

Summary: Critical Thinking Premier Education Banquet 2017

Individuals give critical thinking different definitions even though the term has been in the literature for more than 50 years. There is minimal consensus among education, philosophy, and health professionals. However, critical thinking involves a set of logical cognitive procedures with focus on improving reasoning through use of a set of skills. These skills include analytical abstract thinking, objectivity, and habits of the mind (affective components). Critical thinking relates to context, and it enhances creativity, self-exploration, and social interaction.

We are posing the question: "How do faculty (health professionals) use critical thinking, facilitate beginning health professional students to use critical thinking, and engage students in activities that require critical thinking?"

A proposed set of skills for critical thinking includes these **cognitive steps**:

1. Seeking information
2. Analyzing data
3. Determining differences of data from norm or usual
4. Drawing inference or interpreting from data
5. Applying standards (Evidence-based practice)
6. Predicting or envisioning the plan for problem-solving
7. Transforming the plan into action

and these **habits of the mind (bolded)** associated with the cognitive steps:

1. Being **inquisitive** (asks questions)
2. Developing **confidence** in problem-solving
3. Showing **perseverance** (stick with it and overcome barriers)
4. Accepting other's opinions (**open-minded**)
5. Identifying the **context** (classroom, lab, clinical)
6. Assuring **honesty** (intellectual integrity)
7. Willing to reconsider (**flexibility**)
8. Thinks out of the box (**creativity**)
9. Knowing through **experience** (that gut feeling-intuition)
10. Examines own behavior for change (**reflection**)

These cognitive skills and affective domain qualities are related and can occur at the same time. Not all affective domains are evident in every problem-solving situation while all cognitive skills are necessary steps for critical thinking. Some examples include:

- Seeking information provides evidence of being inquisitive and showing perseverance.
- Analyzing data involves identifying context and seeking additional information.
- Determining differences (discriminating) would involve identifying context, accepting other's opinions, and asking questions.
- Drawing inferences includes identifying the context, showing perseverance, and can lead to the development of confidence (mastery or understanding).
- Applying standards includes determining the context, use of knowledge, accepting others' opinions, and being creative.
- Envisioning a plan involves being flexible and creative, accepting others' suggestions, and developing confidence in problem-solving outcomes through critical thinking.
- Transforming knowledge into action demonstrates developing confidence, using other's opinions, being flexible, and examining one's own actions.