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ABSTRACT

Acting as a sliding signifier, the term "critical thinking" has been bandied about for years now by educators who often ascribe widely varying meanings to it. Researchers and writers mainly stress the "thinking" half of the phrase, often leaving unexamined what it means to be "critical." Those in the fields of critical pedagogy and critical literacy focus on the "critical" part of the phrase. "Critical" has become a trendy buzzword, and has been inappropriately appended to English-as-a-Second-Language (ESL) texts, particularly writing textbooks, again with widely varying meanings and motivations. This paper explores the similarities, overlaps, and differences in the multiple meanings of critical thinking, looking at the origins of the field, its uses in the educational enterprise, its limitations, including cultural and feminist critiques, and issues that arise in including critical thinking in curricula for postsecondary ESL students. A definition of critical thinking is proposed for ESL students that attempts to account for these discrepancies, limitations, and constitutive tensions. It is concluded that the critical part of critical thinking should be emphasized when critical means being able to distinguish among alternatives, to make judgments about issues and problems under consideration, and to consider the implications of arguments of direct concern to students' future and current lives. (Contains approximately 69 references). (Author/KFT)

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Critical Thinking: Origins, Applications, and Limitations for Postsecondary Students of English as a Second Language

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The process of active inquiry combines reflective analysis with informed action. We perceive a discrepancy, question a given, or become aware of an assumption—and then we act upon these intuitions.—Stephen D. Brookfield (1991, p. 23)

Acting as a sliding signifier, the term “critical thinking” has been bandied about for years now by educators and researchers who often ascribe widely varying meanings to it. Researchers and writers in the streams of psychology and philosophy mainly stress the “thinking” half of the phrase, often leaving unexamined what it means to be “critical.” Those in the fields of critical pedagogy and critical literacy focus on “critical,” often naturalizing what “thinking” means. As Brookfield notes, “Phrases such as critical thinking, critical analysis, critical awareness, critical consciousness, and critical reflection are exhortatory, heady, and often conveniently vague” (1991, p. 11). Lankshear and McLaren concur, “*Critical* is also a buzzword which is currently enjoying a moment of vogue” (1993, p. xvi). For students learning English as a Second Language (ESL)¹, “critical thinking skills” are often appended to ESL texts, particularly writing textbooks, again with widely varying meanings and motivations. The most alarming aspect of the critical thinking trend in ESL, in my view, is the often insidious way in which the addition of critical thinking to the curriculum constructs ESL students as incapable of thought because their English is not perfect.

This paper will explore the similarities, overlaps, and differences in the multiple meanings of “critical thinking,” looking at the origins of the field, its uses in the educational enterprise, its limitations, including cultural and feminist critiques, and issues that arise in including critical thinking in curricula for postsecondary ESL students. Finally, I will propose a definition of critical thinking for ESL students that attempts to account for these discrepancies, limitations and constitutive tensions.

¹ I use the term ESL fully aware that many students are learning English not as a second, but as a third, fourth, or fifth language. However, I would like to avoid the deficit connotations of “nonnative speakers” and other similar terms.

The Psychological Strand: From Logic to “Pure Skills”

Critical thinking originated in the disciplines of philosophy and psychology, albeit fairly distinctly. Philosophers often view critical thinking as the on-the-ground deployment of “informal logic,” the application of logic to the problems of everyday life—including education. An early source of the idea of critical thinking was John Dewey, particularly *How We Think* (1910/1903??); Dewey conceived of reflective thinking as being “aware of its causes and consequences.” “Dewey interpreted critical reflection as arising out of perplexity and doubt, and involving a search for material that would resolve this doubt” (Lipman, 1991, p. 106).²

Other twentieth-century philosophers likewise proffered conceptions of critical thinking designed to diffuse the principles of reasoning into the general population. Black’s (1952) *Critical Thinking* attempted to translate philosophical ideas into practical applications. Toulmin’s *The Uses of Argument* (1958), Scheffler’s *Conditions of Knowledge* (1965), Scriven’s *Reasoning* (1976), and DeBono’s *Teaching Thinking* (1976) and *Lateral Thinking* (1977) furthered the project of popularizing informal logic. The foundations of the contemporary critical thinking movement in education, however, were laid with Ennis’s (1962)³ article, “A Concept of Critical Thinking,” in which he noted the “lack of careful attention to the concept, *critical thinking*” and listed “twelve aspects of critical thinking”:

1. Grasping the meaning of a statement.
2. Judging whether there is ambiguity in a line of reasoning.
3. . . . whether certain statements contradict each other.
4. . . . a conclusion follows

²Lipman also discusses the influence on Dewey of philosophers such as C. S. Peirce (1988, p. 105), but exploring the purely philosophical origins of critical thinking, reaching back to Hegel and further to Plato, is beyond the scope of this paper.

³Although Edward Glaser published the well-regarded *Experiment in the Development of Critical Thinking* in 1941, it seems not to have received the type of exposure afforded to Ennis’s piece nor to have created the same impact.

necessarily. 5. . . . a statement is specific enough. 6. . . . a statement is actually the application of a certain principle. 7. . . . an observation statement is reliable. 8. . . . an inductive conclusion is warranted. 9. . . . the problem has been identified. 10. . . . something is an assumption. 11. . . . a definition is adequate. 12. . . . a statement made by an alleged authority is acceptable. (p. 84)

In addition, Ennis proposed “three dimensions of critical thinking,” the logical, “judging alleged relationships between meanings of words and statements”; the criterial, which “covers knowledge of the criteria for judging”; and the pragmatic, defined as “the impression of the background purpose on the judgment” (p. 85). These early formulations pointed almost exclusively to the skills and abilities constitutive of an ideal of critical thinking that incorporated reasoning and argumentation. Siegel characterizes this position as the “pure skills conception of critical thinking,” in which “a person is a critical thinker if and only if she has the skills, abilities, or proficiencies necessary for the correct assessing of statements” (1988, p. 6). Like many subsequent notions of critical thinking, Ennis focuses on the analysis of isolated argumentative structures; he pays little attention the construction of arguments, creative thinking, the social context of the issue under examination, or the sociocultural situation of the thinker.

