

The Role of Adult Learning in Clinical Education

Video Transcript

Pedagogy vs. andragogy: Pedagogy is the art and science of teaching children, while andragogy is the art and science of helping adults learn. The term “andragogy” was introduced in 1968 by Dr. Malcolm Knowles.

Characteristics of learners: With youth learners, we know that they are subject oriented, future oriented, and often depend on adults for direction. More, they are more accepting and often trained for unclear future, often dependent on others. While adult learners are problem-centered, results-oriented, and self-directed, often skeptical about new information, they seek relevancy and accept responsibility for their own learning.

What are the goals of clinical education? The first goal is independent learning and the second is autonomy. As faculty, we want our graduates to be competent clinicians and lifelong learners.

So how does students learn clinically? There is a learning vector where the model is considered to be the key clinical experiences of various stages of learning. So if we look at the diagram, we can see that the novice comes in and they are very dependent upon the faculty. However, through exposure and clinical instruction, they apply what they learn. And as they go up the axis, they become independent, and as they mature as well. And then at the time that they receive all the information, they use that information to integrate that into what they know clinically. So students mature professionally, the horizon axis, and

gradually help the student develop from a dependence on the instructor to having greater independence in pursuing his or her own learning agenda.

Questions to ask yourself when clinical teaching: Who am I teaching? What am I teaching? How will I teach it? How will I know if the students understand? These are all very important questions when you're teaching in the clinic, because each learner will be different and different stages of their development. So it's important to keep these questions into context.

Tips to facilitate clinical learning: Ask a student to explain their answers by using evidence-based decision-making. For example, a patient is needing pit and fissure sealants. Ask the student to locate, provide the evidence on clinical practice guidelines.

Link classroom topics to what they experience clinically. And example is a student indicates that patient's oral condition exhibits gingivitis. Ask the student to describe the condition from what was taught in the classroom and how it is exhibited clinically.

Inquire on how their clinical decisions will impact their process of care. An example: A student has discovered the patient is hypertensive and has a blood pressure reading of 180 over 120. Today's appointment indicates an extraction of tooth number 30. Have the student explain how hypertension would impact today's treatment.

Educational theories in clinical practice: So we have four different types of educational theories, and we'll go through them. We have self-directed learning, self-efficacy, constructivism, and reflective practice.

Theory one, self-direct learning: Organizing teaching and learning so that learning is within the learner's control. A goal towards which learner strives so that they become able to accept responsibility for their own learning. For example, when the student begins a process evaluation, that student must accept the consequences of that evaluation. The faculty must debrief and provide constructive feedback on their performance.

Theory two, self-efficacy is the extent or strength of one's belief in one's own ability to complete task and reach goals; the ability to succeed in specific situation; how one approaches goals, tasks, and challenges. For example, discussing with the student realistic goals in what can be accomplished during a clinical session.

Self-efficacy, the teacher's role: Our role is to model and to demonstrate, set a clear goal or image of the desired outcome, provide basic knowledge and skills needed as the foundation for the task, provide guided practice with corrective feedback, giving students the opportunity to reflect on their own learning.

Theory three, constructivism: Learners construct their own knowledge on what they

have already know. So knowing is active rather than passive, with learners making judgments about how and when to modify their knowledge.

Constructivism: Example: Have a student write a clinic blog, starting with their pre-clinical semester and ending with their last clinical semester, compare and contrast their clinical skills from their start to the present. As faculty, we should see a growth in their development clinically as they transition from one clinic session to another. So in the pre-clinic, they tend to depend on you quite frequently, while as they begin getting closer to graduation, they become more independent and then you facilitate that conversation of what they still need assistance with their clinical skills and learning.

Theory four is reflective practice, is defined as the capacity to reflect on action as to engage in a process of continuous learning. For example, have a student write a reflective paper on a community service event. How has participating in that event changed the student's philosophy of practice?

Recap: Students are adult learners. Students view faculty through a different lens. Faculty can facilitate their clinical learning through the four educational theories of self-direct learning, self-efficacy, constructivism, and self-reflection. The goals of clinical education are independent learning and autonomy.