Student Learning in the Clinical Setting

Objectives
- Describe learning experiences that effectively engage students in developing clinical expertise
- Discuss teaching strategies that will facilitate critical thinking
- Develop strategies to help students connect theory to practice
- Create an environment that supports actively listening to students and creating dialogue that is transformative
- Discuss the importance of reflection as teachers and learners

The Three Roles of the Baccalaureate Generalist Nurse (AACN, 2008)
- Provider of direct and indirect care
- Designer, manager, and coordinator of care
- Member of a profession

The Most Predictive Indicators of Learning Outcomes
- Three environmental factors
  - Interaction among students
  - Interaction between students and faculty
    (Astin, 1991)
  - Interaction between and among students and staff nurses, and other facility staff

Barriers to Learning

Barriers to Learning in the Clinical Setting
- High student to faculty ratios
- Increasing patient acuity
- Student anxiety
- Faculty concerns about patient safety
- Limited number of clinical sites
- Lack of variety of patients
  (Becker & Neuwirth, 2002; Tanner 2006)

Anxiety and Learning
- As anxiety increases, learning decreases (Audet, 1995)
- Three major causes of anxiety in the clinical setting
  - Fear of making mistakes
  - Initial clinical experiences on a unit
  - Performing clinical procedures
    (Kleehammer, et al., 1990)
Unsure of faculty expectations
  - Classroom instructor vs.
  - Clinical instructor

Unsure of staff nurses expectations
  - Instructors vs.
  - Staff nurses

The climate of the environment affects learning

Decrease Anxiety
  - Clarify expectations
  - Create a learning environment where students can thrive
    - Acknowledge anxiety and explore why it exists
    - Be open and approachable

When and How People Learn

Learning
  - Experts’ abilities to think and solve problems depend strongly on a rich body of knowledge about subject matter (Bransford, et al., 2004)
  - “Learning is the process whereby knowledge is created through the transformation of experience” (Kolb, 1984)
  - Application and usefulness of information is increased by understanding detailed information about the system’s operation (Kolb, 1984)
  - Goals:
    - Learning for understanding
    - Recognizing relationships

How to Learn
  - Learning how to learn as opposed to learning information
  - Three ways to take in information:
    - In a way that it is meaningless to us
    - In a misleading way
    - In a way that leads us to important knowledge through which we can acquire knowledge and insight (Paul & Elder, 2011)
  - Discover and process new information in new ways
  - Discover models and resources that work best for you

Adult Learners
  - Adult learners are capable decision makers who need to be active participants in the learning process
    - Interactive learning
  - Adult learners construct knowledge by linking concepts together in meaningful ways based on former learning and life experiences (Knowles)
How People Learn

- Students come to the classroom with preconceptions about how the world works
- Students need a deep knowledge base and conceptual frameworks
  - Nursing process
- Students respond to a *metacognitive* approach to learning
  - Developing knowledge about how they learn best
    (Bransford, Brown & Cocking, 2004)
- Four primary processes
  - Wanting to learn (motivation)
  - Learning by doing (trial and error)
  - Learning from feedback (others’ comments; seeing the results)
  - Digesting (making sense of what has been learned)
    (Race, 1994)

How Do You Learn Best?

- How do you learn new concepts?
- How do you learn about caring for a patient with an unfamiliar diagnosis?
- How are you learning about the clinical instructor role?
- How do you function/adapt when you are assigned to another unit?

Learning Styles

- Students have different methods of learning
- Ideal: develop activities and materials that draw on abilities from each student

Application of Knowledge to Practice

Key Questions

- What should students be addressing in clinical?
- Must we supervise skill performance every time?
- Are we valuing the *thinking* work when focused on skills?
  (Hendricks, 2014)

Critical Thinking

- Critical thinking emphasizes logic and reasoning
  (Di Vito-Thomas, 2005)
- It is not about learning facts
  - Study to understand and apply, not to memorize
- How will you evaluate critical thinking?
  - www.alfaroteachsmart.com
  - Critical Thinking Indicators
    (Rosalinda Alfaro-LeFevre, 2017)
Cognitive skills
- Information seeking
- Discriminating
- Analyzing
- Transforming knowledge
- Predicting
- Applying standards
- Logical reasoning
  (Di Vito-Thomas, 2005)

Affective skills
- Perseverance
- Open-mindedness
- Flexibility
- Confidence
- Creativity
- Inquisitiveness
- Reflection
- Intellectual integrity
- Intuition
- Contextual awareness
- Perspective

Clinical Reasoning
- Critical thinking leads to ….
- Clinical reasoning which
  - “requires practical ability to discern the relevance of the evidence
    behind general scientific and technical knowledge and how it applies
    to a particular patient” (Benner, et al., p. 4).
  - “is determining the best course of action to take based on what is
    known or what can be hypothesized from clinical data”
    (Hawkins, Elder & Paul, 2010, p. 3).

Reasoning Skills to Improve Patient Outcomes
- Thinking is clarified when reasoning skills are used to figure out:
  - What is wrong
  - What is right
  - What could have caused the problem
- Thinking through:
  - Different options
  - Weighing each option
Questions from Learners
- What would happen if I did this?
- What is there to know?
- How is this relevant?
- Why is this relevant?