Diffusing Critical Thinking Into Education

The 1983 publication of *A Nation at Risk* (National Commission on Excellence in Education) documented the perception of a mounting crisis in education, particularly the inability of alarming numbers of students in the United States to go beyond rote memorization to perform analytically, with implications for both their future academic success and for the nation’s economic prowess. Siegel noted in 1988 that “National commissions on the state of education decry the lack of emphasis on reasoning ability in schools and call for the inclusion of reasoning in the curriculum as the fourth ‘R’”

(p. 1). Spurred by such calls to action, educators and researchers advocated adding critical thinking to the curriculum as a means to stem declining test scores and form students capable of competing academically with the Japanese and other foreign economic threats (Schrag, 1988; Young, 1980). In addition to the underperformance of students in schools, noted Resnick, “Employers today complain that they cannot count on schools and colleges to produce young people who can move easily into more complex kinds of work” (1987, p. 6).

In response to these concerns about the academic preparation of students for the marketplace in particular, the critical thinking movement mushroomed, becoming a bandwagon onto which state standards setters, textbook publishers, and test makers jumped (Swartz and Perkins, 1990, p. xv).

In the early 1980s, the textbook industry, after decades of studiously looking the other way, began to make some timid concessions to the advocates of reflective education, adding critical thinking labels to review questions, often regardless of content, and here and there providing a paper and pencil drill aimed at strengthening some particular thinking skill (Lipman, 1991, p. 1).

By 1987 Ennis had extended his initial framework into “A Taxonomy of Critical Thinking Dispositions and Abilities,” which moved beyond the skills-only framework to include the disposition to think critically by using personal qualities such as “Seek reasons. Try to be well informed. . . . Look for alternatives. Be open-minded. . . . Be sensitive to the feelings, level of knowledge, and degree of sophistication of others” (p. 12). This expansion of Ennis’s taxonomy represents the widening scope of philosophy-based conceptions of critical thinking to include not only the attributes of ideal thought, but also the characteristics of the ideal critical thinker; such character traits, however, still remained detached from the social context of the thinkers themselves.

Theorists attempted more succinct definitions of critical thinking. “Critical thinking is reasonable reflective thinking that is focused on deciding on what to believe or do” (Ennis, 1987, p. 11). For Siegel, “the critical thinker is appropriately moved by reasons” (1988, p. 32), but must know how to assess them. He rejects “the idea that reasons and emotion are unconnected, and the related idea that the exercise of reason requires complete independence from the emotions” (p. 40). For Paul, “Critical thinking is the intellectually disciplined process of actively and skillfully conceptualizing, applying, analyzing, synthesizing, and/or evaluating information gathered from, or generated by, observation, experience, reflection, reasoning, or communication, as a guide to belief and action” (1998). Critical thinking, for Paul, involves a dialectical process modeled on Socratic dialogue in which thought is refined by critique and argument.

The Psychology Strand of Critical Thinking

Meanwhile, in psychology,⁴ Bloom’s still-popular 1956 “Taxonomy of Educational Objectives” segregated aspects of the “cognitive domain” into Knowledge and Intellectual Abilities and Skills, which ranges from the “knowledge level” at base through the comprehension, application, analysis, synthesis, and evaluation levels (pp. 201-207). Bloom’s taxonomy helped distinguish the types of skills in which students were asked to engage in the classroom, as well as categorizing the kinds of questions that teachers typically pose. However, the taxonomy has been criticized for the blurring of some of its higher-level operations (Swartz and Perkins, 1990, p. 56).⁵ Furthermore, later research attempts to demonstrate the inseparability of “lower” and “higher”-order thinking skills. “The mental processes we have customarily associated with thinking are not restricted to some advanced or

⁴ Space constraints prevent me from treating the influence of psychological movements such as behaviorism or the theories of Piaget and others on Bloom’s and subsequent models of thinking.

‘higher order’ stage of mental development” (Resnick and Klopfer, 1989, p. 1). Nonetheless, as distinctions between “higher-” and “lower-order” thinking permeate the literature, this claim remains unsettled (Lewis and Smith, 1993, p. 132).

The term “critical thinking” is often confused with other school-oriented frameworks and conceptions of analytical reasoning, such as Higher Order Thinking Skills (HOTS), problem-solving strategies, and metacognition. The confusion stems from the similar overall aims of educators interested in teaching analytical reasoning as well as the imprecise nature of much of the terminology and overlaps in the notions constituting the frameworks. Like critical thinking, HOTS has various definitions. “Higher order thinking is *nonalgorithmic* . . . complex . . . yields multiple solutions . . . involves *nucanced judgment* and interpretation . . . the application of *multiple criteria* . . . uncertainty . . . self-regulation of the thinking process . . . *imposing meaning* . . . [and] is *effortful*” (Resnick, 1987, pp. 2-3, emphasis original). Rather than conceiving of critical thinking as the pinnacle of a set of skills or an overarching category, Newmann sees it as part of higher order thinking, “defined broadly as challenge and expanded use of the mind . . . when a person must interpret, analyze, or manipulate information, because a question to be answered or a problem to be solved cannot be resolved through the routine application of previously learned knowledge” (1991, p. 325). To Perkins, “higher order thinking refers to reasoning, argument, problem-solving, and so on” (1992, p. 30). Lipman suggests that “higher order thinking . . . is not equivalent to critical thinking alone, but to a fusion of critical and creative thinking” (1991, p. 20).⁶

⁵Later in this paper I will analyze an example of a critical thinking exercise partially based on Bloom’s taxonomy.

⁶ Creative thinking represents a more recent addition to the general field of critical thinking, one which I do not have space to discuss, other than to offer Swartz and Perkins’s definition: “Creative thinking implies thinking that is both effective and original. . . . Prototypically, creative thinking involves the production of some kind of complex product” (1990, p. 40). Clearly important in terms of areas such as composition, this notion needs to be unpacked as well.

