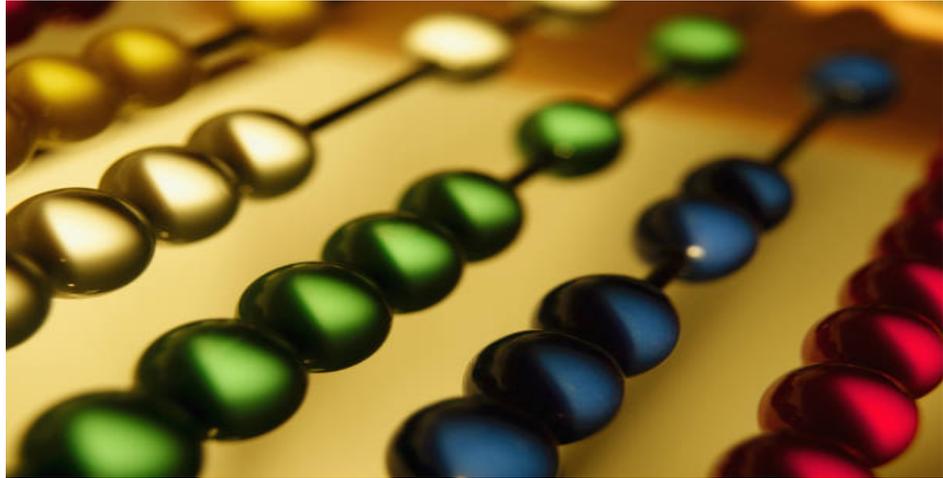
i.e. Question 1 can be science, leading into question 2 covering the pathophysiology of the same topic, leading to question 3 which is the patient presentation and question 4 can cover the medical/surgical workup and management

Bloom's Taxonomy



Based on revised Bloom's taxonomy.
APA adaptation of Anderson, L.W. & Krathwohl, D.R. (Eds.) (2001)

Use of Questions to Direct Learning

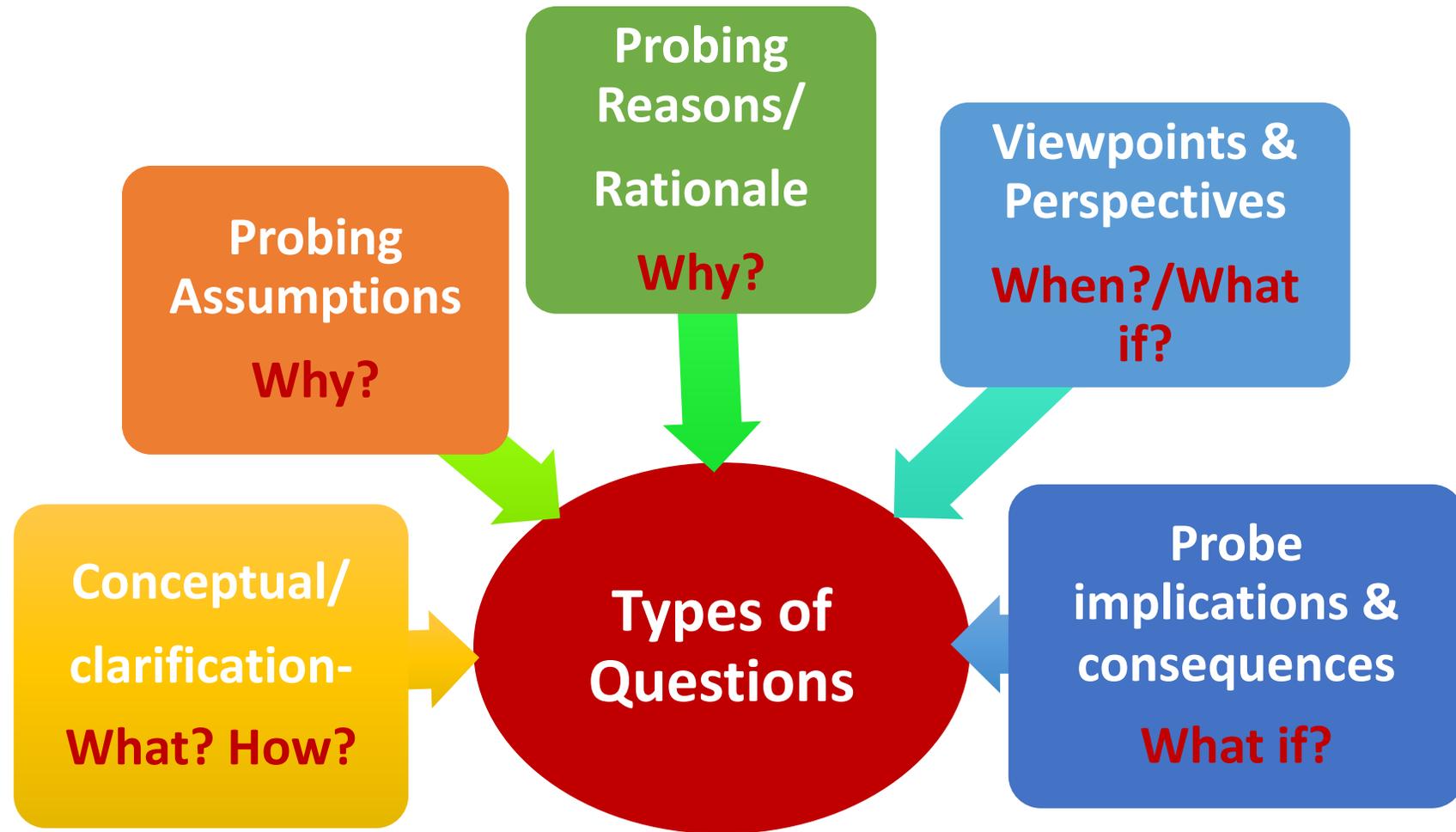


- Restrict use of closed questions
- **(What? When? How many?)**
- Use open or clarifying/probing questions
- **(What are the options? What if?)**
- Allow adequate time for students to give a response-
- Follow a poor answer with another question
- Answer learners' questions-with counter questions
- Statements make good questions-for example, "Students sometimes find this difficult to understand"
- Be non-confrontational

Socratic Questions → **Socratic Dialogue**
→ **Critical Thinking**

**Goal: Probe
thinking of
learners**

**Analyze & assess
a concept or line
of reasoning**



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



USING "QUESTIONING" AS A TOOL FOR EFFECTIVE PRECEPTING

LEARNERS AND PRECEPTORS ALIGN



RECALL/REMEMBER

Identify and define the facts

UNDERSTAND MEANING OF FACTS

Discuss/explain ideas or concepts



APPLY

Differentiate/compare and contrast information

EVALUATE FACTS

- Justify thought processes and assess next steps
- Create new knowledge
- Hypothesize "WHAT IF" alternatives



3 TIPS FOR USING QUESTIONING STRATEGY

1. Use open-ended questions predominately
2. Allow time for response
3. Follow a poor answer with a clarifying question and not a correction

