Abstract

This paper reviews the literature on critical thinking skills in general and in the field of ESL/EFL learning in particular. It starts with a brief introduction. Then, a number of definitions of critical thinking are discussed in details. Critical thinking skills and sub-skills are illustrated. Afterward, characteristics of critical thinkers are presented. Next, the association between critical thinking skills and dispositions are discussed. After that, it is discussed how critical thinking started to appear and play a significant role in learning English as a second/foreign language. Finally, a brief conclusion closes the paper.

Keywords: Critical Thinking Skills, Dispositions, Language Learning, Teaching

Introduction

Academic journals and the mass media have presented critical thinking skills as being essential for the growing workforce of the 21st century. Critical thinking skills have been also recognized as vital for students’ academic success. Currently, there is a growing demand for superior critical thinking skills, problem solving, and negotiation skills as well as highly developed communicative competence (Gervey, Drout & Wang, 2009; Halpern, 2004; Zare & Moomala, 2013, Zare & Mukundan, 2015). Critical thinking skills have been identified as a logical, purposive deep thinking approach (Rudd, 2007) and/or as a doubtful or skeptical approach (Mason, 2007) employed in making decisions, mastering concepts as well as solving problems. Those who possess critical thinking skills demonstrate behavioral dispositions which are required and acknowledged in both academic and vocational contexts (Kosciulek & Wheaton, 2003; Mason, 2007; Rudd, 2007).

Definition of Critical Thinking
Critical thinking is a broad concept and has generated many different definitions and terminologies. The distinguished educational expert Dewey (1933) refers to critical thinking as reflective thinking, and proposes that it must be one of the aims of education. Norris (1985) defines critical thinking as deciding rationally what to or what not to believe. One of the most frequently referred to definitions of critical thinking is one used by Ennis (1987), who has similar views to Dewey and Norris. Ennis defines critical thinking as “reasonable reflective thinking that is focused on deciding what to believe or do” (p. 10). For Dewey, Norris, and Ennis, critical thinking is about being careful and reflective when making decisions to believe something or do something.

According to Lipman (1991) these and other current definitions are not satisfactory for they fail to consider the outcomes of critical thinking, its characteristics and the connection between them. Thus, he suggested the need for a functional definition of critical thinking instead of defining critical thinking skills as discrete skills. This is essential to ensure that the approach taken to teach critical thinking is holistic not otherwise (Brandt, 1988). For instance, by defining critical thinking as a skill, teaching critical thinking becomes similar to teaching concepts of content subjects such as physics. In such a case, it is sufficient to merely make the students understand the concept of what thinking is or teach a skill such as repairing a radio. On the other hand, teaching critical thinking involves getting students to think critically. Therefore, it is not enough to merely tell or preach what to think but the students need to be shown how to think critically, rationally, consistently, and to think well. The students need to have models, which show explicitly how to think well. This can be done by showing, among others, the act of inquiring or arguing. In this thinking process the students will come to know which argument has good and/or poor reasoning.

At the same time, students need to be involved in the very process of thinking and be given practice in doing critical thinking. There is a need to create an environment in which critical thinking flourishes. According to Lipman (1988), teaching critical thinking is similar to teaching moral values. It is not enough to tell or inform since the individual needs to be in the context where the very people around him are upholding the values. The individual observing the people practicing these values as a part of their lives will unconsciously adopt these values. The
same goes with critical thinking skills. It is not just a discrete skill. To Lipman (1988), it is a skillful responsible act of thinking that involves reasoning and good judgment because they rely on criteria. Similar to teaching moral values, critical thinking is also self-correcting and is sensitive to context. Lipman (1993) defines critical thinking as “thinking that facilitates judgments because it relies on criteria and self-correcting, and is sensitive to context” (p.683). Self-correcting refers to knowing consciously a good or a poorly developed argument or thought.

