

Critical and Creative Thinking in the English Language Classroom

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Abstract

In recent years the importance of promoting critical thinking skills and creative thinking in education has been widely acknowledged. More specifically, it is believed that the successful incorporation of these skills in the teaching of English as a second or foreign language have a central role. This belief is based on the premise that there is a close relationship between knowledge and thinking and between language learning and thinking processes. The first part of this article presents the research findings and a short literature review on critical thinking skills and creative thinking. We then present suggestions for their successful incorporation in the English language classroom. We hope that this article will serve as a starting point for English teachers to evaluate their current teaching practices, and motivation to incorporate critical and creative thinking skills in their classroom.

Keywords: critical thinking skills, creative thinking, English language

1. What is critical thinking?

A review of the pedagogical literature reveals that a growing number of studies focus on critical thinking, on what critical thinking skills can and should be taught, and on the most effective and appropriate framework for fostering it. Nevertheless, most educators and researchers agree that an important aspect of critical thinking is the ability to collect, evaluate and make use of information effectively and appropriately (Beyer, 1985). As far as definitions for critical thinking are concerned, definitions that draw upon philosophy often stress the metacognitive element of critical thinking, arguing that it can be defined as “thinking about your thinking while you’re thinking to make your thinking better” (Paul, 1993, p. 91). Similarly, Elder and Paul (1994) argue that critical thinking means that thinkers take charge of their own thinking. This also presupposes that people develop sound criteria and standards for analysing and evaluating their own thinking processes and use of these criteria to improve the quality of their thinking (Uden & Beaumont, 2006).

By contrast, most theorists who base their theories, research and definitions of critical thinking on cognitive and developmental psychology often define critical thinking as “thinking that is purposeful, reasoned, and goal directed. It is the kind of thinking involved in solving problems, formulating inferences, calculating likelihoods, and making decisions” (Halpern, 1996, p. 5). Despite these different perspectives, however, it is now widely accepted that a useful and effective conception of critical thinking needs to draw on both philosophy and psychology (Kuhn, 1992, 1999; Weinstein, 1995). It is generally recognised in the relevant literature that the ability to think critically constitutes a kind of intelligence which students do not necessarily or naturally possess, but it is a skill which can be taught in the classroom. It has been argued that “critical thinking skills“ are not likely to develop spontaneously. By contrast, teachers must take a directive role in initiating and guiding critical thinking, since it is considered a “learnable skill” (Bean, 1996, p. 4). In this context, language classes are particularly appropriate for teaching critical thinking “owing to the richness of material and the interactive approaches used” (Üstünlüoğlu, 2004, p. 3).

According to Santos and Fabricio (2006) the development of critical thinking presupposes an ongoing questioning of taken-for-granted assumptions, while according to Schumm and Post (1997), critical readers display the following characteristics: a) base their judgments on evidence, b) ask penetrating questions and evaluate ideas, c) distinguish between opinions and facts, and d) reflect on their ideas.

Amongst the most prominent scholars who have addressed the issue of critical thinking are Matthew Lipman, Robert Sternberg, and Robert Ennis. Lipman argues that there is a distinction between ordinary thinking and critical thinking. Ordinary thinking is simple, straightforward and without standards. By contrast, critical thinking is more complex and is based on standards of objectivity, utility, or consistency. He supports the view that critical thinking does not include only the mental processes which people employ to solve problems or to make decisions, but it involves “skilful, responsible thinking that facilitates good judgment because it relies upon criteria, is self-correcting, and is sensitive to context” (Lipman, 1988, p. 39). Lipman further argues that, teachers should help students shift: a) from guessing to estimating, b) from preferring to assessing c) from grouping to classifying, d) from believing to assuming, e) from interring to inferring logically, f) from associating concepts to grasping principles, g) from noting relationships to noting relationships among relationships, h) from supposing to hypothesizing,

i) from offering opinions without reasons to offering opinions with reasons, and j) from making judgments without criteria to making judgments with criteria (Lipman, 1984, 1988).