Team Learning
- Create a realistic learning situation
  - More than one patient
  - Follow and assist an RN with a full load
- Manage a care team
- Pair an advanced and beginner student
- Interprofessional clinical learning (pair with OP/PT/dietitian, etc.)
- Explore new strategies to facilitate learning

Learning Activities — Pick a Card
- Create questions that would be relevant to any clinical
- Distribute “question cards” to students in advance so they will know how the activity works
- During post conference or at other times, students pick a card and respond

Stacking Clinical Activity
- Create a practice patient assignment:
  - Create a list of 4-5 patients on the unit
  - Have the students create a plan for delegation (tasks/why)
  - Have some things that can interfere with their plan — how would they change the plan?
- When would an activity like this make sense?

Practices for Clinical Educators

Strengths and Weaknesses of Faculty Teaching Performance (Wolf, et al., 2004)
- Strengths
  - Being a knowledgeable and strategic teacher
  - Creating a positive learning environment
  - Demonstrating professionalism
  - Demonstrating positive personal traits
  - Displaying scholarly traits
  - Being supportive
Weaknesses
- Providing poor delivery of content
- Acting disorganized
- Being inaccessible
- Displaying weak teaching skill
- Being dishonorable
- Exhibiting unprofessional behavior
- Displaying negative personal traits

Best Practices for Clinical Faculty
- Communicate high expectations
- Provide feedback
- Be a coach
- Facilitate reflection
  - Increase self-awareness
  - Reflection is critical for learning, decision making process, feelings, values, etc.
  - Reflective activities

Specific Clinical Learning Techniques
- Encourage independent discovery
- Facilitate active participation
- Encourage questioning, and thinking through the question
  - How will this question help the patient?
  - How will this question help the student?
  - Who should answer the question?

Encourage Students to
- Practice critical thinking and clinical reasoning intentionally
- Develop reflective practice
- Reflect on their learning experiences
- Study to understand and apply, not to memorize

Reflection is Critical
- “In all classrooms, even in the hard sciences, professors use stories, usually in the form of anecdotes, to illustrate points, to elucidate information that may be abstract. Story, especially a personal story, is one of the most powerful ways to educate (p. 56).”
Reflection Activities
- Ask questions that help students analyze the story for what they learned about caring for the patient but also about themselves. They must reflect on and think about their day, their personal story.
  - Why did they make the decisions they did?
  - Why was it important to intervene?
  - How did I determine the priorities?
  - What would I do differently in the future, after reflecting on this situation? (Brookfield questions on pages 8 and 9 of this presentation)

Personal Reflection
- Ask questions of yourself that help you to analyze your personal teaching stories.
  - You must reflect on your day and your story. Ask yourself some of the same questions.
  - Why did I make the decisions I made?
  - Why was it important to intervene?
  - How did I determine the priorities?
  - What would I do differently in the future, after reflecting on this situation?
  - We are all learning!
- The most important responsibility is to be a professional, competent, confident and care role model!

How Will This Information Help You in Your Role?

This presentation was developed by Nelda S. Godfrey, RN, PhD, ACNS-BC, FAAN and adapted by Claudia Horton, PhD, RN

FILE: G-CFA Tab 4 Student Learning
Stephen Brookfield’s Four Critical Thinking Processes


The questions that follow each of the following four major critical thinking processes will help you focus your thinking about the immediate situation.

Contextual Awareness and Deciding What to Observe and Consider

This includes an awareness of what’s happening in the context of the situation, including values, cultural issues, and environmental influences. Sample questions include:

- What was going on in this situation that may have influenced the outcome?
- What factors influenced my behavior and others’ behavior in this situation?
- What else was happening simultaneously that affected me in this situation?
- What happened just before this incident occurred that made a difference?
- What emotional responses influenced how I was reacting in this situation?
- What else do I need to know? What information is missing?
- How do I go about getting the information I need?
- What about this situation have I seen before? What is different or dissimilar?
- Who should have been involved in order to improve the outcome?
- What’s important and what’s not important in this situation?
- What changes in behavior alerted me that something was wrong?

Exploring and Imagining Alternatives

This involves thinking about and imagining other ways of looking at the situation, not just the first thing that comes to your mind. It involves exploring as many alternatives as you can think of for the given situation. Sample questions include:

- What is one possible explanation for (insert what is happening)?
- What are other explanations for what is happening?
- What is one thing I could do in this situation?
- What are two more possibilities/other alternatives?
- What else would I want to know in this situation?
- Are there others who might be able to help me develop more alternatives?
- Of the possible actions I am considering, which one is most reasonable? Why are the others not as reasonable?
- Are there other resources that need to be mobilized?
Brookfield’s Four Critical Thinking Processes (*continued*)

**Assumption Recognition and Analysis**

This involves analyzing assumptions you are making about the situation as well as examining the beliefs that underlie your choices. Sample questions include:

- What has been taken for granted in this situation?
- Which beliefs/values shaped my assumptions?
- What assumptions contributed to the problem in this situation?
- What rationale supports my assumptions?
- How will I know my assumption is correct?

**Reflective Skepticism/Deciding What to Do**

This critical thinking approach involves questioning, analyzing, and reflecting on the rational for decisions. Sample questions include:

- Am I sure of my interpretation in this situation?
- What rationale do I have for my decisions?
- What aspects of this situation require the most careful attention?
- Why was it important to intervene?
- What got me started taking some action?
- In priority order, identify what I would do in this situation and why.
- What priorities were missed?
- Having decided what was wrong/happening, what is the best response?
- What might I delegate in this situation?
- What was done? Why was it done?
- What would I do differently in the future, after reflecting on this situation?
- What else might work in this situation?