However, another perspective on critical thinking involves the use of intellectual standard. Paul and Elder (2002), for example, refer to critical thinking as an art through which an individual can make sure that he/she makes use of the best thinking in any kind of situations. “The general goal of thinking is to figure out the lay of the land. We all have choices to make; we need the best information to make the best choices” (p.7). Paul and Elder (2002) stated 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, Rationality, Accuracy, Depth, Significance, Precision, Breadth, and Fairness. Critical thinkers should apply these criteria as minimal requirements when they reason.

Other educationalists consider critical thinking to be about skepticism. McPeck (1981), for example, suggests that the essence of critical thinking is “the propensity and skill to engage in an activity with reflective skepticism” (p.8). Similarly, Sofo (2004) believes that thinking critically is about doubting and starting to reconsider what we normally take for granted. Sofo (2004) sees critical thinkers as people who evaluate their habits to improve the way they do things. They are people who are open-minded and who take various perspectives into consideration.

One of the most comprehensive and the biggest studies on reasoning and critical thinking was released by the American Philosophical Association (APA) in 1990 (Boghossian, 2006). The research employed a Delphi method to reach an agreement on critical thinking definition. Facione (1996) described the Delphi method and how it was administered in the APA study:
A central investigator organizes the group and feeds them an initial question (In this case it had to do with how college level critical thinking should be defined so that people teaching at that level would know which skills and dispositions to cultivate in their students). The central investigator receives all responses, summarizes them, and transmits them back to all the panelists for reactions, replies, and additional questions. The central investigator summarizes the arguments and lets the panelists decide if they accept them or not. When consensus appears to be at hand, the central investigator proposes this and asks if people agree. If not, then points of disagreement among the experts are registered (p. 9).

This study lasted around two years to be completed. Forty six experts in the United States and Canada were nominated as the panel of experts. Facione (1996) stated “The experts represented many different scholarly disciplines in the humanities, sciences, social sciences, and education” (p.7). Moreover, all the scholars were “widely recognized by their professional colleagues to have special experience and expertise in critical thinking instruction, assessment or theory” (APA, 1990, p. 4). Finally, the participants reached an agreement on the definition of critical thinking and its main components. The statement from the study describes and provides a detailed definition of the best critical thinker, along with the core elements of critical thinking. The definition of critical thinking which was agreed by the experts is presented below:

We understand critical thinking to be purposeful, self-regulatory judgment which results in interpretation, analysis, evaluation, and inference, as well as explanation of the evidential, conceptual, methodological, criteriological, or contextual considerations upon which that judgment is based (APA, 1990, p. 3).

The experts agreed that critical thinking has six main components which are illustrated in the following table:
Table 1: Critical Thinking Cognitive Skills and Sub-Skills (Facione, 1990, p. 6)

<table>
<thead>
<tr>
<th>Skills</th>
<th>Sub-skills</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Interpretation</td>
<td>categorization, decoding significance, clarifying meaning</td>
</tr>
<tr>
<td>2. Analysis</td>
<td>examining ideas, identifying arguments, analyzing arguments</td>
</tr>
<tr>
<td>3. Evaluation</td>
<td>assessing claims, assessing arguments</td>
</tr>
<tr>
<td>4. Inference</td>
<td>querying evidence, conjecturing alternatives, drawing conclusions</td>
</tr>
<tr>
<td>5. Explanation</td>
<td>stating results, justifying procedures, presenting arguments</td>
</tr>
<tr>
<td>6. Self-regulation</td>
<td>self-examination, self-correction</td>
</tr>
</tbody>
</table>

**Characteristics of Critical Thinkers**

Ennis (1985) presents a prominent framework for teaching critical thinking skills. He offers thirteen characteristics of individuals who benefit from critical thinking skills. Such people are more likely to be:

1. “Open minded,
2. Take or change position based on evidence,
3. Take the entire situation into account,
4. Seek information,
5. Seek precise information,
6. Deal in an orderly manner with parts of a complex whole,
7. Look for options,
8. Search for reasons,
9. Seeks a clear statement of the issue,
10. Keep the original problem in mind,
11. Use credible sources,
12. Stick to the point, and
13. Exhibit sensitivity to others’ feelings and knowledge level” (p.46).