Problem-solving strategies tend to be deployed in particular disciplines such as science, mathematics, and engineering; they often emphasize experimentation of increasing complexity (Resnick, 1987, p. 20). Bransford and Stein propose the IDEAL problem solver model in which students practice the Identification of problems; the Definition of problems; the Exploration of strategies; Acting on ideas; and Looking at effects (Bransford, Sherwood and Sturdevant, 1987, p. 163). Perkins suggests the “metacurriculum,” because “our usual notions of subject-matter content leave out higher-order knowledge . . . about how to get knowledge and understanding . . . problem-solving strategies . . . ideas like hypothesis and evidence . . . in different subject matters” (1992, p. 101). Tishman, Perkins, and Jay (1995) propose that in the “thinking classroom,” six dimensions of good thinking operate: a language of thinking, mental management [metacognition], higher order knowledge, thinking dispositions, a strategic spirit [planning], and transfer (p. 2). Norris and Ennis declare that “critical thinking can take place within a problem-solving context, and often in the context of interacting with other people” (1989, p. 8). This collection of definitions demonstrates much overlap, not only within the area of HOTS and its congeries of similar notions, but also with the philosophical strand of critical thinking.

Situating Critical Thinking

The almost bizarre late addition of “interacting with other people” in Norris and Ennis’s comment above points to how the foregoing conceptions of critical thinking are, to greater and lesser extents, detached from the social context. Teaching thinking has often been conceived of as instruction in decontextualized skills applied to discrete problems; in higher education these skills are often taught in separate “remedial” courses called Critical Thinking (OTHER NAMES?). Moreover, these ideas

about the construction of knowledge and the development of argument generally adopt an atomistic perspective that privileges individual cognition. Work in socially situated pedagogies, has begun to bridge this gap. Brown's (1994) notion of communities of learners (COL), for example, attempts to "orchestrate environments to foster meaningful and lasting learning in collaboration" (p. 6), constructing school knowledge in the social setting of interpretive communities in the K-12 classroom, using "reciprocal teaching," "majoring," "performance," and other ways of "enacting roles typical of a research community" (p. 7). Likewise, the concept of situated learning (Lave and Wenger, 1991) stems from "a theory of social practice [that] emphasizes the relational interdependency of agent and world, activity, meaning, cognition, learning and knowing. It emphasizes the inherently socially negotiated character of meaning and the interested, concerned character of the thought and action of persons-in-activity" (pp. 50-51). In any discipline, "Learners inevitably participate in communities of practitioners . . . the mastery of knowledge and skill requires newcomers to move toward full participation in the sociocultural practices of a community" (Ibid., p. 29). In COLs, learning to think critically, therefore, becomes grounded in the social practices, norms, and discourses of a particular community, not imposed as skills added on to other curricular content.

The Transferability of Critical Thinking

The group of taxonomies and definitions favored by critical thinkers from the informal logic school functions outside of disciplinary content areas, independent of subject-matter instruction, proposing a general approach to critical thinking based on the belief that "the principles of logical reasoning are unitary, not specific to particular domains of knowledge" (Resnick, 1987, pp. 39-40). These approaches attempt to teach thinking skills directly so that students learn general principles

about how to think rather than engaging in critical thinking in the classroom. In higher education, “There is an implicit claim that the kind of analysis taught in informal logic courses can and should permeate performance throughout the university curriculum, although this has not been tested empirically” (Resnick, 1987, pp. 31-32). In fact, “the competencies that are the object of instruction may be displayed in the narrow contexts in which they are taught but largely fail to generalize to a wider range of contexts” (Kuhn, 1986, p. 503).

Philosophers and psychologists alike question the generalizability of thinking, proposing that reasoning skills cannot be detached from knowledge in the relevant content area. “There is no set of supervening skills that can replace basic knowledge of the field in question” McPeck claims (1990, p. 9). “The ingredient that renders any putative solution plausible in the first place is not logic but knowledge and information from within the field or problem area” (p. 16). Furthermore, “classically, Socratic interactions are undertaken concerning problems where people already have a fund of experience that they can draw on for information” (Perkins, 1992, p. 57). The tension here develops between a back-to-basics thrust that privileges discrete items of information (e.g., Hirsch 1987) and the thinking skills movement that argues that unless students have reasoning skills they neither remember nor know how to use such information. Kuhn (1986) suggests viewing transfer on a continuum, viewing “thinking skills as emerging in specific contexts, to which they are initially wedded, and gradually, by means of exercise, increasing in strength and in generality” (p. 507).

Transferability, but for Whom?

However, in some cases transferability seems achievable, particularly if teaching is designed specifically for this purpose. “Learning a certain skill or subject area can help us learn a related one,”

writes Bruer (1993, p. 53). “Transfer can occur within and across domains, but only if we teach students appropriately” (p. 54). However, certain abilities are more transferable than others:

Thinking is driven by and supported by knowledge, in the form of both specific facts and organizing principles. . . . At the same time, many aspects of thinking are shared across fields of expertise. . . . oral and written communication skills, mathematical and representational abilities, principles of reasoning and skills of argument construction and evaluation . . . ‘enabling skills’ for learning and thinking (Resnick, 1987, pp. 45-56).

McPeck redirects our attention to the traditional liberal arts education, which he claims provides “both the disposition (or propensity) and the relevant knowledge and skills to engage in an activity with reflective skepticism,” but for which “there are no shortcuts” (1990, p. 21). Instead, “the standard (or familiar) disciplines are the most direct route, if not the *only* efficacious route to teaching critical thinking” (1990, p. 34). He does not propose, however, how to teach critical thinking skills outside of a traditional elite liberal arts setting, nor how the nonelite gain access to this education. For ESL students in community colleges, these questions are particularly salient. In such institutions, but not only there, critical thinking often is taught as a remedial skill for students who didn't “get it” previously, particularly in institutions that serve “nontraditional” students. Indeed, such “basic” education is increasingly prevalent in institutions of higher education. “In 1995, 78 percent of America’s colleges offered such [remedial] classes, up from 73 percent in 1988. Although they were most prevalent in public community colleges, . . . they were common at four-year colleges, too, with 72 percent offering the courses” (Arensen, 1998, Sec. 4, p. 4). As Apple notes, “by limiting the school curriculum only to the practical problems of everyday life, such schools [have] left access to the skills of *critical* reasoning only to those who were already in dominance” (1996, p. 103).

