

VALUE ADDED COURSE  
RESIDENTS AS EDUCATORS

**DR. S. LAVANYA**  
**PROFESSOR**  
**DEPT OF OBG**

- *Donning your long white coat, punctuated by those two beautifully embroidered letters. You are now a doctor.*
- ***What Do We Know About Adult Learners?***
- *Which teachers were you drawn to?*
- *Who kept your attention the longest?*
- *your best teachers facilitated your learning, rather than simply lectured.*

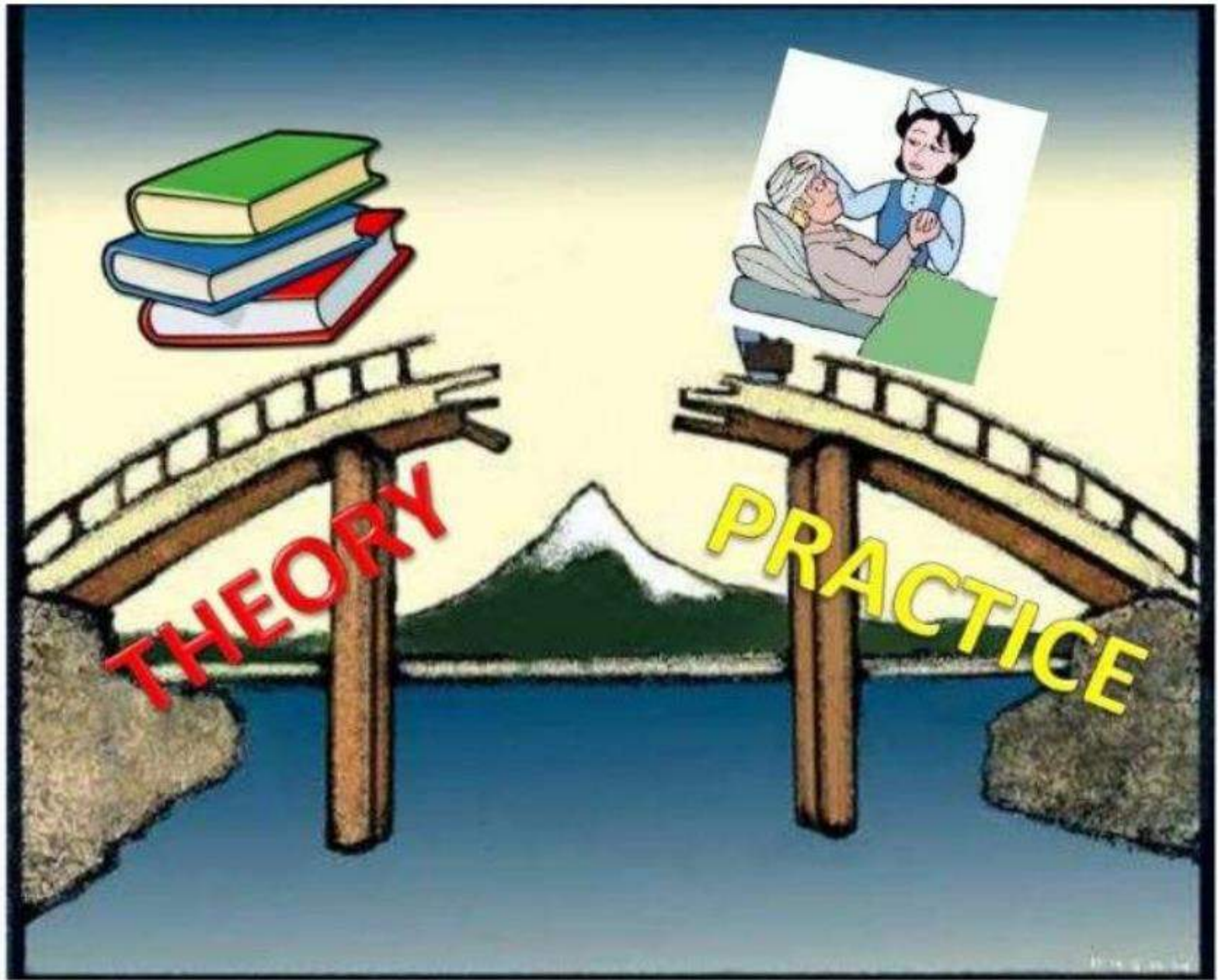
***As you embark on your new role as teacher, keep in mind the following key concepts about teaching adults:***