In addition, Lipman (1988) distinguishes between ‘critical thinking’ and ‘ordinary thinking’. The latter is simple and lacks criteria; while the former is complex and based on criteria such as objectivity, usefulness and consistency. He says teachers need to help students change their thinking behavior.
1. From guessing to estimating
2. From preferring to evaluating
3. From grouping to classifying
4. From believing to assuming
5. From inferring to inferring logically
6. From associating concepts to grasping principles
7. From supposing to hypothesizing
8. From offering opinions without reasons to offering opinions with reasons and
9. From making judgments without criteria to making judgment with criteria.

**Critical Thinking Skills and Dispositions**

Moreover, experts argued that there is a positive correlation between critical thinking skills and the intrinsic motivation (dispositions) to think critically, and that specific critical thinking skills are matched with specific critical thinking dispositions (Facione, 2000). John Dewey provided a detailed description of critical thinking disposition as “personal attributes” (Dewey, 1933). Pascarella & Terenzini (2005) see the disposition to think critically as the tendency, willingness, and/or internal motivation to use critical thinking skills. Critical thinking disposition consists of seven conceptual elements which are inquisitiveness, truth seeking, open-mindedness, confidence in reasoning, analyticity, systematicity, and maturity of judgment (Yang, Chuang, Li, & Tseng, 2013; Pithers & Soden, 2000). The professionals and experts believe that a good critical thinker include both thinking skills and dispositions. Individuals with superior critical thinking skills who fail to employ those skills properly cannot be recognized as good critical thinkers. These individuals are believed not to be good critical thinkers as they fail to include the dispositional dimensions (Facione, Sanchez, Facione, & Gainen, 1995; Facione, 2000; Ennis, 1994; Paul, 1990).

The experiential classification of thinking skills and dispositions tends to support the philosophical difference between them as people try to measure their critical thinking (Taube, 1997). Though, some experts take in the disposition to make use of critical thinking skills as part of their definition of critical thinking (Paul, 1990; Esterle & Clurman, 1993). It was explained that, “we wanted to get in the willingness as well as the ability because a person can master CT
skills without being the least bit disposed to use them” (Esterle & Clurman, 1993). Perkins, Jay, & Tishman (1993) stated that being able to practice a specific thinking skill is a part of the meaning of being disposed to make use of that skill.

Facione (2000) also refers to the descriptions of self-examination and self-correction, sub-skills of self-regulation (one of the cognitive skills of critical thinking), and state that there are dispositional components to critical thinking. Facione (2000) believe that each cognitive skill, if exercised appropriately, would be associated with the cognitive disposition to do so. However, being experienced in critical thinking but failing to use them habitually and suitably disqualifies the individual from being identified as a critical thinker at all (Facione, 2000). Experts believe that a competent critical thinker is consistently disposed to get involved and also to support other people to practice critical thinking skills and critical judgments. The competent critical thinker is capable of making such judgments in a variety of situations and for different objectives.

Experts recommend that people should be taught from early childhood to practice reasoning, to look for related facts, to reflect on multiple alternatives, and to recognize different viewpoints of other individuals. It is practical and also reasonable to require the system of education to train young learners the habits of mind that support those practices, characterize the good critical thinker, and lead learners through the pathway toward achievement (Siegel, 1988; Paul, 1990; Esterle & Clurman, 1993; Facione, 2000).

Critical Thinking in ESL/EFL Context

The term ‘critical thinking’, as Day (2003) notes, began to appear in ESL/EFL literature in the 1990s. However, a discussion of aspects of critical thinking in language learning probably started earlier than that, in the late 1970s when the communicative approach was introduced to the field of English language teaching.

Critical thinking in the ELT literature may have emerged, at least partially, from the fact that the number of international students studying in English speaking countries were growing fast. In Australia (Thompson, 2002), as in North America and the United Kingdom (Briggs, 1999), international students needed a high level of language proficiency, but they also needed to
adjust their discourse style to suit their new situations and cultural contexts. They needed to apply their critical thinking in new and different ways. In addition, with more linguistic and rhetorical conventions to consider, the use of L2 to communicate can be very challenging for students. In addition, English teachers often hear students complain that they know what to say but cannot put it into English.

