Thinking Critically

What is critical thinking?

Critical thinking means thinking productively with a goal in mind.

It is thinking to solve problems. It involves thinking about your own thinking to improve your thinking.

What are the elements of critical thinking?

According to Richard Paul and Gerald Nosich (1996, 2009), critical thinking always involves the following components:

1. Purpose – What are you trying to accomplish? Critical thinking is not idle dreaming.

2. Question(s) - What do you want to know or learn about? Specifically?

3. Assumptions - What is your starting point? What do you think before you begin? Are you aware of how your assumptions influence your thinking?

4. Point of view - What is it and how does it affect your learning? Does it lead you to ignore certain data?

5. Concepts - What are the ideas that organize the information? For example, if you want to learn about the sociology of the family, you have to be aware that “family” is a concept and that your concept of family may not be the same as the sociological concept of “family”.

6. Data, facts, and information from research - How will you evaluate your sources?

7. Interpretation/Conclusion - What do you make of what you found out?

8. Implications—Where does this information lead you?
Thinking Critically means thinking about thinking to improve your thinking ...

Paul (1996) describes the different domains of critical thinking.

1. The “micro” level of critical thinking means applying the elements that are listed on side one of this sheet. It consists of the thinking tools that we use to think through a problem and come up with an answer. The interesting thing is that if we learn how to use the tools and use them skillfully, our thinking will have excellent quality. A carpenter who has the tools he needs and can use them skillfully will be able to build a quality product. A thinker who can skillfully use thinking tools will be able to make quality decisions that others trust.

2. The “macro” level of critical thinking incorporates the actual thinking tasks that people do. Critical thinkers use the tools of critical thinking (the micro level skills) consciously to think through their reading, writing, speaking and listening tasks. A carpenter knows the importance of measuring carefully. A critical reader knows the importance of reading with a purpose. A carpenter knows the value of thinking carefully about the type of materials he will use to build something. A critical writer knows the value of using an appropriate writing style for his audience. Critical thinking separates the amateur from the professional.

3. The “affective” domain refers to the values and attitudes that you bring to critical thinking tasks. Do you believe that a well-thought out decision is worthwhile? Are you willing to invest the effort so that you can be confident in your conclusions? Are you courageous enough to submit your ideas to critical analysis? Are you humble enough to admit that you are wrong? Are you willing to genuinely try to see something from someone else’s view in order to solve a problem? Are you willing to risk being ridiculed for thinking differently than others, or are you inclined to “go along to get along”? Answering these questions will reveal the values and attitudes you have toward thinking critically.
