

Learning Strategies

Learning Strategies	More Information
<p>Ask critical thinking questions about the care provided (Fryer, 2008).</p>	<p>Your responses to critical thinking questions tell you about the knowledge and thinking behind your actions. The use of questions in learning is an important strategy for developing critical thinking skills. You can question all aspects of practice, beyond knowledge of basic facts.</p> <p><i>Example Critical Thinking Questions:</i></p> <p>What is the evidence I am basing my plan of care on?</p> <p>Do I agree with that assessment, why or why not?</p> <p>Why would one intervention be better than another for this patient?</p> <p>What is my role in care and how does it compare to the role of other members of the team?</p> <p>How can collaboration influence care?</p> <p>For more information, refer to Analytic Questions & Evidence-Based Practice</p>



Foster self-questioning by thinking out loud when working with students (Lederer, 2007; Watkins, 2007).

By asking critical thinking questions of yourself, you can determine:

- the goal of thinking;
- circumstances in the situation which influence the approach to critical thinking;
- identification of the perspectives of all stakeholders in the situation;
- factors influencing thinking (personal beliefs, biases, previous experiences, stress, time management);
- knowledge and the types of resources (textbooks, journals, experts) required to meet the desired outcomes; and
- unresolved issues and possible solutions to issues (Alfaro-LeFevre, 1999).

Example Critical Thinking Questions:

Does the team have all the facts to achieve the goal of safe, competent care? Are the collectively defined goals based in evidence- based research?

What resources are essential for accessing the required information?

Have all possible solutions and their outcomes been considered? Is there any performance gaps and are they being addressed?

Have my personal beliefs influenced the plan for care?

What is the benefit versus the risk in taking this course of action?

What are some of the environmental and social influences that have influenced the patient and the approach to planning care?

Is there support and recognition for the collective work of the team?

For more information, refer to Reflection



Discuss your practice as a strategy for developing critical thinking skills in students (Lederer, 2007; Watkins, 2007).

When preceptors reflect on their role as teachers and practitioners, it can be helpful to students' critical thinking. For example, it may be helpful to students to hear how you reason through clinical issues, set priorities, organize care with other providers, make decisions and process information. Discussion on how you do things will trigger students to think about their own thinking. Discussion regarding the similarities and differences between preceptor and student can prevent conflict and enhance the preceptor-student relationship.

Atkins and Murphy (1993) identified the following skills required for promoting reflection:

- Self Awareness: Examine personal feelings, values and beliefs in the context of the interprofessional team /clinical experience.
- Description: Recall all the relevant details including feelings and behaviour.
- Critical Analysis: Examine all aspects of the experience including: assumptions, current knowledge, interpretation of the experience and how it relates to past experiences.
- Synthesis: Integrate new and current knowledge to creatively explore new ways of doing things.
- Evaluation: Make value judgments on accepted professional codes and standards of practice.

Adapted from: "Reflection: A Review of the Literature," by S. Atkins and K. Murphy, 1993, *Journal of Advanced Nursing*, 18, pp. 1188-1192.

Examples of topics to discuss:

Decision-making process and your experience as a practitioner in a team.

Reasons and the evidence for choosing the therapeutic care plan you ordered and what inferences you will be able to make from this information.

Talk to your students about your opinions on:

- interprofessional collaboration
- developing a practice/ role
- how to deal with clinical uncertainty

For more information, refer to Reflection



Use concept maps to visually outline thinking (All & Havens, 1997; Daley, Shaw, Balistreri, Clasenapp, & Piacentine, 1999; West, Pomeroy, Park, Gerstenberger, & Sandoval, 2000).

You can visually illustrate your thinking by using a concept map. Concept maps allow for a review of the thinking process, so that both preceptor and student can ask questions, validate thinking, provide knowledge and address any misconceptions. Concept maps are also helpful for linking concepts together in meaningful ways, thereby developing an understanding through discussion of the conceptual relationships around the clinical experience.

CREATING A CONCEPT MAP

- Select a topic within the clinical experience. Concept maps are context dependent and are useful to the person who constructs them.
- Identify the most general concepts and draw lines to demonstrate the relationship to the topic. Concepts and propositions are organized with the most general and important concepts at the top of the map.
- Identify the most specific concepts that are related to the general concepts. The more specific and less important concepts are presented under the more inclusive concepts.
- Identify as many physical, psychosocial and spiritual concepts that are relevant to the general concept.
- Tie the more specific concepts together with linking words of your choosing.
- Discuss cross-linkages between the more general and more specific concepts.

Form a student group to work on a clinical situation to foster critical thinking (Connors, 2008; Fryer, 2008; Kowalczyk & Leggett, 2005; Lederer, 2007).

Intraprofessional and interprofessional educational activities allow students to build characteristics of a critical thinker through the exchange of ideas, opportunities to explore new ideas, new ways of thinking about things and exposure to different research resources. Critical thinking assignments can involve using a case scenario, comparing two different approaches to care, reviewing decision-making, discussing practice guidelines and/or examining the case from two different perspectives (e.g. patient and provider; Aboriginal healer and social worker, etc.). Use research articles to support ideas presented.

Form a group of students from varied disciplines to discuss and exchange ideas concerning:

- A specific patient scenario and co-ordinate care planning
- Roles
- Integration of knowledge and skill in providing holistic, coordinated care



Use weekly journaling or a written assignment to discuss critical thinking (Ciaravino, 2006; Connors, 2008; Kowalczyk & Leggett, 2005).

Students can write journal entries about the critical thinking decisions made in practice and evaluate these decisions. Journaling is an important tool for increasing self-awareness and for professional growth. Writing allows students to review events, reflect upon them and ponder their meaning for learning and growth. Journaling is also a way to have open dialogue between preceptors, students and faculty. When preceptors write comments back to the student, they model self-reflection. Some generic statements that can be used to focus journaling include:

- Reflecting on my actions today I should have spent more time on ... and less time on
- My thoughts about my clinical performance today are
- My thoughts about my interprofessional teamwork today are ...
- I used problem-solving and knowledge application today when I
- My reaction to ... situation was ...
- I did ... really well. I can improve on
- I learnedthat blending different roles results in....

Students' journal entries can demonstrate their ability to critically think through incidents in the clinical setting, evaluate their critical thinking on personal learning objectives in their learning plans and their achievement of the course objectives.

For more information, refer to Reflection

Preceptors and students meet to regularly discuss educational opportunities within the clinical site for promoting critical thinking (Fryer, 2008).

Preceptors can help develop critical thinking skills best in their students when preceptors focus on topics where they have expertise (or make use of expertise of a colleague), so that preceptors can be role models in developing student thinking about that topic.

The following preceptor behaviours were found to be useful in developing critical thinking in students: consistency, facilitation, guidance, supportive climate, valuing students, collaborative spirit, respect, flexibility, openness, trust and healthy scepticism (Hand, 2006; Myrick, 2002; Myrick & Yonge, 2001; Myrick & Yonge, 2004).

