Practice Based Teaching Roles

Annie Lee

Associate Professor, Teaching Stream

Leslie Dan Faculty of Pharmacy, University of Toronto

Leslie Dan Faculty of Pharmacy
University of Toronto

Objectives for this Session:

1. Identify four different roles of preceptors in practice based teaching

2. Describe examples of these roles

3. Reflect on how these roles can be translated in your residency program

Poll Question

What is your role related to the residency program? Select all that apply.

a) Residency director/coordinator

b) Residency preceptor

c) Resident

d) Staff/Faculty member of a university

Canadian Pharmacy Residency Board Accreditation Standards for Pharmacy (Year 1) Residencies May 2018

2.2.2 Education Approach

Requirement 3 – The residency program should use instructional methods and delivery formats that will provide the optimal learning environment to achieve the educational outcomes.

3.5 Provide Medication and Practice-Related Education

Requirement 3 – The resident shall demonstrate skill in the four roles used in practice-based teaching:

a) Direct instruction
b) Modeling
c) Coaching
d) Facilitation

Is This You?

- It is Monday morning at 9:00 a.m.

- You are preparing for rounds that start at 9:30.

- There are 5 new patients admitted to your service.

- You have a pharmacy resident with you (week 3 of the rotation).

- A fourth year student just started on your service today.

- You ask your resident to orient the student to the service. The student can start working on patients assigned to the resident.

- What teaching role should the resident assume in overseeing the student?

Polling Question

What teaching role should the resident assume in overseeing the student?

a) Direct Instruction

b) Modeling

c) Coaching

d) Facilitating

Back to Basics in Teaching

Factors Affecting Teaching
- Student, teacher, milieu, content

Facilitation versus Lecturing
- Process vs Content
- Coach/Guide vs Content Expert
- Active Role vs Passive Role in learning
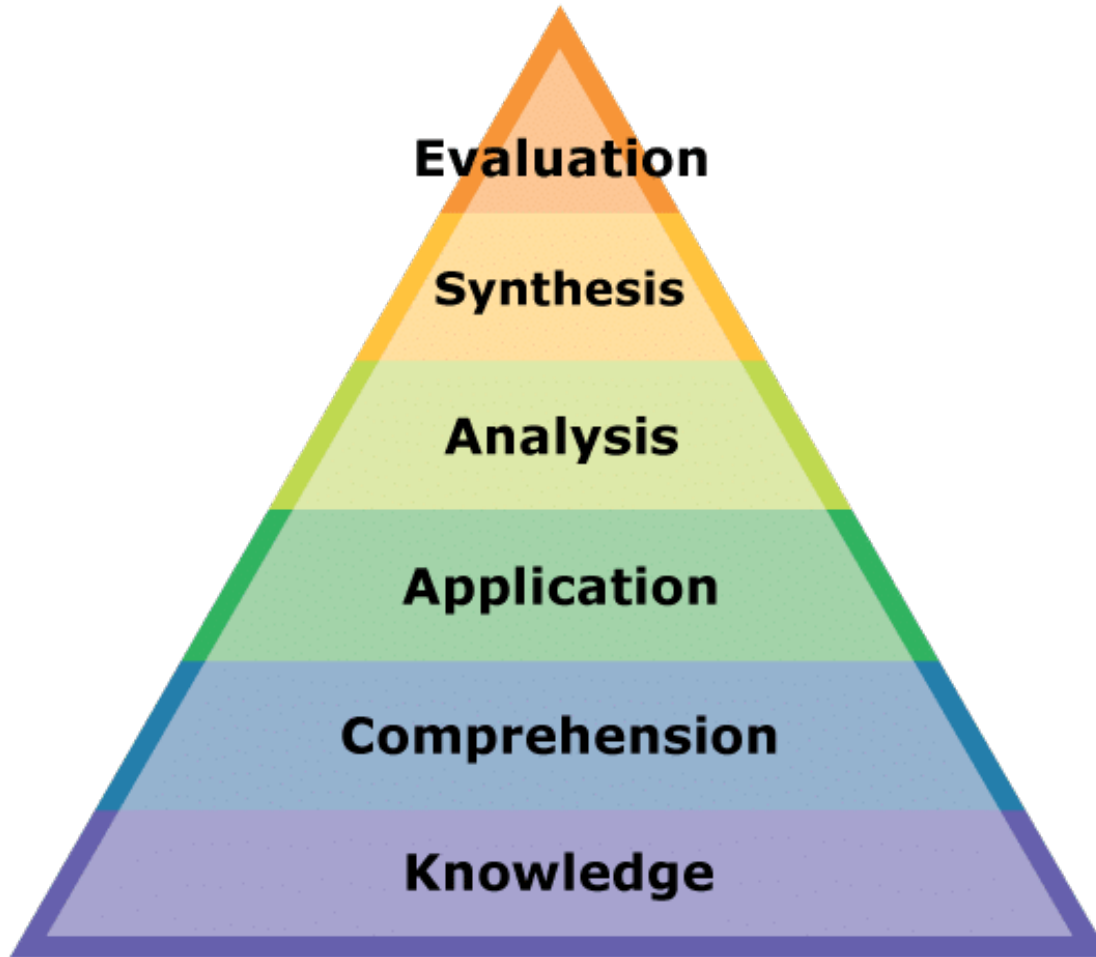
Orientation in Learning (Miller & Seller)

