

## Evaluating Critical Thinking: How Do You Read Minds?



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As accreditors focus more on evaluating critical thinking, educators and managers are searching for answers to a major dilemma: How do you measure what goes on in someone's mind? While I can't tell you how to do one of *Star Trek's* Vulcan mind-melds — where you put your hands on someone's head and immediately know the person's thoughts — I can give you some pointers gleaned from years of consulting on how to improve thinking and performance.

There are two main steps to evaluating critical thinking (CT), both of which require group thinking and thoughtful dialogue and discussion. First, get agreement from key leaders about how CT is defined. Second, be explicit about the behaviors observed when a nurse is thinking critically. Here's what's involved:

**Defining CT.** CT definitions and descriptions abound in the literature, with most of them complimenting and clarifying each other.<sup>1</sup> For the purpose of evaluating CT in the clinical setting, CT —

- entails purposeful, outcomes-directed (results-oriented) thinking
- is driven by patient, family, and community needs
- is based on principles of the nursing process and scientific method
- requires knowledge, skills, experience, and commitment to developing CT characteristics

- is guided by professional standards and ethics codes
- requires strategies that make the most of human potential (e.g., using individual talents and strengths) and compensate for problems created by human nature (e.g., the powerful influence of personal perspectives, values, and beliefs)
- is constantly reevaluating, self-correcting, and striving to improve<sup>2</sup>

### Determining Critical Thinking Indicators (CTIs)

After clarifying and agreeing upon a CT definition, the next step is to determine CTIs: What exactly do you observe when a nurse is thinking critically? Answering this question and developing CTIs requires solid knowledge of the CT literature and careful analysis of the roles and responsibilities of nurses in each particular clinical setting. I find the best way to determine CTIs is to look at three related aspects of critical thinking:

1. knowledge required
2. attitudes or characteristics demonstrated by critical thinkers
3. intellectual skills required

The box on page 3 gives examples of CTIs for nurses working in medical/surgical nursing. Keep in mind that, due to space constraints, this isn't a comprehensive list. Also remember that, because critical thinking is focused, deep, and clear, the CTIs are as explicit as possible. To measure each indicator, use a scale of 0-10 (0 = never demonstrates the CTI and 10 = demonstrates the CTI consistently).

### Walk the Talk

It takes a critical thinker to evaluate CT. You must put in the time and reflection needed to truly understand what CT is before you can evaluate it. You must walk the talk, modeling

the skills and behaviors yourself. All nurses must be clear that, while you can't measure what goes on in someone's head, people get a good idea by looking at behavior over

time. Make the link between behavior and thinking explicit. For example, you can say something like, "When I see you double-checking your charting, I know you're thinking critically because checking accuracy and reliability is an important part of critical thinking," or, "When I see you backpedaling all the time, I know you aren't thinking critically because being proactive is essential to critical thinking."

Finally, become cognizant of your own strengths and limitations. Remember, thinking isn't a one-size-fits-all proposition. You and someone else may approach the same issues and problems in different ways and get equal results. What works in one situation may fail in another, depending on circumstances. Recognize, respect, and support natural learning preferences and thinking styles. Establish honest dialogue. Have nurses review the CTIs. Apply coaching principles, keeping in mind that having someone tell you they'll be evaluating your thinking can be a threatening experience that raises anxiety levels. Give nurses the opportunity to gain insight into how and why they think the way they do. For example, help them learn whether they are left- or right-brain thinkers and how personality traits influence thinking.

If you give nurses the support, tools, and strategies to improve thinking and help them evaluate progress through honest and supportive feedback, you'll see what happens when you release the power of some good minds!

## References

1. 2008-2009 Evidence-based Critical Thinking indicators. Available: <http://www.alfaroteachsmart.com/cti.htm>

2. Alfaro-Lefevre R. *Critical Thinking in Nursing: A Practical Approach to Outcome-focused Thinking*, 4<sup>th</sup> ed. Philadelphia, PA: Elsevier-Saunders, 2009. For more on this book click here:

<http://www.alfaroteachsmart.com/books.htm>

## Examples of Critical Thinking Indicators (CTIs)\*

### CTIs Demonstrating Knowledge

**Explains clearly:** signs and symptoms of commonly encountered problems and complications • related anatomy, physiology, and pathophysiology • reasons behind interventions, medications, and diagnostic studies • policies and procedures and reasons behind them • nursing process and research principles • ethical and legal principles • spiritual and cultural concepts

### CTIs Demonstrating Characteristics of Critical Thinkers

- **Self-Confident:** expresses ability to think through problems and find solutions
- **Curious and Inquisitive:** seeks reasons and explanations; works to learn more
- **Honest:** speaks and seeks the truth, even if the truth sheds unwanted light
- **Context Alert:** looks for changes in circumstances that may warrant a need to modify thinking or approaches
- **Open and Fair-Minded:** shows tolerance for different viewpoints; questions whether own viewpoints are influencing thinking
- **Analytical and Insightful:** identifies relationships; relates deep understanding
- **Logical:** uses intuition as a guide; seeks facts to support conclusions; uses deductive reasoning (“if this is so, then it follows that...”)
- **Reflective and Self-Corrective:** carefully considers meaning of data and interpersonal interactions; corrects own thinking; watchful for potential errors

### CTIs Demonstrating Intellectual Skills

**Nursing Process and Decision-Making Skills:** assesses systematically and comprehensively • recognizes assumptions and inconsistencies • checks accuracy and reliability • identifies missing information • distinguishes relevant from irrelevant • supports conclusions with facts (evidence) • sets priorities/makes decisions in a timely way • clarifies expected outcomes; determines outcomes specific to each patient • reassesses to evaluate responses and monitor outcomes

**\*To download a comprehensive list of CTIs click here:**  
<http://alfaroteachsmart.com/newsite/cti.html>