Historically, Resnick reports, the skills and abilities considered HOTS have always been integral to the elite curriculum, but “it is new to include [thinking, problem solving, and reasoning] in

everyone's curriculum" (1987, p. 7, emphasis original). Despite this stated goal, however, it is questionable how many schools actually implement the kind of elite curriculum she describes or that Brown's community of learners is designed to replace. In fact, "promotion of such attitudes and skills [to justify assertions and consider alternatives] does not occur equally across all school environments. In our study, ninth graders in an academically and socially advantaged school environment manifested them to a significantly greater extent than ninth graders in a non-college-oriented school" (Kuhn, 1992, p. 173).

Creating Critical Thinkers

What effect will a curriculum of critical thinking, then, have on students? Despite differences in their terminology and views on the transferability of thinking skills, the theorists discussed so far are squarely in the same camp in their views on the value of including critical thinking, however it is defined, in the curriculum. "We all want to produce autonomous thinkers who are not taken in by faulty argument, weak evidence, or 'trendy' opinions, and can face life's problems as people capable of making their own rational decisions" (McPeck, 1990, p. 36). Sharing a strong faith in reason, these authors generally agree on some social applications of critical thinking, for example, in combating prejudice by demonstrating its illogical nature. Making explicit links between critical thinking and creating citizens prepared to participate in a democracy, they do not consider other factors that might restrict access to this democracy. Paul (1990) asserts a populist view of thinking that "reflects the optimistic liberalism of progressive education" (Weinstein, 1993, p. 117):

. . . with proper encouragement and cultivation, people can develop the ability to think for themselves, to form reasonable points of view, draw reasonable conclusions, think coherently and logically, persuade each other by reason and, ultimately, become reasonable persons, despite the deep-seated obstacles in the native character of the human

mind and in society as we know it. . . . This confidence [in reason] is essential to building a democracy in which people come to genuine rule, rather than being manipulated by the mass media, special interests, or by the inner prejudices, fears, and irrationalities that so easily and commonly tend to dominate human minds. (p. 319)

Lankshear and McLaren characterize this view of critical thinking as “one which has long been associated with the idea of liberal education as an engagement aimed at promoting intellectual freedom . . . typically celebrated as detached and politically neutral” (1993, p. 21). Paul's words point to the individualistic focus of these conceptions of critical thinking, revealing an underlying belief that Western rationality offers the only avenue to democracy; that human nature resists rational thought but that enlightened rationalistic societies (read: Western free-market democracies) have managed to impose reasoning on the messy, irrational human mind. These proponents of critical thinking focus on developing the individual mind as detached from its social nexus: “the self-sufficient person is, moreover, a liberated person; such a person is free from the unwarranted and undesirable control of unjustified beliefs, unsupported attitudes, and a paucity of abilities, which can prevent that person from competently taking charge of her own life” (Siegel, 1988, p. 58). Presumably these critical reasoning skills would be sufficient to overcome externally imposed structural and material conditions that prevent self-determination.

Both the remedial critical thinking textbooks created for and the academic literature about students using texts such as these often construe the student thinker as illogical, emotional, and inexperienced. Strangely, since many students in these courses have more life or work experience than traditional first-year elite college students, these texts give little credit to students' personal experiences. In addition, they presume an attitude that thinking is merely a skill to be used in certain circumstances, not a way of life (or habit of mind), valuable mainly for getting through

school to find employment. For example, a remedial college textbook, *Becoming a Critical Thinker* (Ruggiero, 1996) that complements a larger text, *Becoming a Master Student* (Ellis, 1994), calls critical thinking “a survival skill” for college students (1994, p. 187) and a valuable skill for future employees.

Assuming that students are ruled by emotion, Ruggiero bases his approach to critical thinking on a positivist epistemology that leaves unquestioned how “facts” are determined and allows them to become naturalized. “Truth is not something we create to fit our desires. Rather, it is a reality to be discovered. . . . Unlike facts, opinions are open to question and analysis by critical thinking” (1996, p. 1). Ruggiero ignores the fact that history is replete with examples of “truths” created to fit the objectives of the powerful. Giroux labels the stances of Ruggiero and Ellis as the “Internal Consistency position,” in which

critical thinking refers primarily to teaching students how to analyze and develop reading and writing assignments from the perspective of formal, logical patterns of consistency. . . . [The] limitations [of these skills] as a whole lie in what is excluded First, there is a relationship between theory and facts; secondly, knowledge cannot be separated from human interests, norms and values (Giroux, 1978, p. 298).

Within this model, “social phenomena like hierarchies of class and privilege, moral and social norms and values, stereotypes of race and gender, structured and patterned practices and routines of daily life, and so forth are received as natural and immutable realia” (Lankshear and McLaren, 1993, p. 6). Ruggiero leads students through exercises designed to teach them how to examine facts as distinct from emotions and opinions, employing the motivational tone of self-help books. He addresses student readers by excusing their ignorance and that of their teachers before them, “Chances are you’ve received little or no instruction in critical thinking. Your teachers are not to blame for this. In many cases they, and their teachers before them, were denied such

training” (1996, p. 4). Yet Ruggiero neglects to explore the reasons that teachers have not learned to think critically. Instead, he makes unexamined, uncritical assertions such as “Progress has in fact occurred in every area of life, including science, technology, education, and government” (1996, p. 85). Critical thinkers might question whether it is progress that has caused income to decline in the United States in the past 30 years for the majority of workers (Apple, 1996) or whether such changes in the economy, which now require a college degree where a high school diploma once sufficed as credentials for similar kinds of work, can be categorized as progress (Shor, 1980), particularly for the students likely to be using this text.

