

Theories of Learning

Student-Teacher Relationships

Precepting students is a dynamic process. It rewards both the preceptor and the student with growth for which both are responsible. Paulo Freire (1997) analyzes the student-teacher relationship. Freire views education as a method of awakening social consciousness. In this process both the student and the teacher simultaneously become learners. “Through dialogue, the teacher-of-the-student and the student-of-the-teacher cease to exist and a new term emerges – teacher-student with students-teachers. The teacher (or preceptor) is no longer merely the one-who-teaches, but one who is taught in dialogue with the students, who in turn while being taught also, teaches. They become jointly responsible for a process in which all grow” (p. 61).

Dialogue is a powerful tool of education. In the education relationship the students-teachers/preceptors need to be viewed as equal knowers in the experience of determining what is to be learned. The educational dialogue is more than an exchange of words; it is a relationship built on trust, and faith that trust is possible in the relationship.

A preceptor-student relationship of trust is critical to a successful clinical experience for both the preceptor and the student. Preceptors trust the student will obtain the requisite scientific basis for practice prior to the clinical experience. Students trust the preceptor’s goal is a quality clinical experience for the student. Often, this relationship develops into a more expanded relationship of mentorship.

Preceptors (teachers) and students bring to a learning relationship or dialogue a multitude of experiences, values, attitudes and skills. The learning dialogue is facilitated not only by trust but also by understanding how both learners learn best.

Students become responsible participants in their own cognitive activities with a goal of becoming self-sufficient problem solvers. The question for the teacher then becomes how we arrange the environment for students so the learners are active participants in the process, evaluating and changing their own learning processes to achieve new skills, insights, outlooks, or thought patterns.

(Adapted from Snow, J., Rouhanna, N, & Cunningham, C. (2000). *A Manual for Preceptors* (2nd ed).

Andragogy and Pedagogy

“Pedagogy” literally means “leading children.”

“Andragogy” was a term coined to refer to the art/science of teaching adults.

Malcolm Knowles and others theorized that methods used to teach children are often not the most effective means of teaching adults. In *The Modern Practice of Adult Education* (1970), Knowles defined andragogy as “an emerging technology for adult learning.” His four andragogical assumptions are that adults:

- 1) Mover from dependency to self-directness;
- 2) Draw upon their reservoir of experience for learning;
- 3) Are ready to learn when they assume new roles; and
- 4) Want to solve problems and apply new knowledge immediately.

Initially defined as, “the art and science of helping adults learn,” andragogy has come to be understood as an alternative to pedagogy; a learner-focused approach for people of all ages.

Pedagogy can also be thought of as “teacher-centered or directive” learning, and andragogy as “learner-centered/directed.”

Adults over 21 are the fastest-growing segment of today’s “undergraduates,” especially in distance and online education. Consideration of andragogical principles in working with adults has become more vital and valid.

Andragogy asserts that adults learn best when:

- They feel the need to learn.
- They have some input into what, why, and how they learn.
- The learning’s content and processed have a meaningful relationship to the learner’s past experience.
- Their experience is used as a learning resource.
- What is to be learned relates to the individual’s current life situation and tasks.
- They have as much as autonomy as possible.
- The learning climate minimizes anxiety and encourages freedom to experiment.
- Their learning styles are taken into account.
- There is a cooperative learning climate.
- We create mechanisms for mutual planning.
- We arrange for a diagnosis of learner needs and interests and enable the formulation of learning objectives based on the diagnosed needs and interests.
- We design sequential activities for achieving the activities.

(Adopted from: New Jersey Institute of Technology, *Andragogy and Pedagogy*)

Learning Styles

Most learners are predominately one type of learner, but usually can adapt to another style. Learners do look for their preferred style in each learning situation because they associate that style with learning success.

Learning Styles	Characteristics	Teaching Strategies
Visual Learners	Process new information best when it is visually illustrated or demonstrated	<ul style="list-style-type: none">• graphics• images• demonstrations
Auditory Learners	Process new information best when it is spoken	<ul style="list-style-type: none">• lectures• discussions
Kinesthetic Learners	Process new information best when it can be touched	<ul style="list-style-type: none">• written assignments, taking notes• examination of objects
Environmental Learners	Process information best when it is presented in surroundings that match learner preference (room temperature, lightening, seating, etc.)	<ul style="list-style-type: none">• online learners can control their own learning environment to a larger context than on-campus students

(Adopted from Rochester Institute of Technology, 2012)

Nurse Practitioner Students are Adult Learners

Teaching is based on how people learn. It is directed, purposeful, and aimed at specifics for the learner or the situation.

Characteristics of Adult Learners:

The primary characteristic is development. They work towards achievement of their potential while recognizing that learning is a lifelong process.