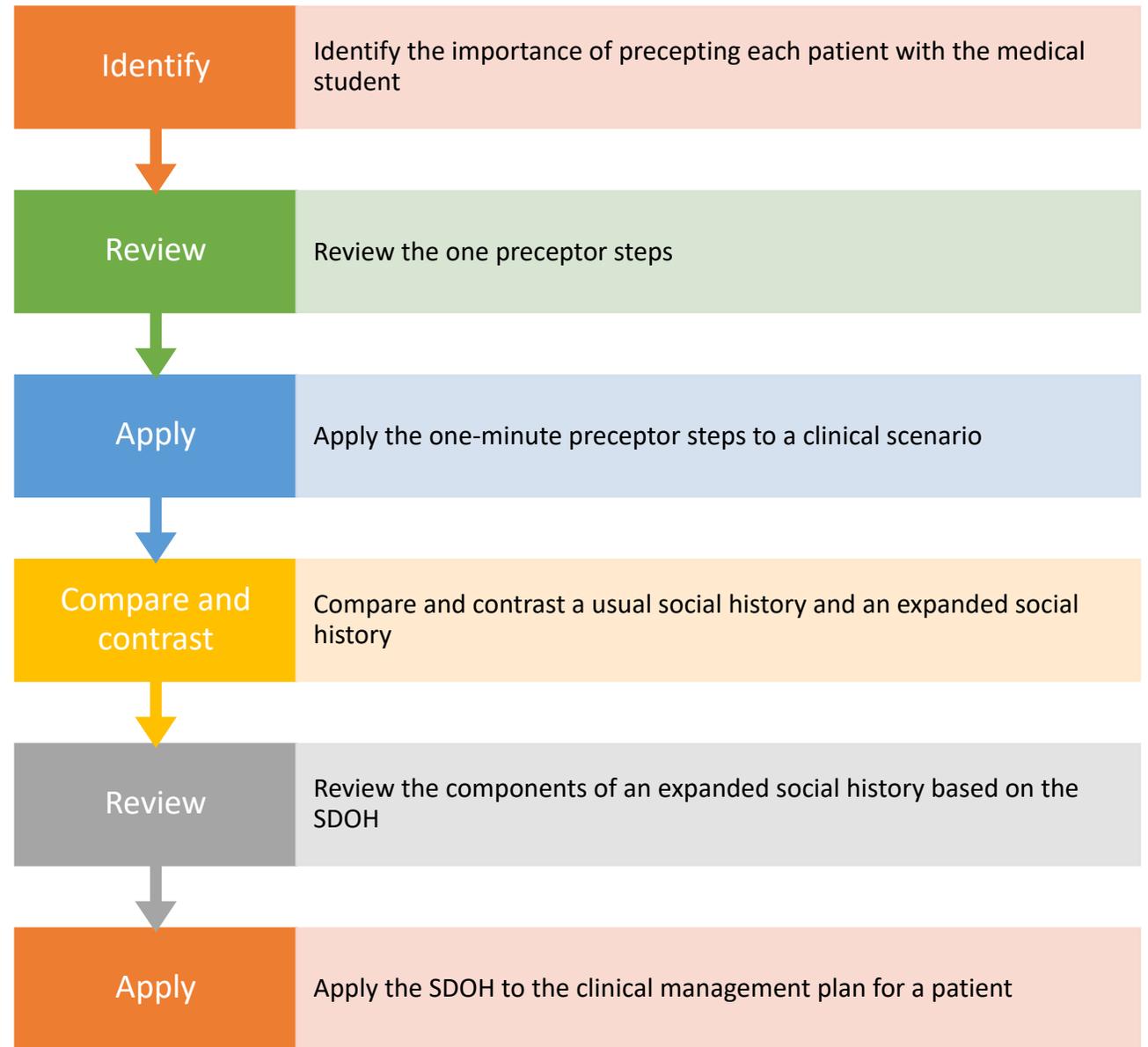


Summary: Clinical Teacher

- Diagnoses learner needs
- Observes
- Role models (knowledge, skills and attitudes)
- Demonstrates care
- Debriefs cases
- Provides feedback
- Encourages learner reflection



Objectives- One Minute Preceptor

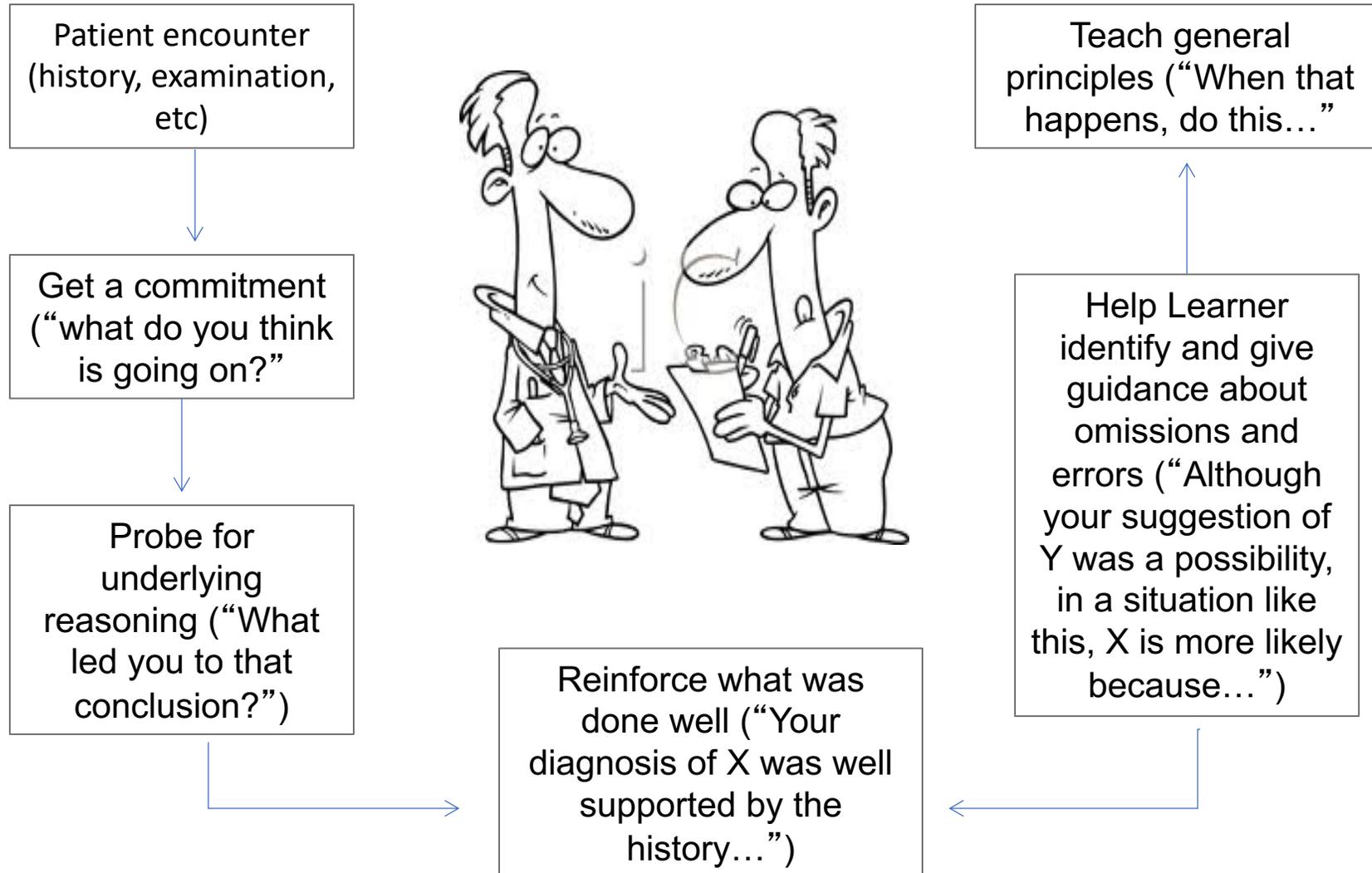




<https://youtu.be/hmKvei3thwQ>

One-Minute Preceptor

“One-minute preceptor” model



Teaching with Limited Time

3-5 Minute preceptor: Micro Skills of Clinical Teaching

1. Get a commitment

- What do you think is going on?
- What would you like to accomplish?
- What other information do you need?

2. Probe for supporting evidence

- Why do you think this?
- What else did you consider?
- What questions do you have?

3. Teach an important concise learning point

4. Reinforce what was done well

- Learner self-assess
- Tell them what they did right
- Be specific

5. Correct mistakes and provide feedback

- Discuss what they can do differently
- Agree on plan for improvement

Steps to Rapid Teaching

Step 1:

Identify the needs of each individual learner; set expectations:

- Ask questions about prior knowledge & skills – OR-
- Conduct a two-minute observation
- Align expectation (learner & preceptor)

Step 2: Select a model for rapid teaching with limited time

- Diagnose the learner
- One minute preceptor/micro skills of clinical teaching
- Ask questions: use Bloom's Taxonomy to ask higher order questions
- Activated demonstration, if appropriate

Step 3: Provide Feedback on performance:

- Be specific
- Comment on strengths
- Discuss areas for improvement
- Give direction & encouragement
- Promote self-directed learning

Five-Step Microskills Model of Clinical Teaching

1. **Get** a Commitment- “**Reporter**”
 - What do you think is going on?
2. **Probe** for Supporting Evidence- “**Interpreter**”
 - What led you to that conclusion?
3. **Teach** General Concepts-promote “manager” skills
 - How do you approach/think about...? (“**Manager**”)
4. **Ask**/Tell Them What They Did Right
 - Specifically, you did a great job of...
5. **ASK**/Correct Mistakes-developmental improvements
 - Next time this happens,... (“**self-direction/educator**”)

TEACHING WITH LIMITED TIME

FIVE MINUTE PRECEPTOR:
MICROSKILLS OF CLINICAL TEACHING



1

GET A COMMITMENT

- What do you think is going?
- What would you like to accomplish?
- What other information do you need?
- What would you like to do next?

2

PROBE FOR SUPPORTING EVIDENCE

- Why do you think this?
- What else did you consider?
- What questions do you have?

3

PRECEPTOR TEACHES IMPORTANT CONCISE LEARNING POINTS 2 - 3

4

REINFORCE WHAT WAS DONE WELL

- Learner self-assesses
- Tell them what they did well
BE SPECIFIC!

