

THE TEACHING OF CRITICAL THINKING IN READING

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Abstract

Recent trends in the educational domain emphasize the importance of critical thinking skills for academic success and for life. Learners should be taught how to think rather than what to think. Judging, reasoning, problem solving, decision making are vital for successful academic and social lives (Collier, et al., 2002 cited in Alagozlu, 2006). Further, Dewey (1933), in his book, How We Think, proposes that critical thinking or reflective thinking be one of education's principal aims (cited in Fisher, 2001, Lipman, 2003). Ennis (1962), Paul and Elder (2002), Siegel (1990), Lipman (2003) and McPeck (1981) also are scholars associated with the tradition of using reflection for training in thinking. According to this tradition, educational institutions should not primarily provide students with facts and specific systems of knowing or meanings. Students should be equipped with skills and knowledge, so they can become critical learners who are cooperative, open-minded, reflective, and autonomous. Fostering students' ability to think critically, to reason, and to use judgment in decision making enables them to successfully adapt to an ever-changing world.

Critical thinking is also particularly important in a democratic society life in this twenty first century (Beyer, 1985, Klentz, 1987 cited in Gustine, 2007). Dam and Volman (2004) point out that, critical thinking is the essence of thoughtful, democratic citizenship, and thus occupies a central position in education in modern world. Marzano et al. (1988) hold a similar view: "The success of any democratic system depends on the individual's ability to analyze problems and make thoughtful decisions. It has been also claimed that critical thinking is the basis of "progressive" thinking; thus it is valued by democratic social institutions.

Many educators propose different teaching methods to foster students' critical thinking ability. For example, Beyer (2001a cited in Buranapatana, 2006) indicates that teaching students to think critically is to give students opportunities to engage in productive learning tasks that require them to produce or construct something new. It has also been indicated in literature that writing is a learning tool that can be effectively used to assist students in clarifying and evaluating their thinking and it is also an essential ingredient in critical thinking instruction since it promotes greater self-reflection and the taking of broader perspectives than does oral expression (Olson, 1984). Further, Paul (1993 cited in Emilia, 2005) asserts that critical writing promotes critical reading and critical thinking which in turns enhances critical writing. Applying critical thinking to the process of reading, which commonly known as critical reading (Kurland, 2000; Chafee, et al, 2002 cited in Emilia 2005), is other suggested method than can be conducted in the teaching of critical thinking.

Kata Kunci : *the teaching of critical thinking*

1. THE NOTION OF CRITICAL THINKING

The word critical comes from the Greek word for "critic" (kritikos), which means to question, to make sense of, to be able to analyze (Chafee, 2000, p.45). Related terms, such as 'criticism', 'criticize' and 'critique', imply judging, comparing or evaluating through careful analysis, so that a critical orientation requires both the element of evaluation or judgment and a close knowledge of the object being evaluated (Lankshear, 1997). To be critical for critical

thinking tradition basically means to be more discerning in recognizing faulty arguments, hasty generalizations, assertions lacking evidence, truth claims based on unreliable authority, ambiguous or obscure concepts, and so forth (Burbules and Berk, 1999 cited in Emilia, 2005).

Although there are some quite diverse definitions of critical thinking, nearly all emphasize the ability and the tendency to gather, evaluate, and use of information effectively. The well-known educationist John Dewey (1859-1952) refers to critical thinking as reflective thinking

and proposes that it be one of the aims of education. Dewey defines 'reflective thinking' as active, persistent, and careful consideration of a belief or supposed form of knowledge in the lights of grounds which supports it and the further conclusions to which it tends (Fisher, 2001). This classic definition implies that critical thinking is an 'active' process in which a critical thinker would think for himself, and find relevant information himself rather than passively receive information from someone else. In contrast, 'passive' thinking process is unreflective thinking in which one would just receive information without any efforts to analyze further.

One of the most frequently referred to definitions of critical thinking is one used by Ennis, who has similar views to Dewey. Ennis defines critical thinking as reasonable reflective thinking that is focused on deciding what to believe or do. (1987, p. 10). Norris (1985) defines critical thinking as: deciding rationally what to or what not to believe. For Dewey, Ennis, and Norris, critical thinking is about being careful and reflective when making decisions to believe something or do something.