The orientation reflects the basic beliefs about the purpose and methodologies of education.

Transmission position – the learner acquires subject-oriented knowledge through the transmission of facts, skills and values (i.e. textbooks and lectures).

Transaction position – the learner is believed to be capable of intelligent problem solving. Education is a dialogue between the learner and content (i.e. problem solving).

Transformation position – promotes personal and social transformation into a humanistic and holistic orientation. The student and the content are seen to interpenetrate each other in a holistic manner (i.e. self-inquiry, self-reflection).

Miller JP, Seller W. Curriculum Perspectives and Practice. Mississauga: Copp Clark Pitman; 1990.

Bloom's Taxonomy: Stages of Cognitive Learning

Bloom's Taxonomy: Stages of Cognitive Learning

Knowledge

Observation and recall of information; mastery of subject matter

Comprehension

Understanding information; translate knowledge into new context

Application

Applying knowledge to solve a problem

Analysis

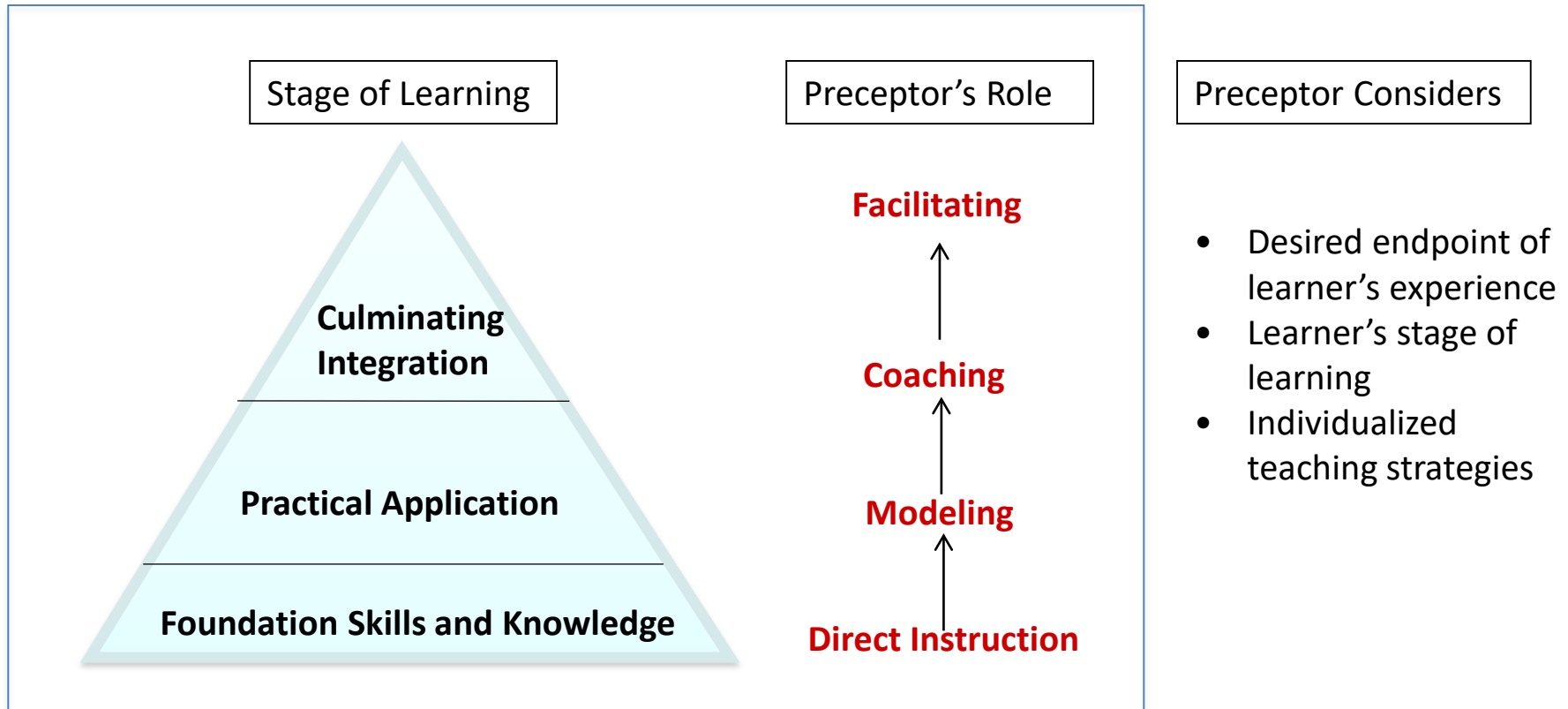Breaking down complex ideas into integral parts and seeing how the parts relate