- Commitment to diagnose the learner
- Advance preparation
- Prepare a teaching script
- Probe for supporting evidence

- **Medical education- facing challenges- Future**
- **Adopt new methods to excel**
- **SHIFT – teacher centered to student centered**  
**passive learning to active learning**  
**product based to process based**  
**Knowledge to skill based**
  
- **INTEGRATE – teaching, learning & technology**
- **Mandate- centralized integrated curriculum**
- **CBME- curriculum based Med Edn- paradigm shift**
- **Ensures competency, entrustable professional activity, tailored learning, sequenced progression & programmatic assessment**

# **STANDARD CLINICAL TEACHING METHODS MERITS AND DEMERITS**

- **Bed side clinic , ward class**
- **Lecture cum Demonstration**
- **Laboratory experiments**
- **Role play**
- **Case study**
- **Mastery Learning**
- **Creative Project**
- **Small group discussions**
- **Tutorials**
- **Simulation**
- **Self directed Learning**



**There is a deep gap between theory and practice**

# Difference between class room and clinical teaching

## **CLASS ROOM TEACHING**

- Large group
- No focus on patient
- Knowledge
- Theoretical framework
- Teacher/students ratio is large
- Passive students
- Less interactive

## **CLINICAL TEACHING**

- Small group
- Focus on patient
- Application of knowledge
- Clinical reasoning
- Teacher / students ratio is small
- Active students
- More interactive

# BEDSIDE TEACHING

## Advantages

- students active learners
- Thought provoking
- Reinforces theory knowledge
- Imparts clinical skills
- Improves communication skills