A more recent perspective on critical thinking involves the use of intellectual standards. Paul and Elder (2002), for example, define critical thinking as being the disciplined art of ensuring that you use the best thinking you are capable of in any set of circumstances. We all have choices to make. We need the best information to make the best choice. Paul and Elder believe that critical thinkers have a basic ability to take charge, to develop intellectual standards, and to apply them to their own thinking. They suggest there are nine criteria generally used: Clarity, Relevance, Logicalness, Accuracy, Depth, Significance, Precision, Breadth, and Fairness. Critical thinkers should apply these criteria as minimal requirements when they reason.

Beyer (1990) cited in Rumpagaporn (2007) however, emphasizes integration, and views critical thinking as an intellectual skill that operates with disposition and knowledge. He regards thinking as a holistic process, defining it as a complex learning phenomenon involving mental operations, dispositions and knowledge which must be well integrated in order to achieve meaningful learning. Beyer summarized what he regarded as six elements of critical thinking as follows:

1. Dispositions: Good critical thinkers are disposed to skepticisms, questioning the accuracy, plausibility, or sufficiency of whatever is presented to them.
2. Criteria; Criteria are conditions that must be met for something to be judged as faithful or authentic.

3. Argument: In critical thinking, an argument is a proposition with its supporting evidence and reasoning. The major purpose of an argument in critical thinking is to convince or persuade.
4. Reasoning : Reasoning is what holds together. We attempt to ascertain the strength of a conclusion by examining reasoning and logical relationships.
5. Point of view: point of view relates literally to the position from which a person perceives and makes meaning of things. A person's point of view develops from prior experiences, cultural backgrounds, values, expectations, expectations, interests, and existing knowledge.
6. Procedures for applying criteria and judgment: Socratic questioning is possibly the most broadly used procedure in critical thinking. This type of questioning seeks to clarify information, to identify a point of view, to discover assumptions, to distinguish factual claims from value judgments, and to detect flaws in reasoning.

The approach of McPeck has been highly influential. McPeck (1981) cited in Buranapattana (2006) defines critical thinking as the appropriate use of reflective scepticism. He explains that reflective scepticism means not to take a statement of truth for granted, to consider alternative hypotheses and possibilities, to investigate a given statement, norm, or mode of doing things. The purpose of this scepticism is not to be disagreeable, but to advance towards the resolution of a problem. The core meaning of critical thinking is the propensity and skill to engage in an activity with reflective or healthy scepticism. McPeck goes on to point out that critical thinking requires the judicious use of scepticism. It is not merely raising questions. Learning to think critically is, in large measure, learning to know when to question something, and what sorts of questions to ask. Not just any question will do. For McPeck, critical thinking involves knowledge and skill and is the thought process involved in problem solving and the active engagement in certain activities. McPeck embraces the domain-specificity of critical thinking, meaning that thinking is always directed to a specific thing. He claims that critical thinking consists of two components; the *ability* to evaluate reasons in a proper way, and the *disposition* to carry out this evaluation. The process is guided mainly by information and not logic, as the latter-according to McPeck- cannot provide arguments, hypotheses and solutions (Siegel, 1990). McPeck claims that application of critical thinking requires a certain disposition and knowledge of the field. Specifically, he argues for both specific knowledge and a critical compo-

nent; the latter involves the ability to reflect, question and judge. It is dependent on the amount of knowledge required by the problem.

Critical thinking as a process is proposed by Cottrell (2005, p.2). She defines critical thinking as a complex process of deliberation which involves a wide range of skills and attitudes which include identifying other people's positions, arguments and conclusions, evaluating the evidence for alternative points of view, weighing up opposing arguments and evidence fairly, being able to read between the lines, recognizing techniques used to make certain positions more appealing than others, reflecting on issues in a structured way, drawing conclusions about whether arguments are valid and justifiable, and presenting a point of view in a structured, clear, well-reasoned way that convinces others.