Adult Learners are:

- Affected by their outlooks on life, such as their family, home, money, and other role models.
- Self-directed
- Motivated
- Energetic
- Excited
- Autonomous with a stable sense of self
- Confident
- Experience based learners
- Capable

What happens when a competent nurse goes back to school?

The nurse will often:

- Need to unlearn some things, such that they will be done differently in the future
- Lose confidence in their level of competency
- Fear “crossing the line into advanced practice” and question if they will be safe.

How can preceptors help this adult learner?

A preceptor will:

- Be an expert role model
- Provide feedback to help deal with the student’s fear and past experiences
- Provide memorable learning experience encounters
- Allow the student to personally pace their learning experiences such that they can learn at their own pace with a known endpoint
- Facilitate an informal, collaborative and mutually respectful environment in which to learn
- Draw on the student’s past experiences and education.

(Adopted from Concordia University, *Nurse Practitioner Preceptor Handbook*)

Characteristics of Adult Learners and Implications for Preceptors

Adult learners have certain characteristics that can be utilized by the preceptor to assist in learning. The following characteristics of adult learners are paired with suggestions for you to use as you teach your student:

Characteristics of Adult Learners	Implications for Preceptors
• Have established beliefs and values	• Realize it takes longer to change these
• Are less flexible in thinking and doing	• Show/discuss alternative options
• Learn by own and others experiences	• Teach through actual experiences
• Have heterogeneous backgrounds	• Be open-minded to alternatives
• Have mixed motives for learning	• Keep expectations realistic
• Are accustomed to responsibilities	• Avoid wasting their time
• Less secure in learning situations	• Ensure chances for success
• Fear inadequacy and failure	• Provide support and guidance
• May need more time to learn	• Give learner control over pace
• Time perspective is immediate	• Make learning useful to work
• Don't see teacher as all knowing	• Relate to preceptor as a helpful colleague
• Are problem centered learners	• Address perceived problem first
• Are reality oriented learners	• Make applications to practice

(Adopted from California State University, Fullerton: *School of Nursing Preceptor Handbook*)

How Preceptors can Apply Principles of Adult Learning

Generally, adults prefer situations which:

<p>Are practical and problem centered</p> <p>SO...</p>	<ul style="list-style-type: none">*Give overviews, summaries and examples, & use stories and your experiences to link theory to practice.*Use collaborative, authentic problem-solving activities. Involve and engage the student in the daily workplace routines and activities.*Anticipate problems applying the new ideas to their setting: offer suggestions. <p>CAUTION – Guard against becoming too theoretical.</p>
<p>Promote positive self-esteem</p> <p>SO...</p>	<ul style="list-style-type: none">*Build in trustworthy activities – those that you know the learner can achieve*Provide low-risk activities. Set learners up for success!*Plan for building individual success incrementally.*Help learners become more effective and confident through guided practice and establishing routines. <p>CAUTION – Readiness to learn depends on self-esteem. Fear and apprehension are barriers to learning and often present as a “disinterested” learner.</p>
<p>Integrate new ideas with existing knowledge and capitalize on their experience</p> <p>SO...</p>	<ul style="list-style-type: none">*Help them recall what they already know from prior experience that relates to the topic of learning.*Share your agenda and assumptions and ask for input.*Adjust time for topics to fit their needs.*Use a continuum that describes a range of skill & knowledge. Ask them to apply stickers or marks showing what their current level of knowledge/skill is in the topic.*Ask what they would like to know about the topic, provided it is within the expected outcomes.*Build in options within the plan so you can easily shift to address needs.*Suggest follow-up ideas and next steps for support and implementation after the session.*Plan alternate activities and choice so your

	<p>student can adjust the process to fit their experience level.</p> <ul style="list-style-type: none"> *Create activities that use their experience and knowledge...this will set them up for success. *Listen and collect information about a student's needs before, during and after the day. <p>CAUTION – Ensure the learning activities and experiences you intend to plan match the degree of choice to learners' level of development.</p> <p>CAUTION – Provide for the possibility of a need to unlearn old habits or confront inaccurate beliefs.</p>
<p>Show respect for the individual learner</p> <p style="text-align: center;">SO...</p>	<ul style="list-style-type: none"> *Provide for their physical needs through breaks, snacks, coffee, and comfort. *Provide a quality, well-organized, differentiated experience that uses time effectively and efficiently. *Avoid jargon and don't "talk down" to participants. *Validate and affirm their knowledge, contributions and successes. *Validate and affirm their knowledge, contributions and successes. *Ask for feedback on your work, ideas and how you are doing as a preceptor. <p>CAUTION – Watch your choice of words to avoid creating negative perceptions. Check in with your learner and test your assumptions.</p>
<p>Allow choice and self-direction; prioritize learning needs</p> <p style="text-align: center;">SO...</p>	<ul style="list-style-type: none"> *Build plans around their needs; compare desired behaviors (goals) & actual behaviors. *Share your agenda and assumptions and ask for input on them. *Build in options within your plan so you can easily shift if needed. *Allow time for planning next steps. <p>CAUTIONS – Match the degree of choice to their level of development. Also, since there may be things they don't know, use a mix of their perception of learning needs AND on expected outcomes based on the objectives for the preceptorship experience.</p>

(Adopted from BC Academic Health Council – Preceptor Internship: *Unit 5: Planning Learning Experiences*)

Principles of Adult Learning and Teaching Review

Learning is a self-directed activity. It is a change in behavior as a result of an experience. A preceptor should understand that adult learners will learn more, faster, and longer when they are actively involved in the learning experiences.