## Disadvantages

- useful only for small groups
- Patient embarrassment

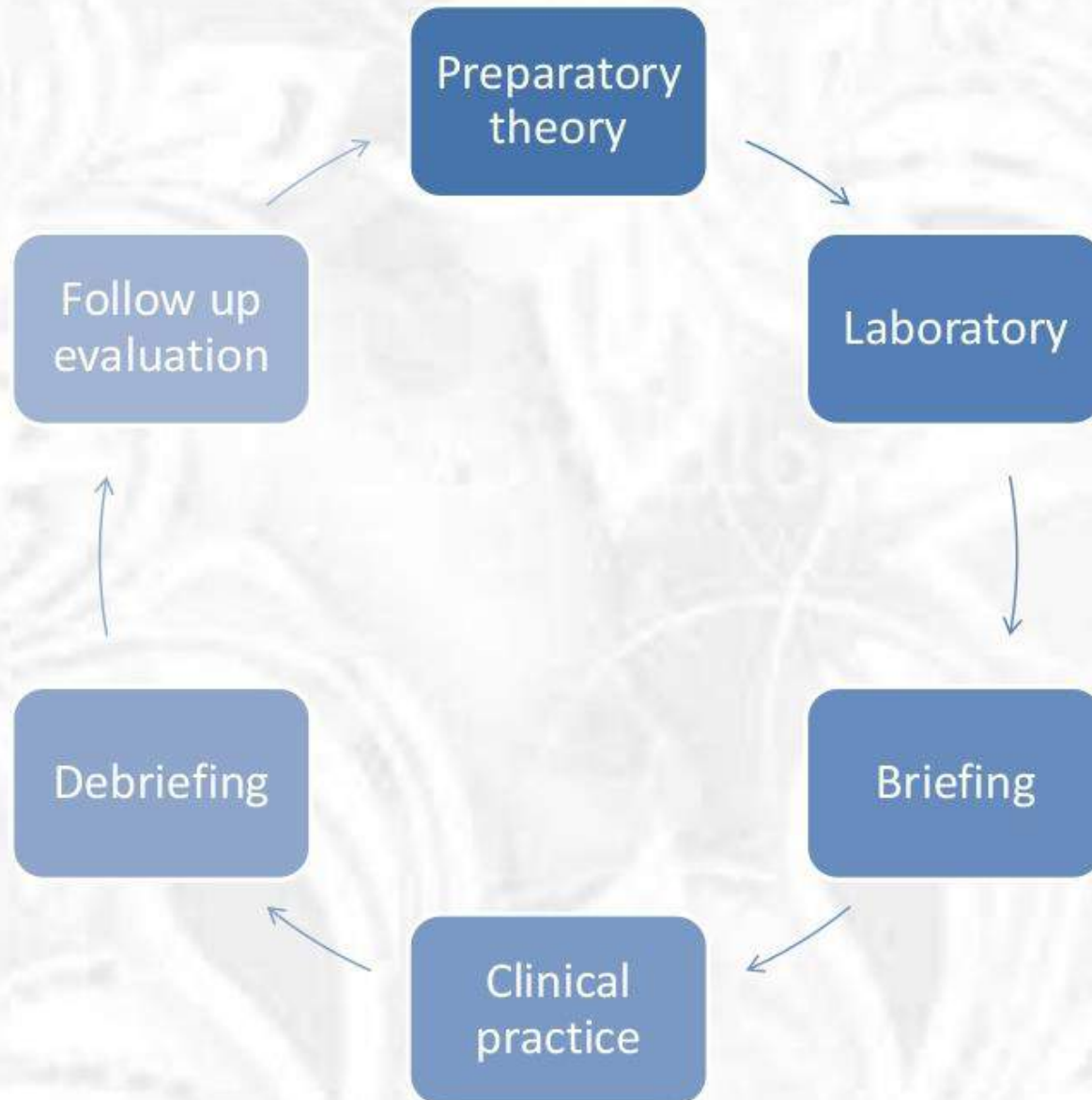


# MYTHS AND FACTS - BEDSIDE TEACHING

<b>Myth</b>	<b>Fact*</b>
Takes too long	Bedside rounding does not take any longer than walk rounding
Patients feel uncomfortable	Patients prefer bedside rounding. Patients report: <ul style="list-style-type: none"><li>•doctors are less confusing</li><li>•more satisfaction with inpatient teams</li><li>•they do not mind discussing sensitive topics</li></ul>
Not educationally valuable	Allows observer to assess (diagnose) the learner Provides opportunity for skill development Allows directly observed feedback Allows role-modelling behaviours



# Clinical learning cycle



# LECTURES AND DEMONSTRATIONS

## • **Advantages**

- Economical
- More reliable
- useful -learner lacks expertise
- Useful for all types of learners
- Easy to remember& recollect

## **Disadvantages**

- Learning by doing ignored
- Visibility poor- viewers
- Hinders skill development



# LABORATORY EXPERIMENTS

## Advantages

Accuracy & precision

Isolation of variables

Controlled /Structured environment

Allows elimination of effects of extraneous variables

Extremely reliable & scientific

## Disadvantages

Lacks external validity

Learner is aware of both cause & effect

Learner proves certain inferences

Difficult to generalize

Ethical problem of harm to respondents

Lack of informed consent

# ROLE PLAY

- **Advantages**
  - social & communal
  - Prepares - real life situation
  - Indicates current skill level
- **Disadvantages**
  - uncomfortable
  - not considered serious



# CASE STUDY

## Advantages

- Intensive study
- develop new research
- Contradicts established theories
- new insight
- Simplifies complex situations
- problem solving skills
- analytical thinking

## Disadvantages

- Inability to replicate
- Researcher biased
- No clarity, classification
- Time consuming
- Insufficient information
- inappropriate results

# MASTERLY LEARNING

## Advantages

- Differentiates what is known what to be learned
- Prevents learning disabilities
- Learner -chance to success
- Breaks cycle of failure

## Disadvantages

- Long process
- Single method of instruction cannot be chosen
- Time consuming



# **SIMULATION**

- **Lack of real system**
- **Teach diagnostic and therapeutic procedures**
- **Uniformly -- educate and evaluate**