In a similar vein, Sternberg supports the view that there are three categories of components of critical thinking: a) meta-components, that is, high-order mental processes which are employed in order to plan, monitor, and evaluate what the individual is doing, b) performance components which refer to the actual steps the individual takes, and c) knowledge-acquisition components, which refer to processes which individuals employ so as to relate old material to new material and to apply new material (Sternberg, 1990).

Finally, Robert Ennis mentions 13 characteristics of thinkers with the ability to think in a critical manner. More specifically, he argues that they share the following features. According to Ennis (1989), they tend to:

- a) be open-minded,
- b) take a position (or change a position) when they are convinced by evidence
- c) take into account the entire situation, adopting a holistic approach
- d) seek precision and objectivity in information, making use of credible and reliable sources of information
- e) deal in an orderly manner with the elements of a complex whole
- f) search for options and alternative solutions
- g) look for reasons
- h) seek a clear statement of the issue
- i) keep the original problem in mind
- j) remain relevant to the point, and be sensitive to the feelings and knowledge level of others

2. Creative thinking

As is the case with critical thinking, there is not universal consensus about the exact constituents of creativity and the standards with which it can be identified and judged. According to Steiberg (1986), several attributes are associated with creativity. These include: a) lack of conventionality, b) intellectuality, c) aesthetic taste and imagination, d) decision-making skills and flexibility, e) perspicacity (in questioning social norms), and f) drive for accomplishment and recognition. Nevertheless, teachers do not always foster the development of creative thinking for their students. Teachers generally require "reactive" thinking from their students; that is, they expect them to react to questions, exercises or test items and to give a preferred "correct" answer. They usually have the tendency to discourage "proactive" thinking, such as generating novel questions and answers, instead of a single "correct", or "accepted" answer. Similarly, they tend to favour tasks and activities which require a "correct" answer, with little room for alternative ways of thinking and answering. However, creative thinking constitutes an important skill in everyday life, and therefore, students should be encouraged and should be provided with ample opportunities to acquire the skills necessary for creative thinking.

Considering the above, project-based learning constitutes excellent way to promote creative thinking, since the process leading to the end-product of the project is not predetermined, but requires the students' active involvement and higher order thinking skills. Within the framework of project-based learning students do not follow strict guidelines, but are invited to improvise, come up with solutions to the problems they encounter, to find alternative ways to fulfil a task, to cooperate, to take risks, to develop effective communicative skills, to evaluate themselves and their peers, processes, in other words, which promote creative thinking. Moreover, problem-based learning (PBL) can foster creative thinking. It allows teachers to make useful additions to their traditional teaching, such as "problem-solving activities, critical-thinking exercises, collaborative learning, and independent study, and allows them to put these into context and give them meaning" (Uden & Beaumont, 2006:45). In essence it is a "range of educational approaches that give problems a central place in learning activity" with small groups working together to solve the problem (Bereiter & Scardamalia, 2000, p. 185). Problem-based learning is often described as a "pedagogical process that begins by presenting the learner with an engaging problem, question, or puzzle. Learners then discover course concepts for themselves as they explore the problem" (Anderson and Lawton, 2007, p. 43).

The main benefits of problem-based learning which can promote the development of critical and creative thinking in EFL/ESL contexts are: a) it promotes interaction and cooperation among students, b) it promotes self-reflection in action (Schon, 1983) and the ability to reflect on "both the individual and the collective activities during and after knowledge construction" (Faidley et al, 2000, p. 110), c) it fosters self-directed learning skills (Dolmans & Schmidt, 1994), d) it promotes deeper learning, e) provides students with opportunities to experiment with what they already know, to find new perspectives, and to become more flexible when dealing with problems (Spence, 2001), f) enhances students' problem solving and self-directed learning skills (Barrows, 1996; Dods, 1997; Kamin et al, 2001), g) encourages "open-minded, reflective, critical and active learning" (Margetson, 1997, p. 39).