In addition, there has been a useful definition suggested by educators in the psychological field. Lipman defined critical thinking as follows: "...critical thinking is skillful, responsible thinking that facilitates good judgments because it relies upon criteria, is self correcting, and is sensitive to context" (Lipman, 1995, p. 146).

Despite the diversity of views, most scholars seem to agree that critical thinking is about using thinking ability. Critical thinkers apply a particular quality of thought; they have the ability apply it appropriately under given conditions and to be objective and open-minded in the process. Critical thinkers are skeptical and open-minded, they value fair-mindedness, respect evidence and reasoning, respect clarity and precision. They look at different points of view, and will change positions when reason leads them to do so. Researchers generally agree that critical thinking can be taught, by either formal or informal means or both.

In the literature there is an issue whether critical thinking skills are general skills which can be applied to all subjects areas (general conceptions) or whether they are specific to a particular domain (subject-specific conception) (Bailin, 2002; Burbules and Berk, 1999; Barnett, 1997; Siegel, 1997 cited in Emilia 2005). The general conception says that critical thinking can be characterized as a set of generalized abilities and dispositions which can be utilized or applied across a variety of situations and circumstances and that critical thinking transfers to other domain of knowledge. The subject-specific conception, on the other hand, sees critical thinking as a form of thinking specific to particular cognitive frameworks, and discipline-specific, depending on knowledge of what constitute good reason in a discipline, which in turns requires extensive knowledge of subject matter (McPeck, 1990).

2. APPROACHES TO TEACHING CRITICAL THINKING

There are high expectations that teaching thinking in schools would prepare students for a successful life and for success in the workplace in a rapidly changing world. When considering how best to assist students in becoming better critical thinkers, educators have a variety of approaches for which to choose. These approaches range from established programs, to direct instruction of particular abilities to indirect emphasis of critical thinking skills (Davidson, 1995).

According to Ennis (1992) and Sternberg (1987), there are three broad approaches in teaching of critical thinking: the general approach, infusion and immersion, and the mixed approach.

The general approach is an attempt to teach students to think critically by using non-school subject context; in the case general critical thinking would be a separate course.

The infusion approach to teach critical thinking is a subject-matter instruction method in which critical thinking abilities and dispositions are explicitly taught and students are encouraged to think critically on the subject. There are two implicit assumptions in the "infusion" approach in which thinking is usually viewed as an "add-on" element (Nisbet, 1991, p. 179 cited in Buranapatana, 2006). While infusion and immersion may in fact be useful techniques, As Ennis argues that the perspective gained through general education is essential to avoid some of the problems – such as inflexibility in applying thinking skills from one area to another -- that created when students' only exposure to critical thinking is through a particular discipline (Ennis, 1989).

The mixed approach consists of a combination of the general approach with infusion approach. There is a separate course aimed at teaching the principles of critical thinking while students are involved in subject-specific content. Therefore, this study employs this approach because it is claimed to be the best possible approach (Sternberg, 1987). Sternberg notes that both infusion and separation have advantages. In the 'mix model', thinking skills are taught as a separate course at the same time that they are infused and reinforced throughout the entire existing curriculum.

3. THE TEACHING OF CRITICAL THINKING IN READING (CRITICAL READING)

The development of thinking skills tend to occur in an educational setting since school is usually the first place where we learn to deal

with information. Most of that information is represented in reading materials, so the development of thinking skills logically tends to begin with reading, then extend to writing. In high school and college, students usually exposed to a variety of genres—journalism, essays, academic texts, fiction, and so forth—which give them the opportunities to analyze the structure and content of different types of texts. Given the international culture today, much of the information read all over the world is in English, and will be for the foreseeable future. In that case, it is necessary to incorporate critical thinking skills in ESL/EFL reading courses.