The Deficit Model of Student Thinkers

Along these lines, other authors operate from the position that college students can rarely, if ever, reach the heights of intellectualism from which the authors are writing. In laying out a “stage theory” of critical thinking, which outlines a developmental hierarchy of five levels of thinkers, starting with “unreflective” and reaching “master” thinker, Elder and Paul define critical thinking as “the ability and disposition to improve one’s thinking by systematically subjecting it to rigorous self-assessment. Persons are critical thinkers, in the fullest sense of the term only if they display this ability and disposition in all, or most, of the dimensions of their lives” (1996a, p. 34). Yet this achievement is not available to everyone. Elder and Paul are skeptical of students’ capacity to reach the “the Master Thinker” stage:

Most of our students will not become advanced thinkers [the fourth level] until beyond the undergraduate level, if at all. . . . For the foreseeable future the vast majority of our students will never become master thinkers—any more than most college basketball players will develop the skills or abilities of a professional basketball player or student writers the writing skills of a published novelist. (1997, p. 35)

These unexamined parallels between writers, athletes, and thinkers imply that only professional recognition (and remuneration) determine the highest levels of occupations. Omitted from this scenario are amateur athletes, writers, and other artists who pursue their craft for satisfaction and pleasure, and nonacademic thinkers. The use of these parallels also assumes that only university academics may be recognized as top-level thinkers. In contrast, Newmann (1991) expands his vision of the critical thinker beyond professionals:

*Any person, young or old, regardless of experience, can participate in higher order thought. . . .

*It encompasses problem-solving in a wide range of school subjects as well as in non-academic areas.

*Using this conception does not require acceptance of any particular theory of cognitive processing or particular pedagogy.

. . . The effectiveness of technique will probably depend on the nature of the mental challenges presented and characteristics of students exposed to them. (p. 326)

Newmann allows for variation among students, envisioning it as an interplay between the “characteristics of the students” and the problem under consideration.

Slouching toward Critical Pedagogy

To varying extents, therefore, these frameworks integrate the discrete skills and the personality dispositions that many consider to comprise critical thinking. Although Siegel and others hint at possible social ramifications of critical thinking, claiming that it can be used for empowerment (1988, p. 76) and in opposition to the status quo (p. 55), most critical thinking theorists refrain from making this result an explicit goal, perhaps from fear of being charged with indoctrination or imparting “ideological” views (Ibid., pp. 48-49) or from a lack of interest.

In adult education, Brookfield bridges these positions, claiming that critical thinking “involves calling into question the assumptions underlying our customary, habitual ways of thinking

and acting and then being ready to think and act differently on the basis of this critical questioning” (1991, p. 1). Brookfield represents one of the few critical thinking theorists who explicitly connects analytical skills to critical pedagogy's goals of bringing students to consciousness about the forces that structure and shape their worlds and their roles within it. “A critically reflective person is aware that individual biographies are partly social products and that values, beliefs, and behavioral norms are culturally produced” (1991, pp. 57-58).

Most of the conceptions of critical thinking examined so far focus on teaching students *how* to examine and deconstruct arguments and texts, which are certainly necessary and useful abilities. However, in addition to the skills mentioned above, critical pedagogy is concerned with teaching students to ask *why* arguments and claims are made as well as *how* they construct and affect the students and their worlds. Burbules and Berk (in press) assert that “Critical pedagogues are specifically concerned with the influences of educational knowledge, and of cultural formations generally, that perpetuate or legitimate an unjust status quo; fostering a critical capacity in students is a way of enabling them to resist such power effects” (p. 1).⁷

Wallerstein (1983) suggests that the problem-posing process developed by Freire parallels many of the steps in a critical thinking process developed by Taba (1965): description of a problem; an affective response to it; the drawing of inferences about it; the making of generalizations; then “application and evaluation for other situations” (Wallerstein, p. 18). The main difference lies in the final step: Where Taba suggests “application,” Freire pushes for “action on alternatives to problems based on the new perspective” (Ibid.). This action takes place in the social environment, not just in the classroom. However, since both of these approaches rely on

⁷ Space constraints preclude a discussion of the feminist critiques of power and authority relations in the field of critical pedagogy, notably from Ellsworth (1989), Gore (1990), and Lather (1991).

dialogue, whether Socratic or democratic, as the mode of discovery and learning, the limits of dialogue must be considered:

These rules [of dialogue] include the assumptions that all members have equal opportunity to speak, all members respect other members' rights to speak and feel safe to speak, and all ideas are tolerated and subjected to rational critical assessment against fundamental judgments and moral principles. . . . This formula fails to confront dynamics of subordination present among classroom participants, and within classroom participants, in the form of multiple and contradictory subject positions (Ellsworth, 1989, p. 106).

Issues of classroom power relations, imperialism (linguistic and otherwise), racism, and sexism continue to be problematic in a critical pedagogue's classroom. However, critical pedagogy at least makes explicit connections between the curriculum and students' lived experiences, sociocultural histories, and the political realities of the world. Critical literacy acknowledges the social contradictions inherent in the classroom, yet encourages students "to research, speculate about and second-guess the institutional agendas, ideologies, and human agents behind and at work in the text (conditions of production), and to talk about their and other readers' social standpoints, community projects, cultural resources and positions (conditions of interpretation)" (Luke, Comber, and O'Brien, 1996, mss. p. 2; see also Apple, 1996, and Lankshear and McLaren, 1993).

Other Critiques of Critical Thinking

The Enlightenment-style rationalism of the philosophy school of critical thinking has been criticized both for sexism and its grounding in the Western scientific tradition.⁸ Bailin (1995) summarizes the criticisms about the bias of critical thinking, that it:

neglects or downplays emotions; . . . privileges rational, linear, deductive thought over intuition; . . . is aggressive and confrontational rather than collegial and collaborative; . . . is individualistic and privileges personal autonomy over the sense of community and relationship;

⁸ Entering this fray involves deciding whether to reject or retain the means of argument that rationalism affords us; I will not deal with that issue here. The point for critical thinking is whether it is redeemable by responding to these charges or whether it should be rejected completely (which strikes me as highly unlikely).