The students may have a wide vocabulary and theoretical knowledge but they may not be able to construct grammatically correct sentences. This seems to be primarily a linguistic problem.

When students have to use L2 to present their ideas and feelings, as they do when undertaking a number of tasks that are required of them in an academic context, they need to use the ability to think critically as well as their linguistic skills. While developing their L2 competency, students face tremendous challenges in exercising critical thinking in L2. From the socio-cultural perspective, when learners express their thoughts in L2, either through spoken or written language, they are not only translating their thoughts from L1 to L2, but also redefining their identities (Lantolf, 1993; Kramsch & Lam, 1999).

Expressing one’s critical thinking in L2 may require that one adjusts one’s ways of saying things. In short, it requires both lexico-grammatical competence and socio-cultural competence, which is in accordance with the aims of Communicative Language Teaching (CLT). Three major research areas contribute to our assessment of the significance of critical thinking in language learning. These are communicative language teaching, metacognitive learning strategies, and L2 speaking ability, especially in reference to academic setting.

a) Communicative Language Teaching

Nunan (1981) described some characteristics of communication in the real world. He stated that, first, individuals communicate for many reasons, to find out information, give vent to their emotions, describe their world, and get things done and so on. Very rarely, they communicate to display their linguistic or rhetorical virtuosity. In other words, they
communicate to fulfill certain needs, and this is achieved, partly through linguistic and partly through non-linguistic means.

Another consideration is that the communicative act is intimately tied to its setting. Nunan (1981) stated that there are at least three elements involved in the communication process: the audience, the communicative aims of the speaker, and language forms. Similarly, Littlewood (1981) discussed two kinds of communicative tasks and activities: social interaction and functional activities. He stated that language instructors need to develop communicative activities which would assist learners: (1) to employ the target language for communicative purposes and manage to get meanings across as effectively as possible; and (2) to use the language in a way that is appropriate to the social setting in which the communication takes place.

The teaching of English for communication necessarily includes many elements of critical thinking because it focuses on form as well as meaning. Thinking critically in language learning is about using the target language to make meaning; this includes using the language to explain, reason, argue, and also to express the reasoning process.

According to Jacobs & Farrell (2003), the communicative language learning environment can provide a useful venue for students to gain and use thinking skills. Group activities within the communicative language learning environment require students to communicate with their peers, to provide each other with help and constructive criticism, and to challenge each other's views.

According to Sofo (2004), group activities commonly employed in CLT can bring out many facets of thinking in students: mental-total awareness, observation skills, how differences are valued, capacity for empathy, openness to new ideas and values, and ability to balance emotion and cognition. Language learners can use critical thinking to decide how to use language most effectively to achieve their desired communicative aims. Utterances are successful when the aim of having the audience properly understand the intended messages is
achieved. In short, communicative language activities provide students with opportunities to test their ideas and reasons in order to determine their positions (Jacobs & Farrell, 2003).

b) Metacognitive Learning Strategies

Studies in the psychology of learning also address issues relating to critical thinking in language learning. Students can be trained to use learning strategies that are helpful to language learning, and there are many types of strategies that are thought to be useful (Wenden, 1985; Wenden & Rubin, 1987; Oxford & Nyikos, 1989; O’Malley & Chamot, 1990; Oxford, 1990; Chamot, 1995; Chamot & O’Malley, 1996; Zare, 2010; Zare & Nooreen, 2011).

Metacognitive learning strategies, if used properly, enable students to become reflective learners. In general, such strategies involve three steps: (1) planning, (2) monitoring, and (3) checking outcomes (Wenden, 1985).