Synthesis

Using existing ideas to create something new to solve a complex problem

Evaluation

Judging the value and quality of work based on criteria/standards

Bloom S. (1956) Taxonomy of Educational Objective, Handbook 1: The Cognitive Domain. New York: David McKay Co Inc.

Learning Pyramid – Stages of Cognitive Learning in Pharmacy Education (Nimmo)

Stage of Learning	Preceptor's Role	Preceptor Considers

Stage of Learning (pyramid, top to bottom):
- Culminating Integration
- Practical Application
- Foundation Skills and Knowledge

Preceptor's Role (bottom to top):
- Direct Instruction
- Modeling
- Coaching
- Facilitating

Preceptor Considers:
- Desired endpoint of learner's experience
- Learner's stage of learning
- Individualized teaching strategies

Comparing Bloom's Taxonomy with Learning Pyramid in Pharmacy Education

Stages of Learning (Nimmo)	Bloom's Taxonomy
Culminating Integration	Evaluation
Practical Application	Synthesis Analysis Application
Foundation Skills and Knowledge	Comprehension Knowledge

Scenario and Poll Question

A preceptor asks a resident/student to suggest an antihypertensive medication for Mrs. Smith. The drug must be efficacious with minimal drug interactions and maximum compliance. Mrs. Smith is taking 7 other medications. What Stage of Learning does this represent for the learner?