. . . deals in abstraction and downplays lived experience; . . . presupposes the possibility of objectivity and thus does not recognize one's situatedness (pp. 191-192).

From within the critical thinking camp, DeBono points to the limitations of Socratic dialogue for teaching: "Our adversary tradition in thinking puts the emphasis on logical support of positions rather than on mutual exploration" (1976, p. 72). Even within the Socratic model, internal contradictions exist: "It is possible to have mutually contradictory positions, each of which is logically supportable if the value systems and perceptions are different" (p. 71). Yet most versions of the critical thinking process exclude mechanisms for recognizing and accepting different perspectives, or for coming to consensus by means other than adversarial ones.

Again, the cultural grounding of critical thinking in the rationalism of the West circumscribes its applications. Norris (1995) summarizes anthropological research on cultural variability in thinking, touching on the orality-literacy aspect of how thought is developed and sustained over time. He points to the Inuit, whose cultural traditions and values relating to thought are grounded in a goal of community harmony that is at odds with "our adversary system of law . . . built upon conceptions of epistemology that are also foundational to theories of critical thinking" (p. 203). The conflict emerges when, for example, the Inuit encounter Western-style schooling, "since goals for the education of the Inuit are now fully a part of educational policy making" (Ibid.) in Canada. The question of cultural variation in thought is rarely treated in the critical thinking literature, yet is important in terms of second language education.

Related to the question of harmony versus antagonism, Maher (1987) contrasts "inquiry models" that "seek to compare multiple views in order to find one best answer" to "feminist models," that "recognize a multiplicity of both problems and solutions, which can be compared and related to

each other but not ranked as inferior or superior” (p. 187). Many critics have raised the question of how comfortable female students feel adopting the stance needed to employ the “claims for objectivity [that] deny the necessity of a perspective” (p. 188), particularly since “female students have traditionally been more silent and passive than males in high school, college classrooms, and elsewhere,” (p. 192), especially in disciplines where they are poorly represented such as philosophy, mathematics, and the sciences. Wheary and Ennis (1995) also point to “stereotypes of women as the weaker, less intellectually competent sex, and . . . teacher and student classroom behavior which limits females’ opportunities to demonstrate and develop critical thinking” (p. 223).

Critical Thinking in TESOL

Whether emerging from philosophy or psychology, the field of critical thinking has rarely addressed issues of thinking in ESL. Exceptions include critical pedagogues such as Benesch (1983), who advocates “critical thinking for social change” (p. 546). To Benesch, critical thinking “is a search for the social, historical, and political roots of conventional knowledge and an orientation to transform learning and society” (p. 546). Cummins (1989) notes that the result of the educational reform movement’s stress on improving students’ test scores “has been to eliminate any kind of critical thinking on the part of either teachers or students from instruction in ‘the basics’” (p. 27), despite his assertion that “curricular content can be covered probably more effectively in the long run by instruction that evokes students’ higher-order thinking skills than by instruction that requires only [r]ote memorization of facts or application of skills (p. 28).

Within the field of TESOL, researchers have increasingly begun to consider critical thinking (see Atkinson, 1997, footnote 1). In response to the rising popularity of critical thinking in ESL

texts and scholarship, however, Atkinson (1997) argues that “TESOL educators should be cautious about adopting critical thinking pedagogies in their classrooms,” for four reasons: it is “more in the nature of a social practice” than “a well-defined and teachable pedagogical set of behaviors”; “its exclusive and reductive nature . . . marginalizes alternative approaches to thought”; it is a “culturally based concept . . . almost diametrically” opposed to “modes of thought and education” of other cultures; and that it is questionable whether “thinking skills thus taught transfer beyond their narrow contexts of instruction” (p. 72).

Atkinson’s piece garnered substantial interest in the TESOL community. From the philosophical camp of critical thinking, Davidson (1998), responds with the argument that “Atkinson can find no other tools besides the ones that critical thinking provides for his critique” (p. 119). He claims that “part of the English teacher’s task is to prepare learners to interact with native speakers who value explicit comment, intelligent criticism, and intellectual assertion” (p. 121). Gieve’s response notes the “great deal of contestation around the meaning of the term *critical thinking*, a contestation that marks it as a site of struggle between competing discourses” (1998, p. 124). He challenges us to weigh the benefits of “the gains won against transmissive educational practices, in the name of education for democracy” against accepting submissive classroom behaviors that students may bring with them from authoritarian educational systems “for the sake of maintaining cultural diversity” (p. 128). Hawkins (1998) underlines the fact that “critical thinking represents the privileged modes of thought of a culturally and socioeconomically specific group of people” (p. 131); thus English language learners should be given the chance to undertake “apprenticeships to new discourse communities” (p. 130) that will allow them to learn the same modes of thought.

In many cases, ESL textbooks and other instructional materials, if they treat thinking at all, appear to presume that English language learners must be deficient in reasoning skills if their linguistic proficiency needs to be improved, although, as I have demonstrated, the assumptions of critical thinking are rarely made explicit. Hence when students come to countries such as the United States, the critical thinking components of ESL courses such as academic writing often operate on the assumption that students' first languages and cultures have neglected to train them in appropriate (Western) modes of thought. Critical thinking thus neglects the self-examination that Paul (1998) and others propound, failing to inquire about the effects of the wholesale replication of this mode of reasoning.

Undertaking this task, Gieve (1995) studied a group of Malaysian teachers enrolled in a British TESOL training course. He noted a culturally based mismatch in their instructors' expectations of them to become "critical autonomous individuals" (1995, p. 72) and their discomfort with challenging what they were being taught about TESOL methodology in the program. Gieve points out that Western instructors' unthinking reproduction of expectations of rationalistic modes of thought ironically ignores cultural difference and constructs students as deficient in reasoning skills. However, at the same time, learning critical thinking practices in the Western rationalistic is highly pragmatic for nonnative speakers of English who are studying in the United States and other Anglophone countries. At a minimum, having an understanding of the practices of critical thinking in the academy may be useful for nonnative English-speaking language teachers who, like Gieve's Malaysian students, may not stay in the countries where they study, but will prepare other students to study or live in Anglophone countries.