A review of the following principles of adult learning and teaching may be helpful for you.

1. **Learning requires involvement of the learner.** To make learning most meaningful, the learner needs to be actively involved in the learning experiences.
2. **Learning is focused and influenced by the motivation of the learner.** Learning is most effective when the content is focused on the needs of the learner and the content/objectives are perceived to be meaningful and useful to the learner. The student is eager to learn and is highly motivated to acquire new skills. A preceptor can be instrumental in fostering this motivation to learn by providing opportunities for success and by keeping expectations realistic.
3. **Learning is an interactive process.** Learning is not a spectator sport. When theory only is presented retention is reported to be 5%. When theory, demonstration, practice, feedback, and follow up are involved in learning, retention is 90-100%. Learning is a result of interacting elements. Adult learners need to talk about what they are learning, write about it, relate it to past experiences, and apply it to their daily lives.
4. **Learning is an individual process.** Every learner responds to a teaching/learning situation as a whole entity. Learning styles vary and individual learners are influenced by their physiologic, psychology, and cognitive make-up, as well as by their social and physical environment. The preceptor should therefore, ascertain what the student already knows and then build upon that knowledge. The preceptor's job is not to fill a clean slate, but to help the student add to and recognize his/her own thoughts and skills.
5. **Learning is influenced by the readiness of the learner.** Students near graduation are typically ready to learn skills that are useful, meaningful, and related to success.
6. **Learning is social.** Learning is a shared responsibility of teachers and learners. Good learning, like good work, is collaborative and social, not competitive and isolated. Sharing your own ideas and responding to the student's reactions improves thinking and deepens understanding.
7. **Learning is most effective when it is organized and clearly communicated.** Select an organized way to communicate principles or to demonstrate a new procedure. If teaching aids are available, use them to your advantage.
8. **Learning is facilitated by positive and immediate feedback.** The preceptor needs appropriate feedback on performance to benefit from the preceptorship. Preceptors should provide frequent feedback on the preceptor's performance and give suggestions for improvement. Dispense generous amounts of recognition and approval and provide criticism in a constructive manner. At the end of the preceptorship, the student needs a chance to reflect on what he/she has learned, what he/she still needs to know, and how to

assess him/her. This feedback will be provided by the preceptor at the end of the preceptorship.

9. **Learning is integrated with knowledge.** New experiences and knowledge cause transfer of information and allow the individual to perform more complex tasks. The curriculum builds on previous knowledge base on the confidence gained at simpler levels. As a preceptor, explaining relationships between new and old concepts will allow the student to bridge any knowledge gap that may exist. Pointing out similarities and differences of new applications of previous learning promotes retention and accurate application.
(Adopted from California State University, Fullerton: *Department of Nursing Preceptor Handbook*)

Twelve Principles of Teaching/Learning

ACQUISITION OF KNOWLWDGE	
Learning.....	Teaching....
1. Requires an active learner	1. Engages the learner as an active participant.
2. Requires understanding-relating current experiences to prior learning experience.	2. Requires presenting material clearly and understandably.
3. Is enhanced when moving from familiar to unfamiliar.	3. Is directed, purposeful, and has content.
4. Takes time.	4. Requires patience.
5. Occurs differently for different people.	5. Requires a selection of methods to fit learner leads.
TRANSFER OF KNOWLEDGE	
6. Is facilitated by the application of theory in practice.	6. Requires knowing the subject well, being a role model as a clinician, and setting the boundaries of safety for the learner in clinical practice.
7. Is enhanced by repetition.	7. Requires evaluation of what is taught or learned.
8. Requires that outcomes of learning must be known.	8. Requires explanation of what the expected outcomes are before requiring the same of the learner.
9. Is affected by the emotional climate.	9. Requires understanding of the nature of human beings and respect of the learner as an individual.
10. What is successful leads to more learning.	10. Requires the reinforcement of desired behaviors and feedback on progress.
INTERNALIZATION OF LEARNING	
11. Involves self-direction and responsibility which are learned.	11. Provides the opportunity for responsible and self-directed behaviors/actions by learners.
12. Is ongoing.	12. Involves a major responsibility which is to teach others the process of learning.

(Adopted from Concordia University, *Nurse Practitioner Preceptor Handbook*)