In the field of language studies, many proponents of critical theory would like learners to be more active and critical when they attempt to make sense of text or discourse, rather than be passive consumers of texts (Kress, 1990; Pennycook, 1997; Luke, 2004 cited in Liaw, 2007). Critical thinking is an ongoing process in which all language learners must engage, regardless of their language proficiency levels. Critical thinking involves the use of information, experience, and world knowledge in ways which allow EFL learners to seek alternatives, make inferences, pose questions, and solve problems, thereby signaling understanding in a variety of complex ways. The need for critical thinking in an EFL classroom does not mean that EFL learners lack the ability to engage in critical thinking. In fact, EFL students usually come to the classrooms with a variety of critical thinking skills developed in their first language. Since higher-order thinking skills are increasingly required for success in a knowledge-based society, it is the responsibility of EFL teachers to assist their students to acquire critical thinking skills while learning English.

Some writers have taken up the relationship between critical thinking and reading and writing. For example, Fisher (1990) who asserts that literacy, the ability to read and write, encourages a more abstract form of thinking, it brings greater precision to the definition of terms, and it allows us to refer back, to think about our thinking, to weigh arguments, to supplement memory, to communicate with others, and to learn in autonomous ways.

Critical reading, to the critical movement, refers to critical thinking which is applied to the process of reading and writing (Chaffee, 2000; Reichenbach, 2001). Meanwhile, Kurland (2001) refers critical reading as a careful, active, reflective, analytic reading. Kurland makes distinction between critical reading and critical thinking. Critical reading refers to a technique for discovering information and ideas within a text and critical thinking is a technique for evaluating information and ideas, for deciding what to ac-

cept and believe. However, he further argues that critical reading and critical thinking work together in harmony. As Chaffee, et al. (2002) contends that critical reading means thinking critically about the information and its source and that critical reading is an essential part of becoming an insightful thinker and a proficient writer. (p. 9).

It is believed that to non-critical readers, texts provide facts in that readers gain knowledge by memorizing the statements within a text (Kurland, 2001). To the critical reader, any single text provides but one portrayal of the facts, one individual's 'take' on the subject matter. Critical readers thus recognize not only what a text says, but also how that the text portrays the subject matter. They recognize the various ways in which each and every text is the unique creation of the unique creation of a unique author.

Teaching critical reading means guiding the students through judging and questioning an idea or thought based on reliable evidence by establishing logical relationships among the statements or data. The teaching principles used in this stage follow the suggestion from Reichenbach (2001), Chaffee, et al (2002), Crawford, et al (2005), Knott (2005). Some teaching steps were also adopted from the work of Emilia (2005) who conducted research on critical thinking in reading and writing.

Knott (2005) suggests that the students should recognize the following aspects in the teaching critical reading:

1. Determine the **central claims or purpose** of the text (its thesis). A critical reading attempts to assess how these central claims are developed or argued.
2. Begin to make some judgments about **context**. What audience is the text written for? Who is it in dialogue with? (This will probably be other scholars or authors with differing viewpoints.) In what historical context is it written?
3. Distinguish the **kinds of reasoning** the text employs. What concepts are defined and used? Does the text appeal to a theory or theories? Is any specific methodology laid out? If there is an appeal to a particular concept, theory, or method, how is that concept, theory, or method then used to organize and interpret the data? Examine the **evidence** (the supporting facts, examples, etc) the text employs.
4. Consider the kinds of evidence that are used. What counts as evidence in this argument? Is the evidence statistical? Literary? historical? etc. From what sources is the evidence taken? Are these sources primary or secondary?

5. Critical reading may involve **evaluation**. The reading of a text is already critical if it accounts for and makes a series of judgments about how a text is argued. If the argument is strong, why? Could it be better or differently supported? Are there gaps, leaps, or inconsistencies in the argument? Could the evidence be interpreted differently? Are the conclusions warranted by the evidence presented? What might an opposing argument be?

Further, Knot (2005) asserts that unless the students are guided to recognize the above aspects in a text, they will suffer from the inability to question and judge the presented knowledge in the text and will not identify the conflicts or the problems in it and they all agree with whatever the text says and internalize what is readily given and will get by with the thought of somebody else, without thinking and without trying to find possible solutions for the problems he identified. They will, perhaps, avoid personal discoveries.