Probably the most important characteristic of PBL, which makes it extremely useful in EFL/ESL classes, is that, contrary to traditional instructional methods, the “reasoning process is another important element in PBL. Learning in a PBL environment is no longer as simple as fact-collecting. Instead, PBL learners have to engage in inquiry processes in which critical and creative thinking skills are the key for the learners to accomplish the problem solving tasks imposed upon them” (Hung, 2009, p. 119). Because PBL starts from a problem and the students collaborate so that they find a solution to the problem, the whole process entails employing higher-level thinking skills, rather than simply finding facts, and are therefore more likely to lead to “deeper understanding and better application and transfer of the knowledge in the future” (Hung, 2009, p. 120).

3. Fostering critical and creative thinking in the English language classroom

Before English teachers adopt interventions to foster their students’ critical and creative thinking, it is important that they bear in mind that a friendly, supportive and non-threatening classroom atmosphere can have a positive impact on students’ motivation and language performance and that a “positive climate for learning has been identified by many educationalists as a critical factor in effective learning” (Little, 1997, p. 119). The rest of this chapter presents some practical recommendations that English teacher can employ, after taking into account their students’ need, language proficiency, the coursebook, and the curriculum. Paul suggests that teachers should use cooperative learning as often as they can, speak less so that students have more time to think, think aloud in front of the students, use appropriate questions that probe various dimensions of their thinking, use concrete examples to illustrate abstract concepts, and generally design all activities so that students “must think their way through them” (Paul, 1992, p. 20). Teachers can foster critical thinking by stimulating active learning, since it can lead to effective and lasting education, by encouraging well supported conclusions, and by building from students’ experiences (Chaffe, 1992).

Ennis proposes the following guidelines that teachers should adopt in order to promote their students’ critical thinking skills. He argues that educators should be aware of the cognitive and mental processes that constitute critical thinking. They should also be familiar with the tasks, skills, and situations to which these processes are applied, and use a range of classroom activities that promote these processes. Furthermore, he provides a framework for such instruction. He divides critical thinking into four components, each consisting of several specific skills, which, as he argues, can be taught to students (Ennis, 1985, p. 44-48). These are: a) defining and clarifying, b) asking appropriate questions to clarify or challenge, c) judging the credibility of a source, and d) solving problems and drawing conclusions. In addition, teachers can support the development of critical thinking by asking students many questions which require students not only to seek or retrieve information, but also to analyze, logically process, apply, and evaluate it. Teachers also need to organise and implement teaching activities and tasks, a basic element of which is to involve students in supporting their answers, arguments or conclusions. In addition, supplementary materials beyond the workbook and the coursebook are necessary so as to cater for their students’ specific needs, preferences, language ability and to take into account their own teaching situation (e.g. equipment, curricula, classroom size etc.).

Ornstein provides a list of guidelines that teachers can use in order to enhance creative thinking (Ornstein, 1995). Teachers should: a) make available different resources for working out ideas, b) foster a tolerant attitude toward novel ideas, c) encourage students to engage in tasks requiring them to apply exploration, testing, searching, and prediction skills, d) resist accepting one “correct” answer or a predetermined pattern, e) teach skills for avoiding peer sanctions, f) teach students to value and take pride in their own creativity, g) encourage autonomous and independent learning, h) look and listen carefully, stir up the unmotivated students, don't accept superficial, ‘easy’ answers, i) develop a spirit of adventure in the classroom, j) encourage the habit of working out the full implication of ideas, k) provide active and quiet places-where students can "mess around" or "do their thing", while at the same time providing guidance and direction, l) make students more sensitive to their environment, n) encourage manipulation of objects and ideas, and o) keep alive the excitement of learning and thinking, encourage, stimulate, motivate.