## **SELF DIRECTED LEARNING-**

- **Need of the hour**
- **Short time for curriculum**
- **Heutagogy –self initiative-needs goals strategies**
- **Learning to learn art**
- **Achievement goal- performance (extrinsic) and mastery (intrinsic)**

- Traditional teaching has def advantages & disadvantages
- We need to design hybrid techniques to keep pace with the world



# TEACHING PLAN

- Outline structure of a session
- Duration, materials & resources for the session
- Undo misconceptions about topics
- Generate questions and discussions

*Gain Learners attention*

*inform learners of objectives*

*stimulate learners recall prior knowledge*

*present the content*

*Elicit performance*

# PROBING TECHNIQUES FOR SUPPORTING EVIDENCE

- ask learner- evidence to support their opinion.
- Allow to consider additional information.
- Ask them to think out loud.
- helps the learner build critical thinking skills essential for independent practice
- Revealing thought process -what they know (non-teachable moments) and what they don't (gaps in their knowledge or *teachable moments*)..
- "educated facilitator." By probing, you encourage the student to return to their "commitment" in an iterative process.

# GOOD TEACHING

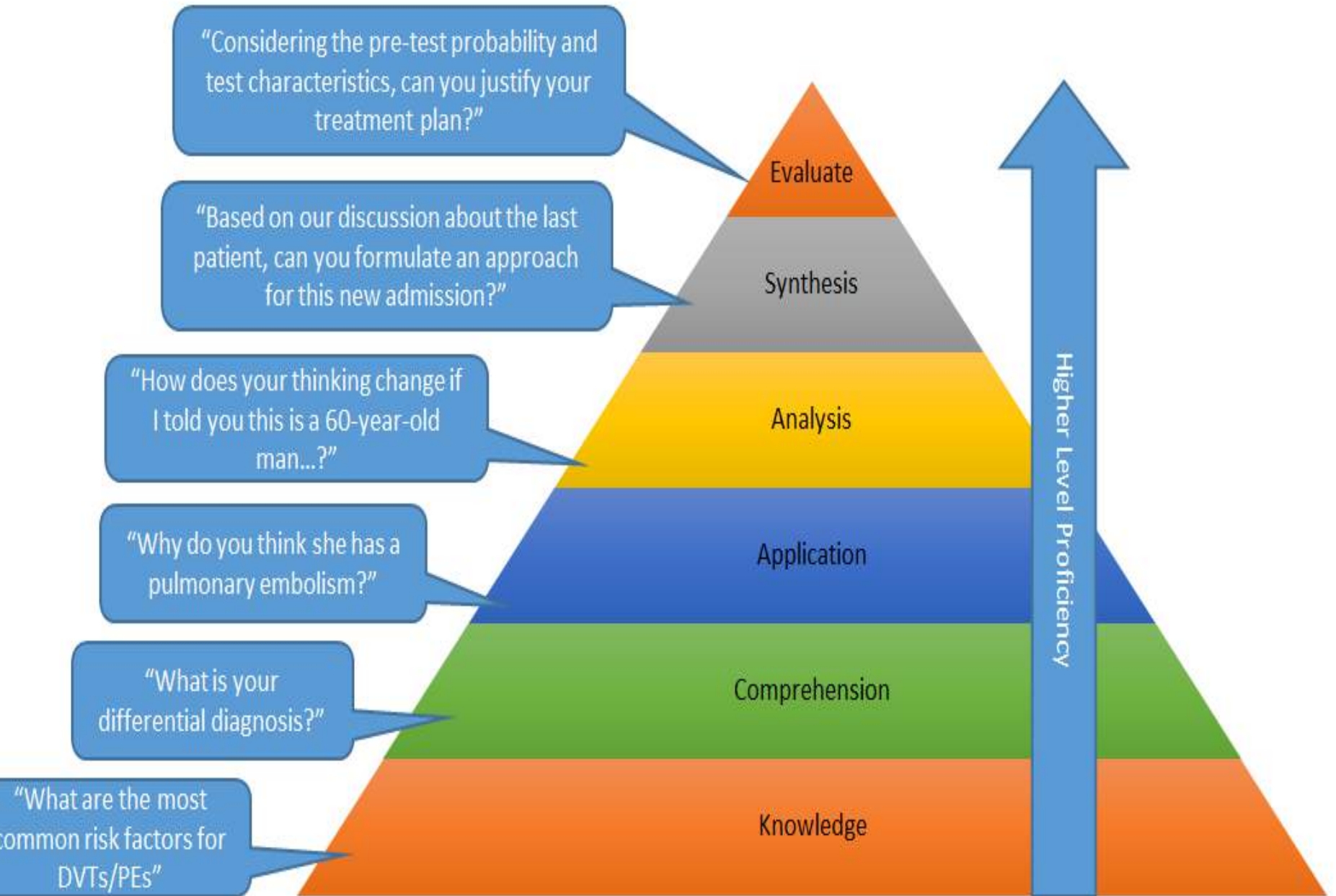
- Teaching - not a natural gift, but an acquired talent based on specific steps and skills which can be learnt.
- Teaching is dependent on *how* knowledge *is shared*, not your level of knowledge.
- *Capture teachable moments*; teaching is not synonymous with lecturing.
- Target your learners' needs while demonstrating your own strengths.
- Be satisfied with small teaching achievements.
- Don't expect too much of yourself each time you teach.