5

CORRECT MISTAKES AND PROVIDE FEEDBACK

- Discuss concerns followed by strategies and a plan to approach differently

APPLY THE 5 MICROSKILLS TO PRECEPT DURING A TELEHEALTH ENCOUNTER

#1 FRAME THE SESSION

- WHAT IS YOUR PRIOR EXPERIENCE WITH TELEHEALTH?
- WHAT DO YOU KNOW ABOUT THE PATIENT (PRIOR TO THE CALL)?
- HOW WILL YOU OBTAIN CONSENT FOR THE VISIT?
- HOW WILL YOU CONDUCT THE INTERVIEW & FOCUS ON THE CHIEF CONCERN (CC)?
- HOW WILL YOU GATHER PATIENT HISTORY?
- HOW WILL YOU ASSESS PHYSICAL EXAM (PE), AS NEEDED?



#2 PROBE POST TELEHEALTH VISIT

- WHAT WAS YOUR IMPRESSION OF THE ENCOUNTER?
 - UNDERSTANDING OF CC, INCLUDING HPI
 - OBJECTIVE DATA: DIRECT OBSERVATION, VITALS, PE
- WHAT IS YOUR ASSESSMENT & PLAN?
- DO WE NEED TO SCHEDULE A FOLLOW-UP VISIT?

#3 TEACH

- IDENTIFY COMMUNICATION & CLINICAL SKILLS
 - ADDRESS SPECIFICALLY TELEHEALTH COMMUNICATION SKILLS APPLIED TO THE ENCOUNTER (VERBAL & NONVERBAL)
- CONSIDER ASKING THE STUDENT TO PRACTICE TEACH BACK FOR A FOLLOW-UP VISIT



#4 REINFORCE BEHAVIORS OBSERVED

- ASK THE LEARNER WHAT WENT WELL
- TELL YOUR OBSERVATIONS (COMMUNICATION & CLINICAL)
- ASK THE LEARNER WHAT THEY WANT TO DO DIFFERENTLY
- PROVIDE ENCOURAGEMENT

#5 FOCUS THE LEARNER TO SELF-IDENTIFY GAPS

- KNOWLEDGE SKILLS
 - COMMUNICATION (VERBAL/NONVERBAL)
 - HISTORY
 - PHYSICAL EXAM
 - ASSESSMENT & PLAN



Teaching Tips and Content written by:
Alice Forman, EdD, RD (Tara)neet Ahuja, DO
Zucker School of Medicine at Hofstra/Northwell
Creative Design: Melissa Affa



Telehealth Visits Teaching "Web-Side" Manner



WITH THE EXPONENTIAL GROWTH OF TELEHEALTH, IT IS VITAL THAT HEALTHCARE PROFESSIONALS EDUCATE ON THE ETIQUETTE AND PREPARATION FOR TELEHEALTH ENCOUNTERS



DRESS THE PART

Clothing choices that may not impact an in-person encounter can greatly affect the quality of a telehealth visit

- Learners should be taught to consider clothing color, patterns, and jewelry selection
- Wear a lab coat when appropriate
- Make sure your name and title is visible on the camera screen

ELIMINATE DISTRACTIONS

Check the environment for possible distractors prior to the telehealth visit

- Minimize fidgeting
- Mute microphone until the encounter begins
- Inform patients of any distractors that cannot be removed
- Avoid side conversations/texting during encounters
- Check wi-fi signal/technology
- Close all other applications, which can slow your connection
- Be sensitive to your background images/noise



ENSURE A PRIVATE AND SECURE AREA FOR THE VIRTUAL VISIT

Privacy becomes an even bigger concern when the patient is unable to visually see that the environment is secure

- Direct learners to inform patients that the equipment being used is HIPAA secure
- Learners must tell the patient that the visit is secure
- Both provider and patient should introduce all individuals present on their side to determine if it is acceptable for them to be present



IMPORTANCE OF NONVERBAL CUES

Nonverbal cues are important in projecting warmth, interest and concern thus enhancing the connection with patients

- Direct learners to center themselves on the screen
- Remind learners to lean in/nod & purposefully use their facial expressions
- Maintain eye contact and/or explain if there is a need to look away
 - If the camera is not positioned to focus on the provider or patient it can appear as a disinterest
- Direct learners to be aware of their own expressions; A smile on camera, for example does not appear as large as in person



VERBAL COMMUNICATION

Timing and pacing of a telehealth visit is as important, if not more, than a traditional visit

- Start the visit with small talk to break the ice, express gratitude
- Convey empathic understanding of the patient's concern
- Learners should be in tune to the tone of their voice
 - Goal is to sound confident, warm and interested!
- Use partnership statements to promote collaboration
- Be clear about next steps
- Verify patient's understanding
- Let the patient end the call first



Teaching Tips and Content written by:
Alice Forman, EdD, RD (Tara)neet Ahuja, DO
Zucker School of Medicine at Hofstra/Northwell
Creative Design: Melissa Affa



SOCIAL DETERMINANTS OF HEALTH
 Good health begins in the places where we live, learn, work and play



STUDIES SUGGEST THAT 80-90% OF HEALTH IS DETERMINED BY A PERSON'S SOCIAL DETERMINANTS OF HEALTH. ONLY 10-20% IS ACCOUNTED FOR BY MEDICAL CARE.

Social Determinants of Health (SDOH) have the biggest impact on health outcomes, more than health care access and delivery



Clinical providers should reflect on our power and privilege, as a part of the large scheme of inequities and within our patient relationships we can show our commitment to social justice



Education is vital and should include not just what SDOH are, but also how they came to be; who benefits and who suffers; and what can be done about them, how, and by whom



SDOH can be addressed at the clinical encounter, as well as from a policy and societal level



APPLYING THE 5 MICROSKILLS TO PRECEPTING THE SOCIAL DETERMINANTS OF HEALTH



#1 TELL & COMMIT

- TELL ME ABOUT THE PATIENT YOU JUST SAW
- WHAT SPECIFICALLY ABOUT THE PATIENT'S SOCIAL CIRCUMSTANCE HAS AFFECTED THEIR HEALTH?

#2 PROBE & PROVIDE

- WHAT QUESTIONS DID YOU ASK AS PART OF YOUR SOCIAL HISTORY THAT SUPPORTS YOUR DIAGNOSIS?
- WHAT CAN WE DO TO HELP?



#3 TEACH

- FIND A TEACHING POINT USING SDOH AND THE PATIENTS' PRESENTING ILLNESS
 - **ACKNOWLEDGE:** "HAVE WE CONSIDERED THE PATIENT'S UNINSURED STATUS?"
 - **EMPATHIZE:** "DO YOU THINK THE PATIENT MAY BE FRUSTRATED ABOUT UNSAFE CONDITIONS TO EXERCISE IN THEIR NEIGHBORHOOD?"
 - **ACTIVATION:** FIND SDOH SERVICES SPECIFIC TO PATIENT'S NEEDS
 - **ENGAGEMENT:** HAVE A SOCIAL WORKER COME IN TO DISCUSS ELIGIBILITY OF MEDICAID/PLANS

#4 REINFORCE

- START WITH THE SOCIAL QUESTIONS TO CREATE A TREATMENT PLAN, GIVEN WHAT WE KNOW ABOUT THE SDOH AND HEALTH OF THE PATIENT

#5 FILL IN THE GAPS

- USING THE SDOH CONSIDER HOUSING AND FOOD INSECURITIES AND ASK WHAT MORE WE CAN DO TO HELP THE PATIENT



Objectives- Teaching with the Patient/Bedside

Describe	Describe the clinical environment that impacts teaching with the patient present (inpatient or outpatient)
Identify	Identify the patients' viewpoint of being present with clinical teaching
Delineate	Delineate steps in bedside teaching (inpatient or outpatient) <ul style="list-style-type: none">• Outside the room before the patient visit, in the room with the patient, outside the room post patient visit
Distinguish	Distinguish directed observation from direct observation <ul style="list-style-type: none">• Outside the room before the patient visit, in the room with the patient, outside the room post patient visit