These ongoing arguments within the field of TESOL point to probably unresolvable tensions and dilemmas between providing students with the cultural capital of the Western academy and the simultaneous desire to preserve cultural autonomy and difference. Research (but not necessarily practice) in some areas of critical thinking has moved beyond a skill-based approach to instruction, placing us into the messy arena of “communities of practice” and “discourse communities” in which students must become apprentices to experts in a field. Although this messiness reflects a postmodern sensibility that seems to better accommodate differences in students and teachers, it can just as well mask power and privilege. Kuhn reminds us that “even in the best schools . . . in seemingly ‘open discussion, the teacher shapes students’ answers until they finally ‘spontaneously generate’ the answer the teacher is seeking. Students who ‘think well’ in such discussions are likely to be those the most sensitive to the teacher’s communicative cues” (1992, p. 176). As Heath (1983) demonstrates, those “sensitive” students are likely to be middle-class white students whose “primary discourses” from their home cultures feed into “secondary,” school-based discourse (Gee, 1996, p. 137). Among ESL students, Europeans are therefore more likely to fit easily into the Anglophone academic models; students from other areas of the globe may have more difficulty.

However, to succeed academically, all students, including ESL students, need to acquire the cultural capital of the academy, including the ability to “think critically.” As Delpit (1995) argues, for students whose backgrounds do not provide them with a close match to the dominant academic discourse--and, I would add, dominant modes of thought--direct instruction may be the answer. However, when it comes to critical thinking, the issues become more complicated given the lack of unanimity on the definition of critical thinking. A purely reductionist view of critical thinking that merely imparts a set of skills clearly remains problematic: Its scope is limited to isolated, bounded

problems; nor does not account for emotion, creativity, and the sociocultural context of the learner. Although theorists who advocate incorporating “dispositions” into the mix expand the scope of critical thinking, they have offered few suggestions for how to do so. Indeed, the combination of “skills” and “dispositions” remains inadequate to the goals of critical thinking from a perspective of critical pedagogy and critical literacy.

While advocates of critical thinking generally agree that students need to learn more than discrete items of “fact,” large disparities exist in their conceptions of critical thinking. As Gieve notes, these “competing discourses” (1998, p. 124) of critical thinking fall into many camps. To the defenders of Western rationalism, critical thinking offers a dispassionate means of understanding competing arguments within a democracy where everyone has the same rights and access to power. To critical pedagogues and advocates of critical literacy, critical thinking should be used to enable students to unmask power differentials within society. And, as Cummins writes, “critical thinking skills can be developed in students only by teachers who are themselves critical thinkers. . . . However, . . . critical thinking and questioning of authority by teachers is seldom encouraged by those at higher levels of the educational hierarchy” (1989, p. 30).

A Synthetic Conception of Critical Thinking

What can we make of these different origins, camps, and uses of critical thinking? In my view, critical thinking must incorporate the skills and dispositions that theorists from both the philosophical and psychological fields use to define critical thinking in some form or another. However, these skills and dispositions must be integrated into the curriculum as part of an overall approach that emphasizes the “critical” nature of “critical thinking.” If being critical means being able to distinguish among

alternatives, to make judgments about issues and problems under consideration, and to consider the implications of arguments, then “issues of direct concern to students’ future and current lives” (Cummins, 1989, p. 27) should no longer be evacuated from the classroom. In the postsecondary classroom, where instructors often have more control over the curriculum than do K-12 teachers, more opportunities exist for “critical” thinking about the curriculum. However, although Cummins has faith that “when educators begin to critically analyze the forces that disempower them within the classroom, they automatically take the first steps toward the empowerment of their students” (p. 36), I am less sanguine that such awareness, if and when it exists, automatically translates into a more aware pedagogy. My analyses of the multiple meanings of “critical thinking” in this paper are offered as a way to unpack the interests and possibilities related to the term.. Rather than perpetuating the murky usages of “critical thinking,” we need to ask, “What’s so critical about critical thinking?” as we see it implemented in a wide range of contexts.

References

- Arensen, K. W. (1998, May 31). Classes are full at catch-up U. *The New York Times*, Sec. 4, p. 4.
- Apple, M. W. (1996). *Cultural politics and education*. New York: Routledge.
- Bailin, S. (1995, Spring). Is critical thinking biased? Clarifications and implications. *Educational Theory*, 45(2), 191-197.
- Baron, J. B., & R. J. Sternberg. (Eds.) (1987). *Teaching thinking skills: Theory and practice*. New York: W. H. Freeman.
- Benesch, S. (1993). Critical thinking: A learning process for democracy. *TESOL Quarterly*, 27, 545-547.
- Bloom, B. (1956). *A taxonomy of educational objectives*. New York: David Mackay.
- Bransford, J. D., R. D. Sherwood, & T. Sturdevant. (1987). Teaching thinking and problem solving. In J. B. Baron & R. J. Sternberg (Eds.) *Teaching thinking skills: Theory and practice*. New York: W. H. Freeman.
- Brookfield, S. D. (1991). *Developing critical thinking*. San Francisco: Jossey-Bass.
- Brown, A. L. (1994, Nov.). The advancement of learning. *Educational Researcher*, 4-12.
- Bruer, J. T. (1993). *Schools for thought*. Cambridge, MA: MIT Press.
- Burbules, N. C., & R. Berk. (in press). Critical thinking and critical pedagogy: Relations, differences, and limits. In T. Popkewitz & L. Fendler, (Eds.) *Critical theories in education: Changing terrains of knowledge and politics*. New York: Routledge.
- Cummins, J. (1989). The sanitized curriculum: Educational disempowerment in a nation at risk. In D.M. Johnson and D.H. Roen (Eds.), *Richness in writing: Empowering ESL students*. New York: Longman.