a) Foundation Skills and Knowledge

b) Practical Application

c) Culminating Integration

Teaching Roles

Direct Instruction

Modeling

Coaching

Facilitating
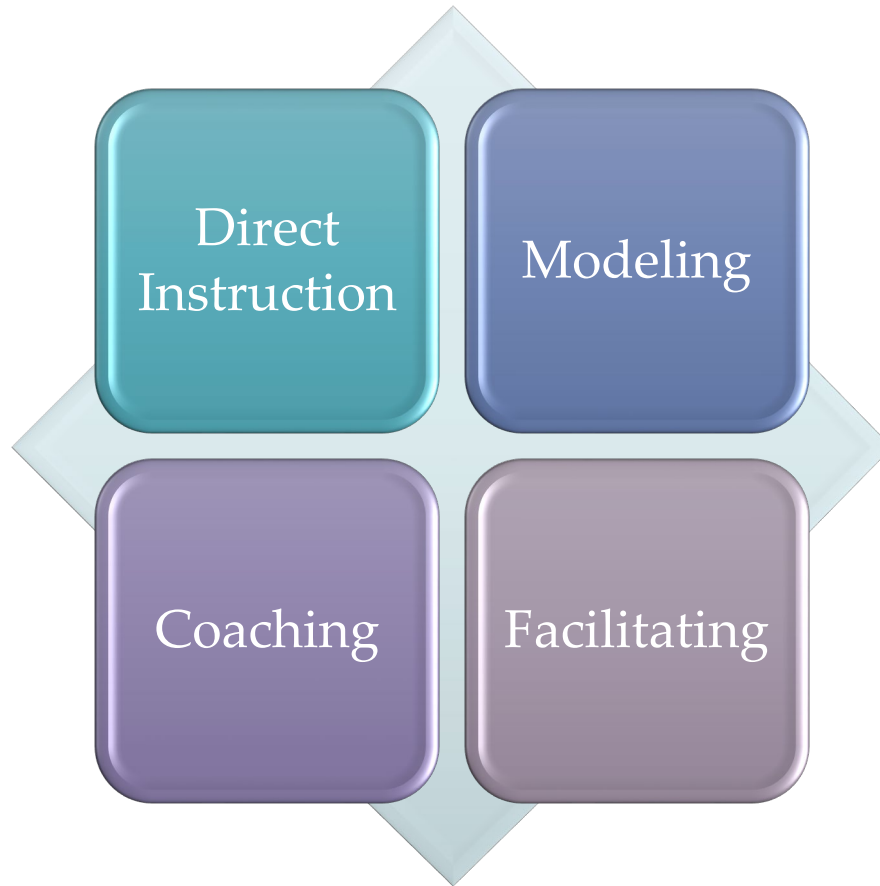
Direct Instruction

Definition: *the conveying of knowledge directly to the learner using lectures, discussions or required readings[1]*

Purpose: Help learners build a strong foundation of knowledge and understanding to apply to patient care activities

Rarely the primary teaching role in residency programs

1. Am J Health-Syst Pharm. 2012; 69(18):1588-99

Direct Instruction Techniques

Lecture
- Enhance a learner's understanding of facts
- Interactive lecture – formal lecture with questions and answers
- Maybe used inappropriately to replace a learner's self-direction

Discussion
- Informal or formal
- Guided discussion – less formal combined with developed questions

Required Readings
- Assimilate new facts and information
- Examples – guidelines, policies, consensus statements, textbooks

Case-Based
- Build on learner's 'comprehension'
- 'Teaching Case' - lecture or discussion – informal or formal
- Solved case, real case or simulated case

Poll Question

Take a minute to think how you can have residents demonstrate **<u>Direct Instruction</u>** in your residency program.

Type in any reflections you have in the question box.

Examples of Direct Instruction

- Learner completes assigned readings and then participates in discussion with preceptor on drug therapy

- Preceptor conducts presentation for a group of learners

- Preceptor presents actual case to learner – verbalize thought process

Modeling

Definition: *providing an example to the learner by observing the preceptor solve a real problem*[1]

Purpose: demonstrates a specific behavior/skill/interaction to the learner

Works Best When:

- Learner has gained foundational knowledge and skills

- Modeling takes place in actual clinical encounter

- Learner is notified in advance of the specific behavior to be modeled

- Preceptor verbalizes and explains ('think aloud') when solving a problem

- Concluding with a debriefing of encounter

1. Am J Health-Syst Pharm. 2012; 69(18):1588-99

Poll Question

Take a minute to think how you can have residents demonstrate **Modeling** in your residency program.

Type any thoughts you have in the question box.

Examples of Modeling

- Preceptor counsels patient about adherence and primes learner to listen for specific communication strategies. Debrief after encounter.

- Preceptor demonstrates injection technique for a vaccination and explains the steps s/he is taking.

Coaching

Definition: *a learner executes a previously modeled task or skill and feedback with direction allows learner to refine*[1]

Purpose: learners gain practical hands on experience under the supervision of preceptor.