# TEACHING SCRIPT AS A TEACHING GUIDE

- Writing a script -to explain a new idea or concept .
- Structured teaching with time allotment
- can be daunting to stand in front of students without a plan.
- Proper planning - improve the pace and quality
- help you to explain ideas more efficiently
- help both you and the students.
- outline your approach to the topic and key teaching points
- teaching scripts can be revised and used again in the future in similar clinical scenario

# BLOOM'S TAXONOMY OF LEARNING DOMAINS







- Identify. Recognize. Interpret. Distinguish. “Bloom’s verbs”
- foundational building blocks of learning objective-pedagogic models- Bloom’s taxonomy.
- backbone of CME and residency programs’ lesson plans, assessments, simulations, and learning platforms
- reflect both educational goals and clinical experience.
- Medical educators - assess learners level on the ladder and tailor their assessments
- basis of all clinical decision making is knowledge
- diagnose and treat patients with foundation of recalling correct information and comprehension of that knowledge.
- *Applying* that material to patient care is the next step up on the ladder
- “formulate” a solution to a problem, “map” out a plan for treatment, “prepare” a patient for the next step in evaluation.

## Prepare

- Read about the patient in advance
- Counsel the patient before the encounter
- Identify learning points prior to rounds

## Plan

- Who is going to be talking at the bedside? Where is everyone going to stand?
- Who is going to examine the patient?
- What do you want to accomplish during the encounter?

## Encounter

- Role model behaviors you hope to instill in your learners
- Identify teachable moments and teach through open-ended questions
- Communicate and summarize plan

## Debrief

- Clarify questions and address pending issues
- Provide feedback (both positive and constructive)
- What went well? What can we do better next time?

# TEACHING PROCEDURES

## Plan Ahead

- Assess learner
- Review kit in detail
- Review step-by-step approach

## Supervise

- Monitor closely
- Know when to jump in and correct mistakes
- Always debrief following the procedure
- Assess competence

## Demonstrate

- Perform procedure in its entirety
  - Once without comments
  - Then with explicit comments about each step

## Practice

- Simulation-based observation
- Learner self-reflection
- Provide feedback



- *Teach through all your words and actions.*
- *Lead by example; learners are learning from your behaviour than from your prepared content (educators call this the “hidden curriculum”).*
- *Instill the behaviour*
- *be thoughtful of your words and actions in front of learners.*
- *Avoid derogatory comments about patients or other services.*
- *Maintain a positive attitude, even in the face of challenges.*
- *Maintain calm and confidence in the midst of busy call days and sick patients.*



**THANK  
YOU**