BEDSIDE TEACHING

<https://www.youtube.com/watch?v=iiqB-eQcbT8>



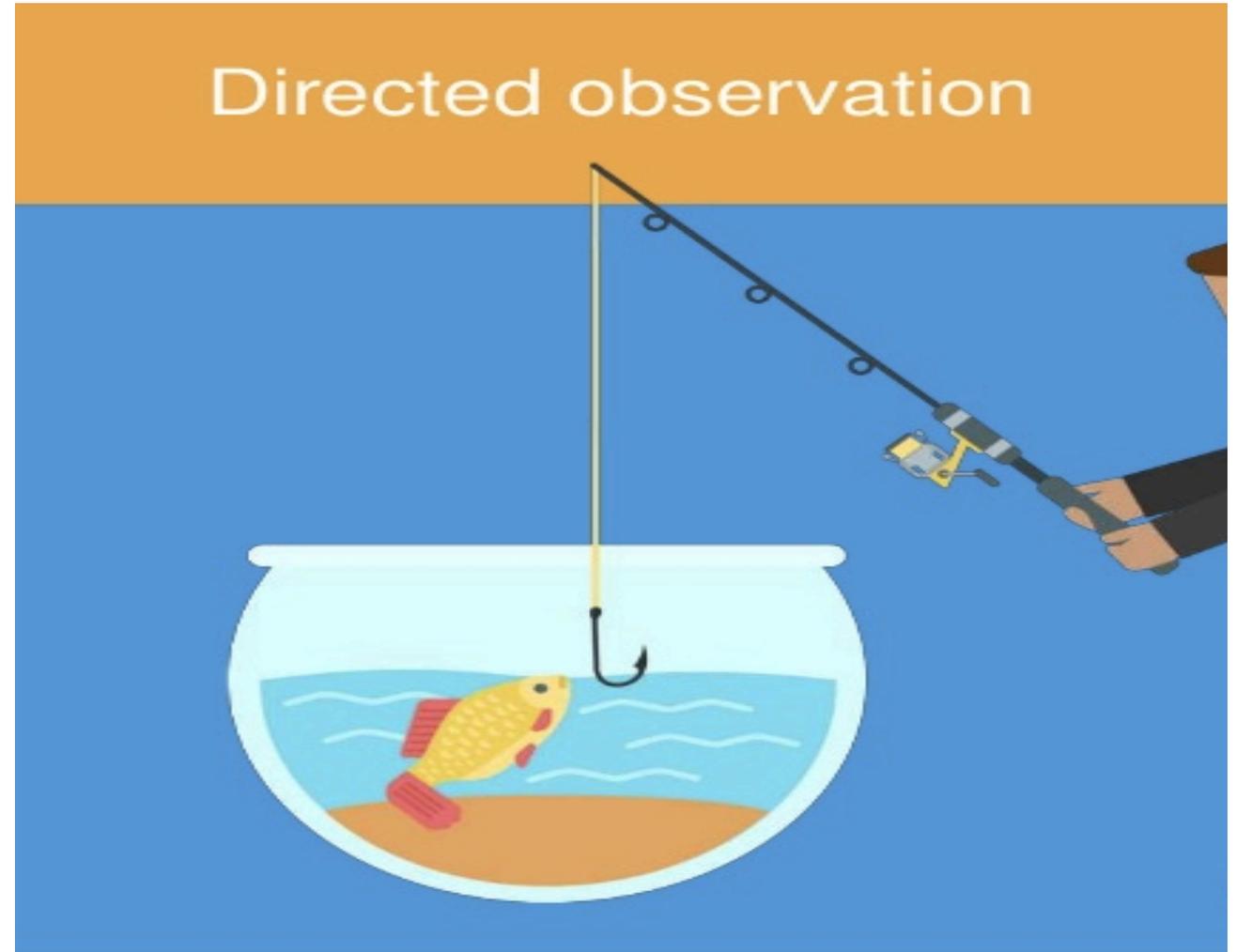
DIRECTED OBSERVATION

TO KEEP THE LEARNERS FULLY ENGAGED WHEN YOU ARE FOCUSED ON A CONSULTATION OR PROCEDURE, MAKE SURE THEY HAVE SPECIFIC OBSERVATION AND RECORDING TASKS-

#1 HAVE A CONVERSATION WITH THE LEARNER TO IDENTIFY A LEARNING POINT

#2 PROVIDE PATIENT CARE AND DEMONSTRATE AGREED LEARNING POINT

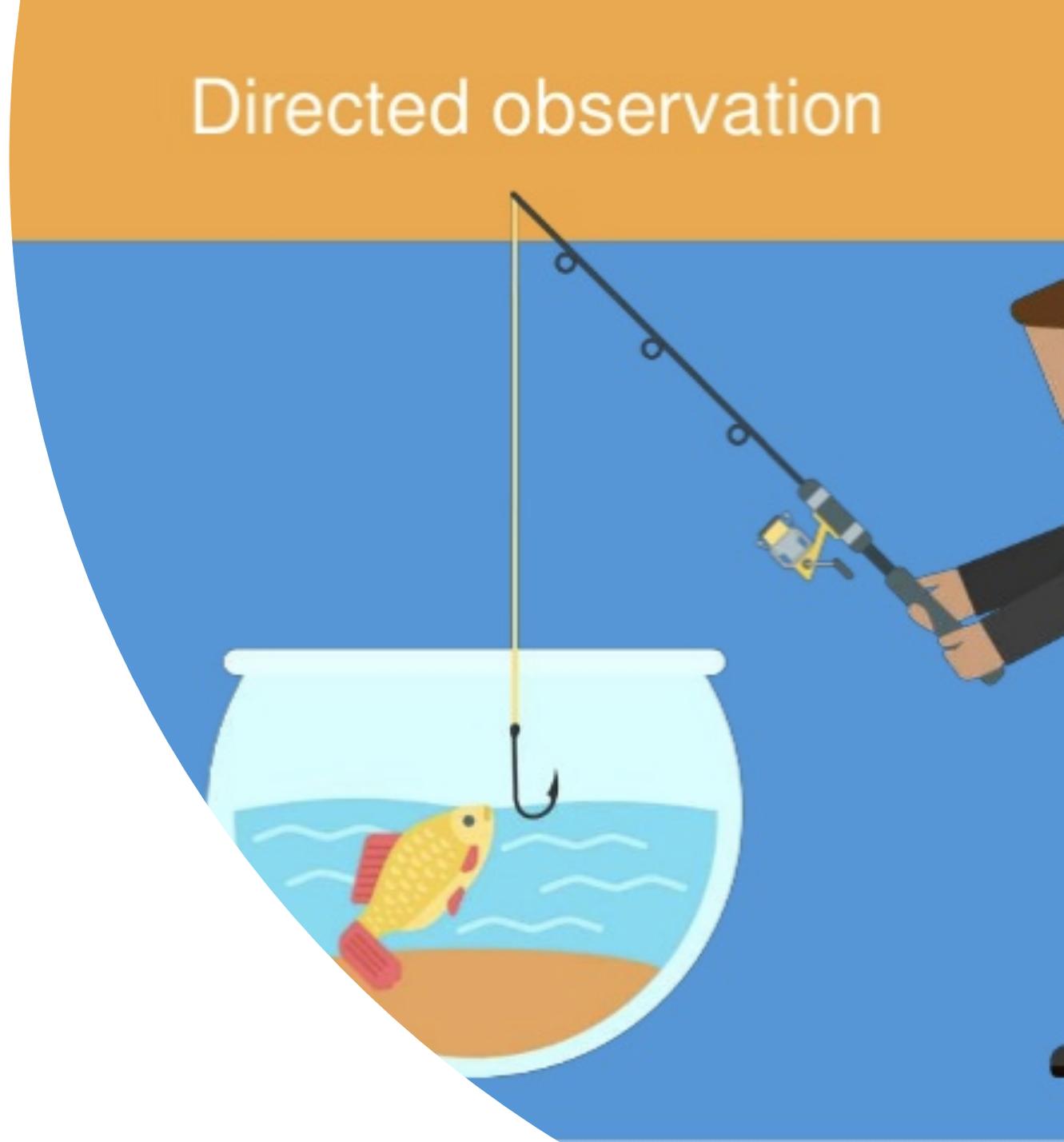
#3 DEBRIEF OBSERVATION WITH LEARNER AND CLARIFY LEARNING POINT



Directed observation

Examples

- **“TAKE PARTICULAR NOTE OF THE MANNER IN WHICH I CLARIFY THE PRESENTING COMPLAINT”**
- **“WRITE DOWN YOUR SUPPORTING EVIDENCE FOR A DIFFERENTIAL DX AFTER YOU HEAR THE PRESENTING COMPLAINT AND HPI”**
- **“NOTICE HOW I HOLD THE EQUIPMENT TO CONDUCT THE EXAM AND HOW I TALK THE PATIENT THROUGH THE EXAM TO EASE ANXIETY/DISCOMFORT”**



DIRECTED TEACHING THROUGH OBSERVATION

A Teachable Moment in Busy Environments



Conversation with the learner to identify a learning point specific to patient

DISCUSS WITH THE LEARNER WHAT THEY WOULD LIKE TO LEARN FROM AN OBSERVATION

Based on what learner identifies & your knowledge of the patient, identify a directed observation learning point

Prime the learner by focusing on signs and symptoms relevant to the chief complaint

DEMONSTRATION BY FACULTY
OBSERVATION BY LEARNER



Provide Care to the patient

INTRODUCE YOURSELF AND THE LEARNER TO THE PATIENT: CLARIFY TO THE PATIENT THE LEARNER WILL BE OBSERVING THE ENCOUNTER

CONDUCT THE ENCOUNTER AND DEMONSTRATE WHAT WAS AGREED UPON

Think out loud, instruct learner to pay attention to your communication with the patient