Works Best When:

- Learners have understood new concepts, observed patient care activities and ready to apply knowledge

- Priming before encounter to orient learner to task

- Feedback is provided after task/encounter to reinforce skills and avoid incorrect choices

- Learners 'think aloud' (i.e. verbalize what they are thinking) as they solve a problem

1. Am J Health-Syst Pharm. 2012; 69(18):1588-99

Types of Coaching

Traditional Case Presentation
- Learner interacts with patient and presents findings, problems and plan of action

One-Minute Preceptor
- Preceptor asks specific open ended questions to highlight learner thought process

Think-aloud Model
- Learners describe their thought process when discussing patient cases

Questioning
- Q&A session before, during and after a patient encounter

One-Minute Preceptor

- Clinical questioning with feedback

- Diagnose the learner and then teach through discussion

- Designed for use in ambulatory clinics and medical offices – clinical teaching is 10 min
  - Case presentation by learner (6 minutes)
  - Preceptor ask questions (3 minutes)
  - Discussion of case – actual teaching (1 minute)

- Five Microskills - get a commitment, probe for supporting evidence, teach general rules, reinforce what was right, correct mistakes

- One-minute preceptor allows maximum use of limited teaching time

Poll Question

Take a minute to think how you can have residents demonstrate **<u>Coaching</u>** in your residency program.

Type your thoughts in the question box.

Examples of Coaching

- A learner, under supervision, interacts with a patient in a medical unit. After the interaction, the learner presents the patient case to the preceptor and discusses a plan. Preceptor provides feedback on the encounter.

- Preceptor uses the One-Minute Preceptor technique to speak with the learner during patient encounters in a renal outpatient clinic.

Facilitating

Definition: *Helping leaners to grow by offering practice experience and opportunities for evaluating their own practice[1]*

Definition of Facilitator (Merriam-Webster Dictionary):

One that helps to bring about an outcome (as learning, productivity, or communication) by providing indirect or unobtrusive assistance, guidance, or supervision

Facilitators vs Teachers

"Guide on the side" vs "Star on the Stage"

1. Am J Health-Syst Pharm. 2012; 69(18):1588-99

Skills of an Effective Facilitator

- Promotes thinking and problem-solving

- Does not evaluate ideas; non-threatening

- Uses effective communication skills (active listening, encourage and motivate, attentiveness to verbal and non-verbal cues)

- Recognize the facilitator's behaviours have a profound influence on how learners perform (individual or group)

- Highlights relevant points

- Flexible and able to adapt

- Interested and engaged in task

Facilitation Skills in a Group

- Guides the group through the process and helps the group focus on its goals or desired outcomes

- Ensures that everyone has the opportunity to participate; creates an inclusive and safe environment to participate

- Highlights relevant points/summarizes group ideas to validate and clarify the progress of the discussion (could also use designate)

- Comfortable dealing with silence in the group

- Don't assume it is working – check in with learner by asking questions

Unsuccessful Group Facilitation

- Facilitator talks more frequently than learners

- Teacher-centered didactic lecture style rather than student-centered

- Asymmetrical student engagement

- Facilitator reverts back to being a content expert rather than facilitator

- Facilitator provides correct answers rather than having learners problem solve

Poll Question

Take a minute to think how you can have residents demonstrate **<u>Facilitation</u>** in your residency program.

Type your thoughts in the question box.

Examples of Facilitation

- Leading a group of learners to come to a group resolution on a case and then providing opportunity for learners to self-evaluate

- Preceptor is speaking to a learner about a diabetes case. The preceptor asks open ended questions – tell me about your patient. The preceptor invites different points of view for problem solving. Why did you make that drug recommendation?

Back to the Scenario

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- You ask your resident to orient the student to the service. The student can start working on patients assigned to the resident.

- What teaching role should the resident assume in overseeing the student?

Polling Question

After this presentation, would you change your response for the teaching role of the resident in the scenario?

a) Yes

b) No

c) It depends on the situation

Final Thoughts

- Consider stage of learner

- Consider learning environment

- Consider the teaching strategy for the individual learner

- Select the role of the preceptor that fits with the teaching situation encountered

Questions?

Contact:

Annie Lee – awm.lee@utoronto.ca