According to Oxford & Nyikos (1989), successful language learners take several steps in managing their own learning and each step requires that learners be critical thinkers. Metacognitive strategies are generally self-reflective activities. Poor performance may result from lack of self-monitoring and proper planning. Many studies have suggested that language students should learn how to use such strategies. Students who are active users of metacognitive strategies, therefore, are likely to be more effective learners and good critical thinkers (Zare, 2012).

c) Research on L2 Speaking

In an ESL/EFL context, the four macro skills, listening, speaking, reading, and writing, all require students to perform complex tasks that demand the use of cognitive and metacognitive skills. L2 academic speaking, in particular, requires that the students exercise a great deal of critical thinking and this process has proven to be very challenging for most students (Atkinson & Kaplan, 1994; Atkinson, 1997; Wilson, 1998; Thompson, 2002; Zare & Moomala, 2015).

Studies suggest that students, especially from Asian countries, have been either failing to integrate critical thinking skills into their speaking skill or employing different and inappropriate
styles of logic (Ugla, Ilianis, & Mohamad Jafre, 2013). Yet, some analysts argue that such students are as capable of promoting and demonstrating critical thinking skills as native speakers (Briggs, 1999; Carnarajah, 2002).

Integrating the appropriate critical thinking skills into oral communication activity plays a critical role in the efficacy and usefulness of the activity. Successful and effective communication can take place if the communicator infuses elements of critical thinking into her communication.

In this regard, Cooper & Simonds (2003) stated that competent communicators are concerned with enlarging their repertoire of communication acts, selecting criteria for making choices from the repertoire, implementing the communication acts chosen, and evaluating the effectiveness of communication employed. As it can be noticed, all these characteristics of competent communicator are also consistent and very close to critical thinking skills. In other words, individuals who carefully employ criteria and intellectual standards while communicating with others are more effective and successful in their communication.

According to Cooper & Simonds (2003), regardless of the circumstances surrounding your interactions, the more competent a communicator you are, the more effective you can be. The basis of communication effectiveness is the appropriateness of the communication act. The competent communicator uses critical thinking skills in which she carefully and critically examines the components of the communication situation; the participants, the setting, the topic, and the task. Based on an analysis of these components, the competent communicator chooses the appropriate communication act.

As Paul & Elder (2002) explained, “The general goal of thinking is to figure out the lay of the land to make choices” (p.7). Accordingly, it can be concluded that to be more effective, the communicator needs to use her critical thinking skills while engaging in communication to analyze and examine the situation, make choices, implement them, and finally evaluate the effectiveness of the choices she made. Poor, careless, hasty, and uncritical choices and/or responses will have negative influence on communication and may also cause failure. If you respond inappropriately to a classmate, for instance, you may foster defensiveness or hostility.
that the classmate, intentionally or not, may communicate to you or other peers. This, in turn, affects how the students behave in the classroom and how interact with each other, and ultimately will result in the break-down of communication. Thus possessing a large repertoire of communication acts and using them critically and appropriately will enhance interaction with others in the educational environment (Cooper & Simonds, 2003).

In sum, effective communicators are critical thinkers who understand their audience and use the language appropriately. They apply appropriate reasons. Above all, they are objective and open-minded and use self-reflection in their language learning.

**Conclusion**

Halpern (2004) stated that employers nowadays show more value for member of staffs who think critically and are capable of solving complicated issues. Such being the case, training learners to think critically must be one of the most important goals of education. Experts, educationalists, and/or instructors have to put more emphasis on this area and continue to support and facilitate the development of students’ critical thinking skills. Critical thinking skills and sub-skills must be clearly understood by instructors so that they can impart that knowledge to learners. The purpose of critical thinking instruction (becoming a competent critical thinker) needs to be clearly defined and established. Instructors must not only teach learners critical thinking skills but also demonstrate these skills through their teaching activities and behaviors to set an example and act as role models. They also need to get learners involved in activities which force them to practice the skills. Last but not least, it must be realized and practiced that critical thinking does not only entail being critical towards other individuals, but also reviewing, revisiting, and reassessing critically and constantly one’s own beliefs, mentality, way of thinking, attitudes, and behaviors.

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**References**


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