Debrief observation & clarify learning point



POST
OBSERVATION

ASK THE LEARNER WHAT THEY OBSERVED

DISCUSS THE OUTCOME OF THE ENCOUNTER AND RE-ITERATE LEARNING POINTS

Leave time for questions, clarifications, identify a learner focused follow up

◀ BEDSIDE TEACHING ▶

● Capture a teachable moment ◆

PRE-ROUNDS OUTSIDE THE ROOM

Preparation, Planning, orientation for Bedside Teaching with Patient

Plan what you would like to achieve on patients rounds

Orient the learners to your plans for the session

Engage all learners in the group by giving them specific tasks



BEDSIDE ROUNDS WITH PATIENT

Introduction, Interaction, Observation, Instruction

Introduce yourself and the team to the patient

Learner will role-model a physician-patient interaction identified outside of the room

Observation by faculty is a necessary part of learner-centered bedside teaching

Challenge the learners' minds, gentle correction when necessary

POST-ROUNDS OUTSIDE OF THE ROOM

Debriefing, Feedback, Reflection with Learners, Preparation for the next patient

Provide Feedback and coaching on observation, specific to what was practiced

Prepare for the next patient

Leave time for questions, clarifications, follow up research/reading

If readings are assigned they *must* be discussed later



Objectives- Procedure Skills Teaching



Compare and Contrast skills teaching vs didactic teaching?



Define 4 element approach to skills teaching



Describe the key principles of cognitive apprenticeship in relation to skills teaching



Explain the Zone of Proximal Development

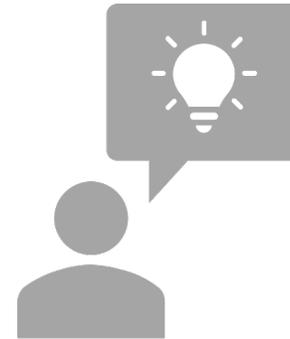


Practice teaching a common skill with peers

Discussion on Skills Teaching



1. How does skills' teaching differ from knowledge teaching?

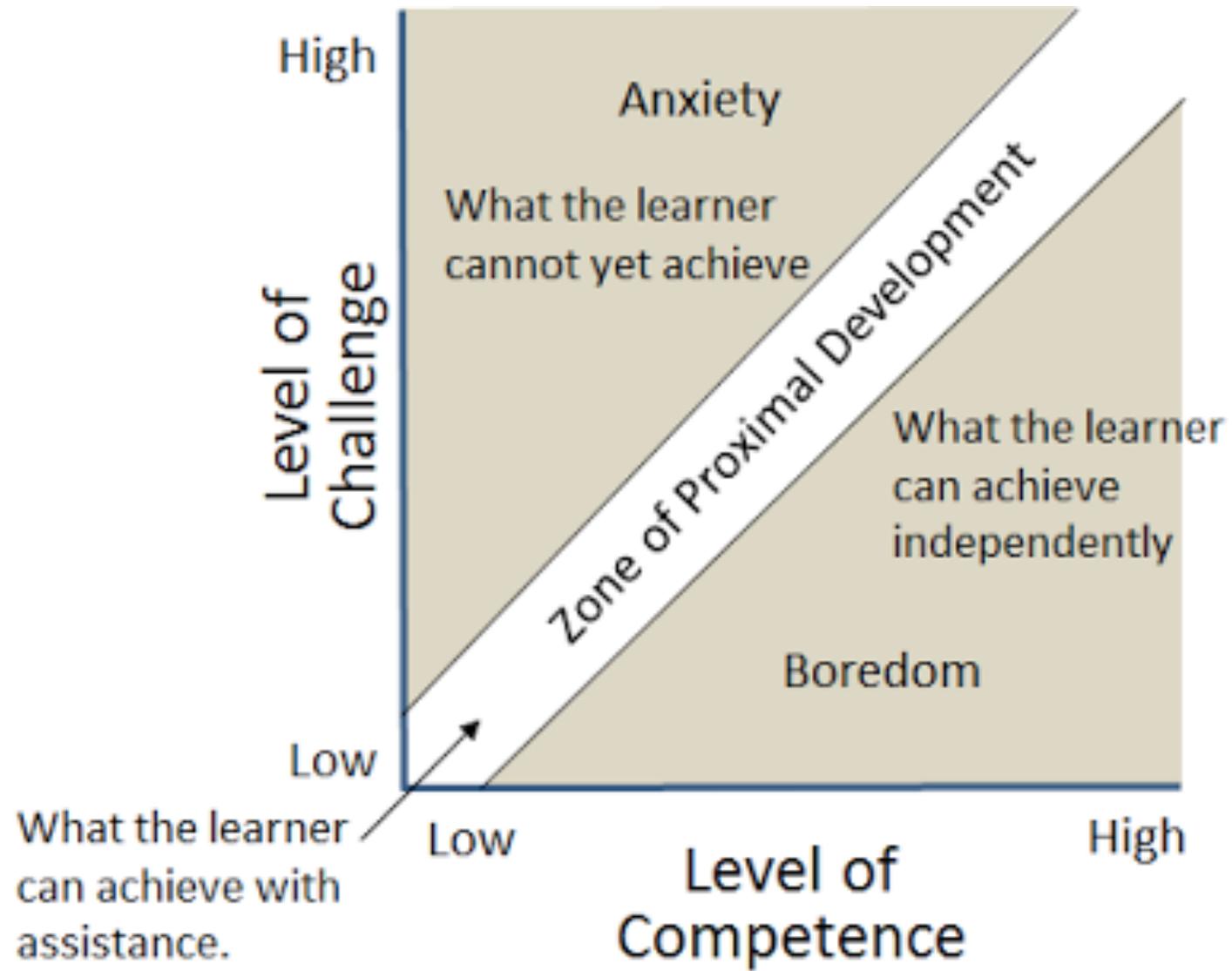


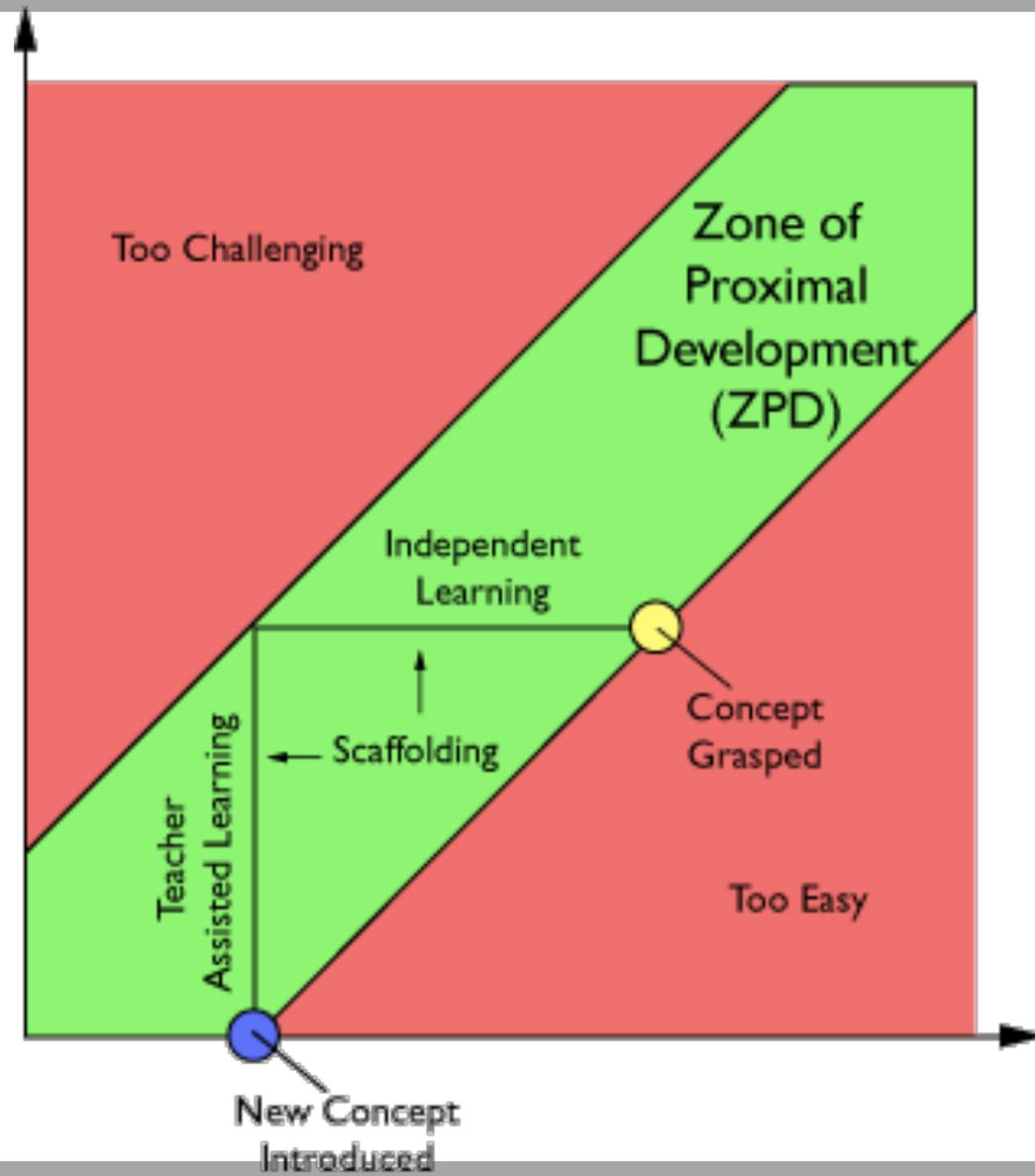
2. With respect to your own educational or clinical setting, can you share ideas with colleagues regarding how skills learning can be advanced on behalf of learners?

