Modern society is full of examples of people's inability to employ techniques of critical thinking in everyday situations. Learning to think critically is important because within this complex society, individuals are constantly placed into situations where difficult choices must be made. An ability to analyze critically available alternatives increases the probability that wise choices—or at least informed choices—will be made. The key to critical thinking is reasoning through alternatives with a positive problem-solving attitude. Educators can help students to improve their critical thinking processes by creating an atmosphere where students are free to ask questions, and by using methods of evaluation that are consistent with the principles of promoting critical thinking. Multiple choice, true/false, and fill-in-the-blank tests, for example, are not consistent with such principles. Teachers should structure thought-provoking questions that challenge students to employ methods of critical thinking. Finally, students must be taught to solve problems by: (1) stating the problem; (2) searching for the facts; (3) sifting the facts for important information; (4) soliciting ideas; and (5) selecting the best alternative. (PRA)
Critical Thinking
The Importance of Teaching
By
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In the opening salvo of the 1990 Kansas campaign for governor, democratic hopeful John Carlin, a former incumbent, charged then-incumbent Governor Mike Hayden with a lack of leadership abilities. Hayden, in the opening speech of his campaign, responded to the charge by citing Carlin's armed service record—or lack of record. Hayden, a former Marine, asked how Carlin, who had never served his country as a member of the armed forces, could attack his (Hayden's) leadership abilities. This outstanding bit of reasoning is probably typical of most political campaigns—witness the compelling issues of the 1988 presidential race: Willie Horton's early release, the pledge of allegiance issue, Dukakis' membership in the American Civil Liberties union, and, of course the ever-present thousand "points of light."

The Importance of Critical Thinking:
The above examples are but a microcosm of our society's inability to employ techniques of critical thinking to everyday situations. Indeed, the ability to think critically is an important part of everyday routine. Critical thinking is imbedded in the process of reasoning—a process in which each of us engages each day. In a general sense, reasoning is, simply put, the ability to think clearly and critically about things. Professor Gerald M. Nosich
explains: "More specifically, reasoning has to do with reasons: giving reasons to back up your position, understanding the reasons behind someone else's position, criticizing that position by bring up reasons against it, and trying to figure out if the reasons given on either side succeed in establishing or refuting that position. It's thinking hard about something, thinking your way through a problem, trying to solve it by giving and evaluating reasons. It's something you already do a good deal of the time." (Nosich, p. 1)

Why is learning to think critically important? Within our complex society, individuals are constantly placed into situations where difficult choices must be made. An ability to analyze critically available alternatives increases the probability that wise choices—or at the least, informed choices—will be made.

Professor John C. Reinard explains that "Critical thinking is the careful and deliberate effort to make a decision about a proposition based on thoughtful evaluation of available information. It involves carefully weighing the issues of a proposition and then making some decision. One might critically decide to accept, reject, or suspend judgement about a proposition. When one is acting critically, however, one adopts scientific attitude and brings the force of available information to bear on the decision. Finally, a judgment is made when there is good reason for it." (Reinard, p. 76)

Methods Involved in Critical Thinking:
The key to critical thinking is according to professor Nosich
"reasoning your way through alternatives, and it is something you do naturally, without thinking it's reasoning." (Nosich, p. 1) Reinard further refines the role of reasoning by arguing that the process must focus on the problem solving attitude. He writes: "Critical thinking presumes a productive problem-solving attitude. This attitude involves a positive approach to problem solving as well as a systematic way of thinking about key propositions. Critical problem solving involves being methodical in dealing with propositions." (Reinard, p. 77) But the question remains: As educators and communicators, how can we help our students improve their critical thinking processes?

Several elements are necessary. First, we must, as professional educators create the proper atmosphere in which critical thinking can take place. Students must be encouraged to ask questions. Students must be encouraged to go beyond the mere memorization of facts. This can be accomplished in a setting where critical thinking is rewarded rather than punished. We as educators must remain open to having our ideas, opinions and beliefs questioned critically by our students. Students must be prepared to accept constructive critiques of their efforts. Only in this open arena of give and take can critical thinking survive and thrive.

Second, our methods of examining and evaluating must be consistent with the principles of promoting critical thinking. The use of short answer tests (multiple guesses, true or false, and fill-in the empty spaces) is not consistent with efforts aimed at stimulating critical thinking. We must be prepared to
structure thought-provoking questions. These questions must challenge the students to employ methods of critical thinking. Third, students must be given proper instruction in the area of critical thinking. Students must learn how to adopt a problem solving attitude. It is important that students learn how to employ a step-by-step process in problem solving. Professor Reinard posits that "five steps seem to be consistent in this sort of problem-solving approach..." (Reinard, p. 77). He employs what he terms "the five S's of problem solving." The steps are 1) state the problem, preferably by isolating where one is and where one desires to be; 2) search for the facts; 3) sift the facts for important information; 4) solicit ideas, whether from oneself or from others; and 5) select the best alternative. (Reinard, p. 77)

Proper instruction in the understanding and application of these steps should help prepare students to employ critical thinking methods. While the effort to utilize such steps may appear to be stilted and inflexible at the outset, the failure to utilize these measures may well result in the termination of critical thinking before the process is underway. As professor Reinard observes: "Critical thinking requires an attitude of reflection and a willingness to examine propositions thoughtfully." As educators it is our role and duty to provide the proper framework for our students.
REFERENCES
