AN INTRODUCTION TO CRITICAL THINKING

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Most educators in higher education have encountered intelligent students who learn by rote memorization methods but do not have the ability to, and cannot delve below the surface. If they run into a brick wall, they crumple and fall instead of looking for alternatives to the situation.

The purpose for critical thinking training with tutors is to teach them good thinking strategies to assist themselves as well as the tutees. It is important to open their minds to be good critical thinkers before they can use critical thinking procedures with tutees. We should concentrate on teaching students how to think instead of teaching them what to think.

Begin the training session with, "What comes to your mind when you hear the word thinking?" The word thinking can be used in many different ways. Dictionaries tell us that the word thinking describes more than nineteen different mental operations. Boostrom (1992) stated that in the broadest sense, thinking consists of whatever goes on in your head.

Chaffee (1988) countered with, "Thinking is the extraordinary process we use every waking moment to make sense of our world and our lives" (p.2).

Chaffee's conclusions about the thinking process are used to continue the training session on thinking. Those conclusions are as follows:

 Thinking Is An Active Process. When we try to solve a problem, reach a goal, understand information, or make sense of someone, we are actively using our minds to figure out the situation.

- 2. Thinking Is Directed Toward A Purpose. The purpose may be to solve that problem, reach that goal, understand that information, or make sense of someone.
- 3. Thinking Is An Organized Process. Thinking effectively has an order or organization. There are certain steps to take to solve that problem, reach that goal, to understand that information, or to make sense of someone.
- 4. Thinking Can Be Developed And Improved. During our lifetime we develop thinking through use, by becoming aware of the thinking process, and by practicing. Thinking can be developed and improved through guidance and practice (p. 25-26).

A good thinker is one who goes beyond the first plausible answer. Are there some other possibilities? What other way can I think of this situation? To open the tutor's minds to the way tutees may operate, Costa's (1991) list of how ineffective thinkers behave can be used:

1. Ineffective thinkers are impulsive, often jumping to conclusions. Everything is speed and speed is what we want! You get a headache, take a Tylenol, within seconds the headache is gone. Can't get a girlfriend? Try Ultrabright, right away women are swarming all over you. Neighbors don't like you? Use Listerine and the next minute they are in your hot tub. We live in a world where speed is important. When working with tutees, we need to remember, "wait time." Give tutees time to think of the answer. Too often a tutor may ask a question, pause, and then answer the question him/herself.

- 2. Ineffective thinkers give up quickly if they are unsuccessful in solving a problem on the first or second try. Tutees should be encouraged to persist with tasks, to stick it out.
- 3. Ineffective thinkers are inflexible in approaching thinking tasks. The following example points out that each of us has our own concepts and that often the direction our thinking is going is not necessarily the direction the tutee is going. Close your eyes and imagine that it is a very hot summer day; you have just purchased an ice cream cone that is dripping down your hand. Brainstorm what you feel. What kind of ice cream did you choose? There will be as many different answers as tutors in the room.
- 4. Ineffective thinkers use imprecise language: They said . . .who said? Everybody did . . .who exactly is everybody? Cheerios are more nutritious more than what? It is better . . better than what? Things go better with Coke . . . what things, better than what? Which kind of Coke are we talking about . . . diet, caffeine free, regular, cherry, classic? It is significant for the tutors to speak precisely and to clarify what they mean as well as showing the tutees the importance of precise language!
- Ineffective thinkers often plunge into a thinking task without planning what to do.
 They generally do not have any organizational strategies.
- 6. Ineffective thinkers fail to check their work for accuracy. Tutors can point out the never-ending need for accuracy. We do not always have to be 100 percent accurate, but there are times when it is critical. If a surgeon was not sure where

- he/she should cut, what would happen? The Challenger explosion is a classic example of inaccuracy.
- 7. Ineffective thinkers are reluctant to secure as much data as possible. Too many tutees are happy with one example instead of trying to find others to enhance or support their work.
- 8. Ineffective thinkers skip steps in executing a thinking task and then are unable to backtrack to see where they have made mistakes.
- 9. Ineffective thinkers are unable to engage in a line of reasoning. "Because" is an often-used word in their vocabularies and beyond that they cannot continue to explain their thinking.
- 10. Ineffective thinkers are often incapable of launching a thinking task. Often the tutees do not have the slightest idea where to begin or find it difficult to begin due to a fear of failure. It is important to point out the value of getting started with the thinking process. If the process does not move in the right direction, the process can be revised.

Making the tutors aware of their thinking process helps them to understand their thinking patterns as well as recognizing the thinking patterns and abilities of tutees.

After an introductory training session, other sessions can be designed to work with assumptions, inferences, evaluations, reasoning and problem solving for use throughout the year.

References

- Boostrom, R. (1992). *Developing Creative and Critical Thinking: An Integrated Approach*.

 Lincolnwood, IL: National Textbook Company.
- Chaffee, J. (1988). Thinking Critically. Dallas, TX: Houghton Mifflin Company.
- Costa, A. (1991). *Developing Minds: A Resource Book for Teaching Thinking*. Arlington, VA: Association for Supervision and Curriculum Development.