Some aspects of critical reading emphasized in this study are taken among others from Chaffee (2000), Reichenbach (2001), Diestler (2001), Knott (2005) and Cottrell (2005). These include:

1. *Identifying the topic the writer is discussing, what the writer takes to be the **issue** or problem with respect to the topic, and what **position** the author takes on the issue.*

As suggested by Reichenbach (2001) that the first thing to discover in written material is its topic. The topic is what a sentence, paragraph, series of paragraphs is about, the subject or category under which you would place it. The topic might be a thing, event, person, or ideas, and generally it is expressed by a word or two or three, at most a phrase, and it cannot be expressed in a complete sentence.

Once the topic has been found, the next step is to identify the issue the author raises. As Diestler (2001) asserts that a critical thinker recognizes the issue under discussion and the varying conclusions about the issue (p. 3). The issue is the question that is being addressed. The question should contain the topic, preferably (but not always) as the subject of the question (Reichenbach, 2001, p. 38). Issue can be about facts, values, or policies. Factual issues concern whether something is true or false. Issues about values deal with what is considered good or bad or right or wrong. Policy issues involve taking action; often, these issues emerge from discussion of facts and values.

The third element in obtaining knowledge of what is being communicated is the discovery of the author's thesis. The thesis is the main point that the author wants to make. The thesis

should be the author's response to the issue raised, expressed in a complete sentence (Reichenbach, 2001). In argumentative writing, the thesis is the main conclusion (Diestler, 2001). Conclusion, as defined by Diestler (2001), is the position taken about the issue. It is a claim supported by evidence statements. These evidence statements are called reasons or premises. In a well-written paragraph, the thesis generally resides either at the beginning as a topic sentence or at the end as a concluding sentence.

2. *Identifying the **reasons** that support the conclusion*

Reasons is defined as the statements that provide support for the conclusions (Diestler, 2001). Reasons are also called evidence, premises, support or justification. Sometimes the author presents the evidence in an obvious way; at other times the evidence is hidden. And sometimes the evidence is misleading, pointing in other direction (Reichenbach, 2001).

3. *Distinguishing **facts** from **opinions***

This skill focuses on distinguishing between a statement based on fact (one that can be proved true) and a statement based on opinion (one that expresses how a person feels about something or what a person think is true). The ability to distinguish between these two types of statement is considered essential to critical reading (Cottrell, 2005). Writers often mix fact and opinion, and it is not always easy to tell whether something is based on verifiable information or someone's particular point viewpoint (Reichenbach, 2001). For this reason, it is important to read with a questioning mind.

4. *Distinguishing between **primary** and **secondary** sources*

A primary source is original material or information that has not been interpreted by another person (Cottrell, 2005). Examples of primary sources are court records, government documents (like the Constitution), letters, some documentary films, memoirs, and position papers of organizations, original research, and editorial. A secondary source is made up of information collected from numerous primary sources that is interpreted by the collector. Examples of secondary sources include histories (such as a history of the Constitution and its framers), many magazines articles and critical analyses. Primary sources often have the immediacy of an eyewitness. They can provide details that may not be available to an outside observer or scholar. But they may also present information in manner colored by the author's personal views or experience. A secondary

source may or may not offer information that is more analytical and comprehensive than that found in a primary source. The secondary source author has the advantage of hindsight and, in many cases, access to several primary sources and thus to several perspectives (Cottrell, 2005).

Regarding the steps in teaching critical reading, this study adopted the three phases of teaching from Crawford, et al (2005, p. 2). The phases include the anticipation phase, the building knowledge phase, and the consolidation phase.

- *The Anticipation Phase*

4. CONCLUSION

It is essential for teachers to guide their students to recognize some aspects of critical thinking in a text so that they will not suffer from the inability to question and judge the presented knowledge in the text and are able to identify the conflicts/the problems in it and they all agree with whatever the text says and internalize what is readily given and will get by with the thoughts of somebody else, without thinking and without trying to find possible solutions for the problems/conflicts he identified.

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