Procedure/Psychomotor: 4 steps



- Thus, effective clinical teaching requires that one be skilled in facilitating the acquisition of skill performance by the learner. In this session, scholars will utilize a four element approach to skill teaching:
- 1. Demonstration: teacher demonstrates at normal speed, without commentary,
- 2. Deconstruction: teacher demonstrates while describing steps,
- 3. Comprehension: teacher demonstrates while learner describes steps,
- 4. Performance: learner demonstrates while describing steps.





Apprenticeship to Entrustment: A Model for Clinical Education

Chris Merritt, MD, MPH, assistant professor, Emergency Medicine and Pediatrics, Alpert Medical School of Brown University, Bella Shah, MD, resident, Emergency Medicine, University of Michigan Medical School, and Sally Santen, MD, PhD, professor, Emergency Medicine, University of Michigan Medical School

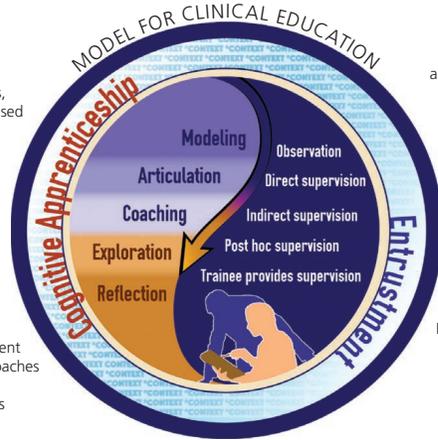
Trainees have long apprenticed alongside experts, participating more fully as they earn their mentors' trust. Novice physicians still rely on *learning by doing* under the guidance of experts. Termed *legitimate peripheral participation*,¹ learners begin by engaging in simple but real tasks, tackling increasingly complex and more central roles as their supervisors' trust increases.

Cognitive apprenticeship:

Applying the methods outlined here, experts make explicit the thought processes, heuristics, and problem-solving strategies used to address complex challenges^{2,3}

An iterative cycle:

Though illustrated stepwise, the apprenticeship and entrustment processes are truly cyclical; approaches to simpler scenarios are applied to increasingly complex situations



Entrustment:

Trainees take on increasing autonomy and progressively greater responsibility for professional activities as they gain trust

Decision to trust:

Entrustment decisions depend on:

- Context
- Learner attributes
- Teacher attributes
- Task attributes

Modeling: Expert demonstrates an approach to a problem or a patient, serving as a role model for the novice (e.g., during a difficult conversation).

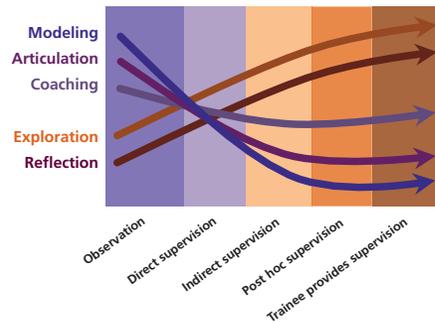
Articulation: Both expert and novice must verbalize what would otherwise be internal thought processes (e.g., by answering "why?").

Coaching: Expert provides guidance before, during, and after the novice's performance, providing proactive and reactive instruction and feedback.

Exploration: The novice begins to branch out, applying knowledge or experience from other domains (e.g., a learner may adapt the expert's approach, applying it in a different manner or in a different sequence).

Reflection: The novice solidifies understanding through deliberate contemplation of past and future performance.

Experts provide more support early on, allowing greater latitude for exploration and reflection with increasing entrustment.



By providing intentionally layered scaffolding throughout a cognitive apprenticeship, the expert supports the novice's development of patterns for understanding problem solving, encouraging increasing autonomy as trust is earned.

References:

1. Lave J, Wenger E. Situated Learning: Legitimate Peripheral Participation. Cambridge, England: Cambridge University Press; 1991.
2. Collins A, Brown JS, Newman SE. Cognitive apprenticeship: Teaching the crafts of reading, writing, and mathematics. In: Resnick L, ed. Knowing, Learning, and Instruction: Essays in Honor of Robert Glaser. Hillsdale, NJ: Lawrence Erlbaum Associates; 1989:453-494.
3. Stalmeijer RE. When I say ... Cognitive apprenticeship. Med Educ. 2015;49:355-356.
4. ten Cate O, Hart D, Ankel F, et al. Entrustment decision making in clinical training. Acad Med. 2016;91:191-198.

Author contact: cmerritt@brown.edu; Twitter: @chris_merritt.

Cognitive Apprenticeship Model: Articulate Coach Explore Reflect

LEARNING PROCEDURES

VIEW ONE, SPEAK ONE, DO ONE

Procedures can be broken down into portions, (microskills) and new learners may not see each component



Learners need to have an overview of all steps involved in the procedure

The importance of early steps may not be apparent until later in the procedure

#1 VIEW!
"Let's Watch how it could be done"

OCCIPITAL LOBE



PARIETAL LOBE

#2 SPEAK!
"WHY Don't you talk me through it?"

#3 DO!
Learner performs with direct observation OR has not demonstrated # 2 so: "Watch me and See how I do THIS part specifically!"

FRONTAL LOBE



VIEW
Provide scaffolding

SPEAK
Verbalize microskills

DO
Observe and direct feedback

Skills Teaching



In preparation for this skills teaching exercise, each participant will need to select a clinical or perhaps other practical skill that contains between 5 to 10 steps and can be taught in less than 5 minutes.



Scholars will gather in groups of three so that each will teach a skill, learn a skill, and be an observer who provides feedback to the skill teacher and learner.

Coaching and Feedback



Objectives: Coaching and Feedback



Compare and Contrast Feedback and Coaching as a Technique



Identify factors that contribute to effective coaching and feedback



Identify the steps in the SFED Model of Feedback & Align with Ask-Tell-Ask Model of Feedback



Identify characteristics/skills of a a clinician who uses coaching skills with a learner



Describe collaborative feedback



Practice feedback with a coaching 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.



- But are we doing it right?



Feedback vs. Coaching

Feedback	Coaching
Focuses on past behavior	Focuses on future behavior
Reactive to a situation	Proactive towards a goal
One-way communication	Two-way communication
Telling or advice oriented	Ask oriented
Focuses on data and information	Focuses on unlocking potential
Describes consequences	Explores options and alternatives
Feedback giver is motivated to change behavior	Feedback receiver is self-motivated to take responsibility and find their own answers



Assessment Drives Learning

<https://youtu.be/SYXgMobMU8U>

A= Self-assessment

T=Feedback/FACTS

A=Encouragement (preceptor-driven) and Direction (learner driven)

SFED: ASK-TELL- ASK

From Cheerleader to Coach: The Developmental Progression of Bedside Teachers in Giving Feedback to Early Learners

Marjorie D. Wenrich, MPH, Molly Blackley Jackson, MD, Ramoncita R. Maestas, MD, Ineke H.A.P. Wolfhagen, PhD, and Albert J.J. Scherpier, MD, PhD

Acad Med. 2015 Nov;90(11 Suppl):S91-7. doi:
10.1097/ACM.0000000000000901. PubMed PMID: 26505108.