According to Pierce (2004), teachers who wish to foster their students’ thinking skills should focus on the following: a) improve students’ metacognitive abilities, b) use effective questioning strategies, c) have students use oral and written language often and informally, d) design tasks that require thinking about content as a primary goal, e) teach explicitly how to do the thinking needed for the tasks, and f) create a classroom atmosphere that promotes risk-taking and speculative thinking. As far as Strategies for Teaching Critical Reading and Textbook Reading are concerned, it has been argued that critical reading “is dependent on critical thinking. Critical thinking involves asking probing questions, having an open mind, and reaching a logical conclusion based on evidence” (Reed & Pierce, 2004, p. 5). They provide the following set of strategies for teaching textbook reading: a) distinguish between textbook reading and critical reading, b) introduce the assigned reading in a preceding class,

c) students are assigned to write something in response to the text as homework, and d) design a focused, informal writing-to-learn task based on the reading. Moreover, according to Üstünlüoğlu (2004) teachers can activate critical thinking in the language classroom by making students aware of their perceptions, assumptions, prejudices, and values. More specifically, he proposes language activities which: a) help the learners become aware of their perceptions and how they may differ from those of others, b) help students identify their assumptions, and think about whether their assumptions are justifiable, c) make students aware of their prejudices, as they can impede critical thinking, d) help students create new thought patterns, think imaginatively and critically, instead of seeing only one possibility, and e) make students aware of the values on which they base their judgements and evaluations. In relation to writing skills, Correia (2006) suggests that language teachers should incorporate active reading tasks, such as summary writing and note taking, which require students to go beyond a superficial reading of the text to read between the lines, rather than engaging in activities such as multiple choice questions and true-false statements. To this end, she suggests that students should work “together in pairs or groups, with or without guidance from the teacher, in order to negotiate answers to questions.

Tasks considered active may include creating diagrams and filling in tables”, generally tasks that “enable students to interact with the text and each other” and tasks that require students to “to voice their own opinions about the text and discuss those opinions with other students and the teacher” (Correia, 2006, p. 17-18). Similarly, to overcome students’ difficulty in reading between the lines, and in order to foster critical reading, Tully has used “a mind mirror project to help students synthesize key story elements to create a visual representation of the character’s perspective” (Tully, 2009, p. 10). He believes that mind mirror projects can lead not only to students who are “self-aware, confident, and autonomous critical thinkers”, but they can them improve their critical thinking skills in future academic endeavours (2009, p. 10). Moreover, to help students see both sides of an argument, Elbow (1986) (quoted in Shaila & Trudell, 2010) suggests an activity, in which students work in pairs and take turns supporting and arguing against the same issue. This helps students have empathy with other people’s opinions. Bean also provides a number of step that teachers can use in order to integrate “writing and critical thinking activities into a course” (Bean 1996, p. 2). He also suggests that teachers should present problems a) as formal writing assignments, b) as though-provokers for exploratory writing, c) as tasks for small group problem solving, and d) as starters for “inquiry-based class discussions” (Bean, 1996, p. 6). Moreover, questionnaire projects are highly likely, apart from integrating the four macro skills, to contribute to focused language use and the development of critical thinking (Kagnarith et al, 2007), due to their potential to increase cognitive skills such as interpretation and self regulation.

Finally, in order to stimulate creative thinking, teachers should create the classroom conditions necessary to encourage students to make inferences, to encourage them to think intuitively and spontaneously, and use inquiry-discovery teaching techniques. English teachers should also encourage students to make educated guesses (based on the evidence, data and information they have available), to follow hunches, and to make leaps in thinking, rather than think in a “straightforward” manner.

4. Conclusion

While it is generally accepted that critical and creative thinking have a central role in education and that they constitute a principal goal of learning, EFL/ESL classes do not always promote the development of critical, as well as creative thinking. English teachers need to be aware that “Knowledge, by its very nature, depends on thought...all knowledge exists in and through critical thought” (Paul, 1992, p. 5) and that classroom climate is conducive to the development of critical skills (Üstünlüoğlu, 2004). However, the integration of critical thinking with the four macro skills, which is “an important step in students’ development, not only as English language learners, but as scholars in whatever field they choose to pursue” (Kagnarith et al, 2007, p. 7), remains a challenge. The theoretical as well as the practical issues described in this article are intended to equip English teachers with a sound basis for promoting critical and creative thinking skills in their classrooms. The suggestions and proposals do not constitute “ready made” rules or guidelines that teachers can use indiscriminately. Instead, they should be considered as starting points for teachers to evaluate their current teaching practices, and motivation to incorporate critical and creative thinking skills in their classrooms.

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