Table 1

Less experienced teachers	More experienced teachers
Teacher as cheerleader	Teacher as coach
Focus on positive, minimize negative	Provide honest, transparent feedback
Provide general, nonspecific feedback	Specific, directive, targeted feedback
Passive teacher role	Calibrated teacher role
Follow student lead: "Tell me what you need"	Push student to reflective adult learner role
Remain in background at bedside	Selectively exercise active role at bedside
Give postponed feedback	Balance immediate/delayed feedback
Concern about students' fragility	Understand students' resilience
Worry about impact of negative feedback	Know that students want specific, critical feedback
Create a safe environment	Create a challenging but safe environment
Deter student discomfort	Expect a response: "You show me," "It's okay not to know," and "We're here to develop everyone's skills"
Limited goals and strategies	Strategic and goal oriented
Don't know what works in giving feedback	Have strategies and language for giving feedback
Use trial and error: "Whatever works"	Have goals and expectations: "This works"
Limited skill and comfort addressing behaviors and personality traits (e.g., student anxiety) that limit skill building	Address and name students' limiting behaviors and personality traits (e.g., student anxiety); offer techniques for skill building
Oriented toward students' current needs	Oriented toward students' developmental trajectory
Teach without a long-range plan	Know what skills students should have at different stages of development
Minimal use of teams	Foster environment of team feedback
Private one-on-one feedback from teacher	Utilize peers and patients in giving feedback

Table 1 Themes Related to Giving Feedback to Early Clinical Skills Learners: Characteristics of Less Experienced Compared With More Experienced Bedside Teachers

Wenrich MD, Jackson MB, Maestas RR, Wolfhagen IH, Scherpier AJ. [From Cheerleader to Coach: The Developmental Progression of Bedside Teachers in Giving Feedback to Early Learners](#). Acad Med. 2015 Nov;90(11 Suppl):S91-7.

Figure 1

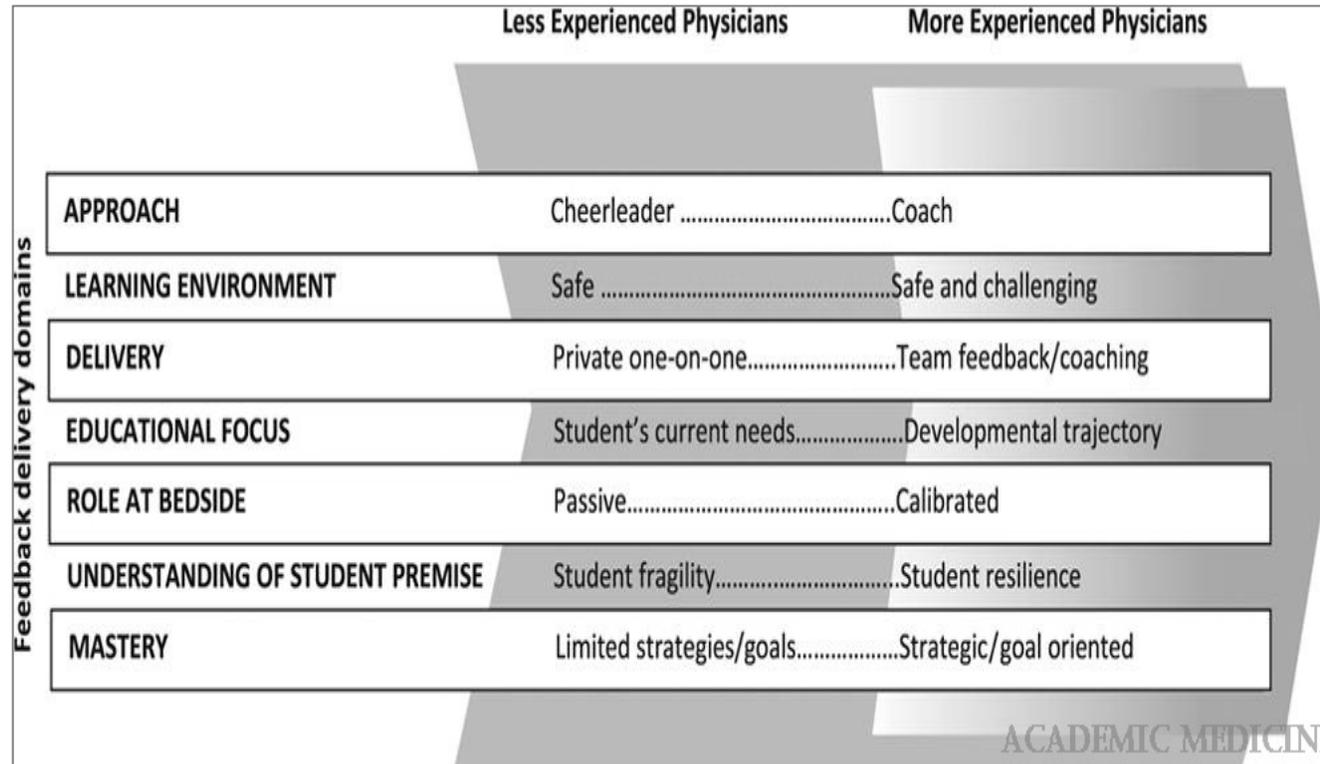


Figure 1. Conceptual model of progression of skills at giving feedback at the bedside.

Wenrich MD, Jackson MB, Maestas RR, Wolfhagen IH, Scherpbier AJ. [From Cheerleader to Coach: The Developmental Progression of Bedside Teachers in Giving Feedback to Early Learners](#). Acad Med. 2015 Nov;90(11 Suppl):S91-7.

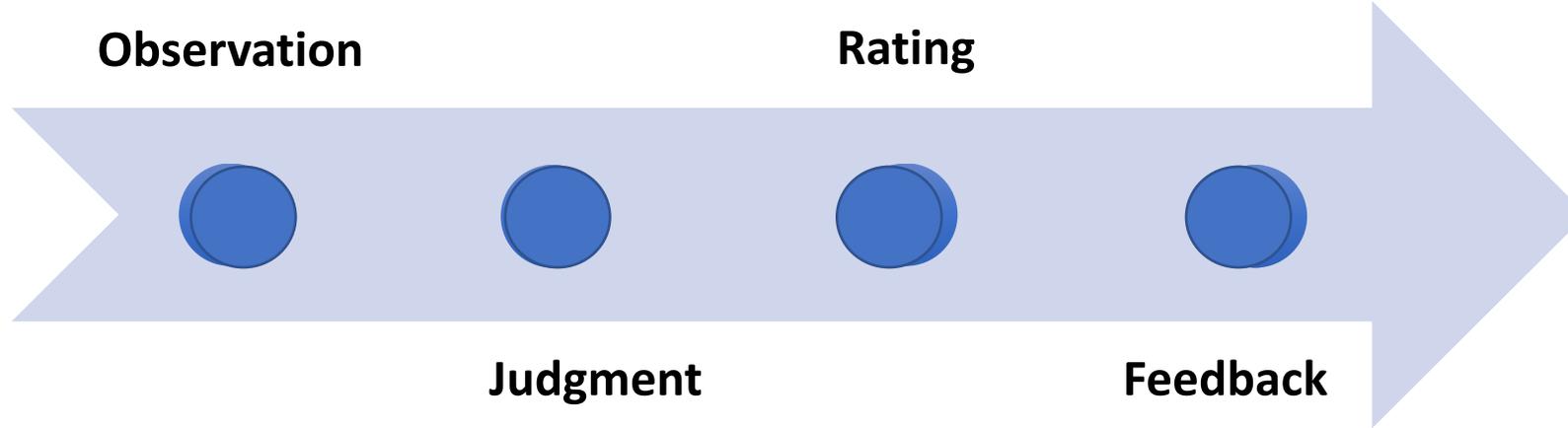
Faculty/Resident Development

↓
Observation

↓
Rating

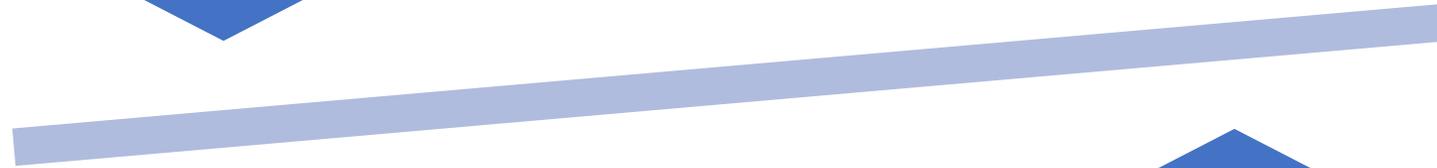
Judgment

Feedback

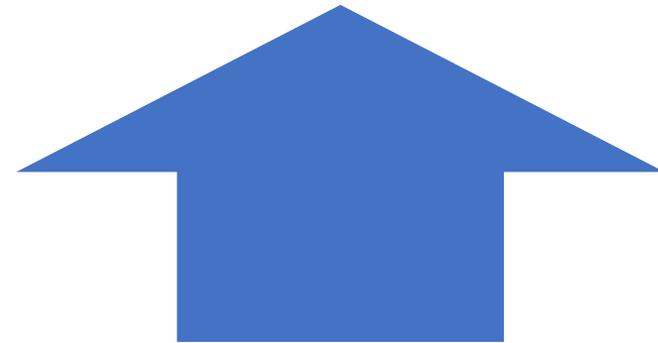




Self-Assessment
“look in the mirror”



Performance
Improvement



What role does this data play in assessing knowledge, skills or attitudes?
Is it reliable?

Feedback/Coaching Sandwich

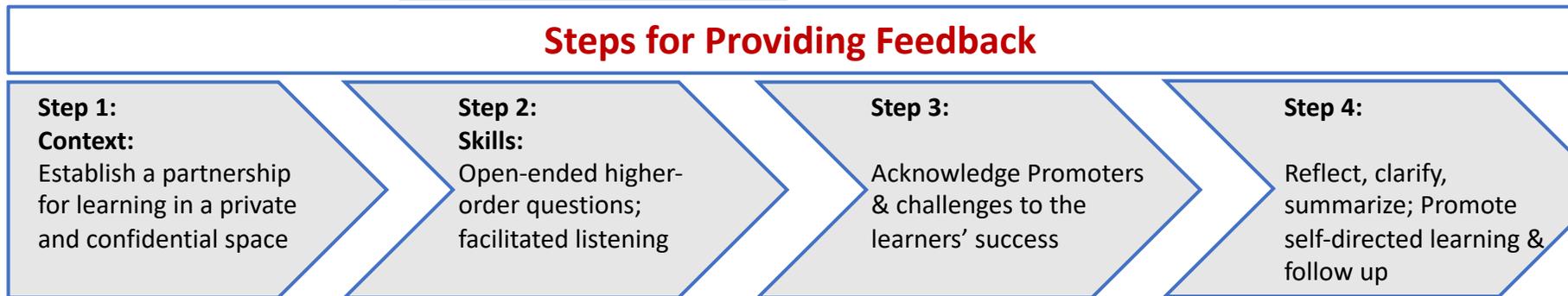
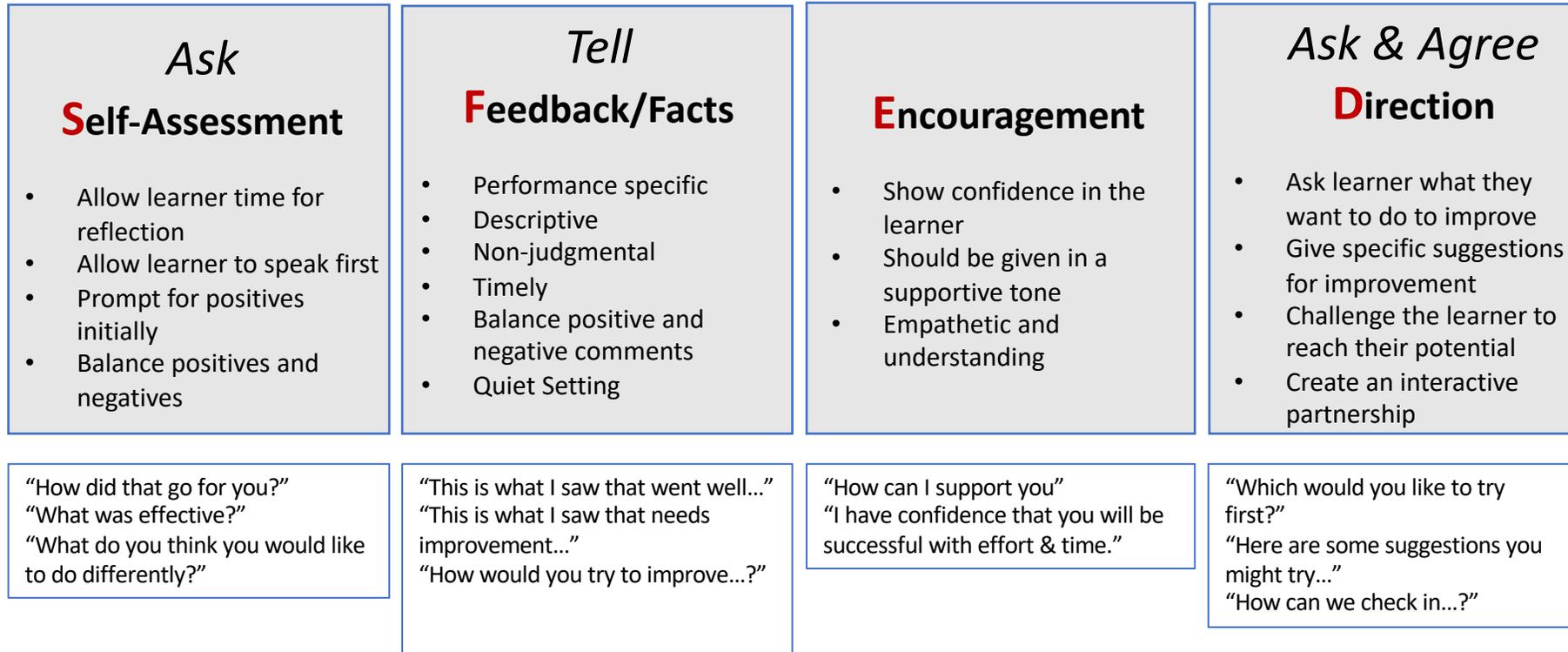
Positive Feedback



Collaborative Feedback

Direction/Coaching

SFED Model of Feedback/Coaching



SFED MODEL OF FEEDBACK

HOW TO USE THE SFED MODEL OF FEEDBACK WITH YOUR LEARNERS



Self Assessment

"ASK"

ASK the Learner...

"How do you think that went?"
What was effective?
"What do you think you would like to do differently?"

Allow Learner to Speak First

Reflection

Encourage a "deeper dive"

Balance Positive and areas to improve

Feedback/Facts

"TELL"

Provide **NON-JUDGEMENTAL**,
TIMELY feedback on
SPECIFIC behaviors and Skills



Encouragement

"Respond"

Convey Confidence in the learner

Use a Supportive tone

Use Empathy Skills

Direction

"ASK"

ASK Learner to Self Identify
strategies for improvement

"Where am I?"
"Where do I need to be?"

Challenge the learner to reach
their potential

Collaborate on next steps

"How do I get there?"

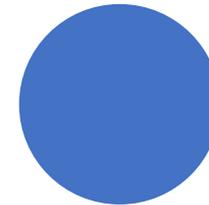


Find a quiet, private space for feedback
Name what you are doing
"I'd like to give you some feedback. Is now
a good time?"

(cc) BY-NC-ND

- 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
-

Types of Feedback/Coaching



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**

*“No matter how well trained people are, few can sustain their best performance on their own. **That’s where coaching comes in.**”*

Atul Gawande



Atul Gawande Thoughts



*A **COACH** PROVIDES A PAIR OF SKILLED EYES AND EARS, AN OUTSIDE PERSPECTIVE ON PERFORMANCE.*



***WHAT MAKES A GREAT COACH?** GAWANDE EMPHASIZED A NUMBER OF FACTORS, INCLUDING CREDIBILITY, CREATIVITY IN SOLVING PROBLEMS, EFFECTIVENESS IN COMMUNICATION, AS WELL AS “AN UNDERSTANDING THAT THE DETAILS CREATE SUCCESS” — THAT SMALL THINGS USUALLY MAKE THE DIFFERENCE BETWEEN GOOD AND GREAT.*



***COACHING** CAN ALSO HELP TEACHERS DEVELOP SUCCESS BY PROMOTING “HUMILITY, BELIEF IN DISCIPLINE, AND [MORE] WILLINGNESS TO ENGAGE IN TEAMWORK.”*

How to Teach Anybody Anything-Be *Mindful

- **Tip 1**
 - **Mindful of the right amount of information, for learner level**
- **Tip 2**
 - **Mind the gap in knowledge and/or skills**
- **Tip 3**
 - **Mind the time**
- **Tip 4**
 - **Mind the student reaction**
- **Tip 5**
 - **Mindful feedback**
- **Tip 6**
 - **Monitor stress, aim optimal**
- **Tip 7**
 - **Be mindful-in the moment- when you are with learners**

Conclusion

“**Clinical teachers differ from clinicians** in a fundamental way. They must simultaneously foster high-quality patient care and assess the clinical skills and reasoning of learners in order to promote their progress toward independence in the clinical setting.

Clinical teachers must diagnose both the patient’s clinical problem and the learner’s ability and skill”.

Bowen, J. N Engl J Med 2006;355:2217-25.

Conclusion

An **effective clinical teacher** articulates what seems different about an ostensibly straightforward patient, with a granular explanation. With repeated exposure, physicians who are fully present will learn to unwrap the puzzle before them, changing and even saving lives.

Bowen, J. N Engl J Med 2006;355:2217-25.

Thank you...
Questions...Thoughts