- Davidson, B. W. (1998). A case for critical thinking in the English language classroom. *TESOL Quarterly*, 32(1), 119-123.
- DeBono, E. (1976). *Teaching thinking*. London: Penguin.
- _____. (1977) *Lateral thinking: A textbook of creativity*. Harmondsworth: Penguin.
- Delpit, L. (1995). *Other people's children: Cultural conflict in the classroom*. New York: The New Press.
- Dewey, J. (1903). *How we think*. New York: DC Heath.
- Elder, L., & R. Paul. (1996, Fall). Critical thinking: A stage theory of critical thinking: Part I. *Journal of Developmental Education*, 20(1), 34-35.
- _____. (1996, Winter). Critical thinking: A stage theory of critical thinking: Part II. *Journal of Developmental Education*, 20(2), 34-35.
- Ellis, D. (1994). *Becoming a master student*. (7th ed.) Boston: Houghton Mifflin.
- Ellsworth, E. (1989). Why doesn't this feel empowering? Working through the repressive myths of critical pedagogy. *Harvard Educational Review*, 59(3), 297-324. In C. Luke & J. Gore (Eds.) (1992). *Feminisms and critical pedagogy*. New York: Routledge.
- Ennis, R.H. (1962, Winter). A concept of critical thinking: A proposed basis for research in the teaching and evaluation of critical thinking ability. *Harvard Educational Review*, 32(1), 81-110.
- Gee, J.P. (1996). *Social linguistics and literacies: Ideology in discourses*. (2nd ed.) London: Taylor & Francis.
- Gieve, S. (1995). Discourses of rationality: Argumentation in EAP and teacher education across cultures. In Blue, G.M. & R. Mitchell, (Eds.) *Language and education*. Clevedon, UK: Multilingual Matters Ltd. and the British Association for Applied Linguistics.

- _____. (1998). A reader reacts. *TESOL Quarterly*, 32(1), 123-129.
- Giroux, H. (1978). Writing and critical thinking in the social studies. *Curriculum Inquiry*, 8(4), 291-309.
- Glaser, E. (1941). *Experiment in the development of critical thinking*. New York: Columbia University Press.
- Gore, J. (1990). What can we do for you? What *can* we do for you? Struggling over empowerment in critical and feminist pedagogy. *Educational Foundations*, 4(3), 5-26.
- Hawkins, M. (1998). Apprenticing nonnative speakers to new discourse communities. *TESOL Quarterly*, 32(1), 129-132.
- Heath, S.B. (1983). *Ways with words: Language, life, and work in communities and classrooms*. New York: Cambridge.
- Hirsch, E.D. (1987). *Cultural literacy: What every American needs to know. ???*
- Kuhn, D. (1986, Summer). Education for thinking. *Teachers College Record*, 87(4), 495-512.
- _____. (1992, Summer). Thinking as argument. *Harvard Educational Review*, 62(2), 155-178.
- Lankshear, C., & P. McLaren. (Eds.) (1993). *Critical literacy: Politics, praxis, and the postmodern*. Albany: SUNY Press.
- Lather, P. (1991). Post-critical pedagogies: A feminist reading. *Education and Society*, 9(1-2).
- Lave, J., & E. Wenger. (1991). *Situated learning: Legitimate peripheral participation*. New York: Cambridge University Press.
- Lewis, A., & D. Smith. (1993, Summer). Defining higher order thinking. *Theory Into Practice*, 32(3), 131-137.

- Lipman, M. (1991). *Thinking in education*. New York: Cambridge University Press.
- Luke, A., B.Comber, & J. O'Brien. (1996). Critical literacies and cultural studies. In G. Bull & M. Anstey (Eds.). *The literacy lexicon*. Melbourne: Prentice-Hall.
- Maher, F.A. (1987). Inquiry teaching and feminist pedagogy. *Social Education*, 51(3), 187-192.
- McPeck, J. (1990). *Teaching critical thinking: Dialogue and dialectic*. New York: Routledge.
- National Commission on Excellence in Education. (1983). *A nation at risk: The imperative for educational reform*. Washington, DC: U.S. Department of Education.
- Newmann, F. (1991, Fall). Promoting higher order thinking in social studies: Overview of a study of 16 high school departments. *Theory and Research in Social Education*, XIX(4), 324-340.
- Norris, S. P. (1995, Spring). Sustaining and responding to charges of bias in critical thinking. *Educational Theory*, 45(2), 199-211.
- Norris, S. P., & R. H. Ennis. (1989). *Evaluating critical thinking*. Pacific Grove, CA: Critical Thinking Press and Software.
- Paul, R. (1990). *Critical thinking: What every person needs to survive in a rapidly changing world*. Rohnert Park, CA: Center for Critical Thinking and Moral Critique, Sonoma State University.
- _____. (1998). <http://www.sonoma.edu/cthink/University/univlibrary/definect.nclk>. Accessed 5/9/98. FIX STYLE.
- _____ & Elder, L. (1997, Spring). Critical thinking: Implications for instruction of the stage theory. *Journal of Developmental Education*, 20(3), 34-35.
- Perkins, D. (1992). *Smart schools*. New York: The Free Press.
- Resnick, L. (1987). *Education and learning to think*. Washington, DC: National Academy Press.

- _____, & L. E. Klopfer (Eds.) (1989). *Toward the thinking curriculum: Current cognitive research*. Alexandria, VA: ASCD.
- Ruggiero, V. (1996). *Becoming a critical thinker*. Boston: Houghton Mifflin.
- Scheffler, I. (1956). *The conditions of knowledge*. Glenview, Ill: Scott, Foresman.
- Schrag, F. (1988). *Thinking in school and society*. New York: Routledge.
- Scriven, M. (1976). *Reasoning*. New York: McGraw-Hill.
- Shor, I. (1980). *Critical teaching and everyday life*. Boston: South End Press.
- _____, & P. Freire. (1987). *A pedagogy for liberation: Dialogues on transforming education*. South Hadley, MA: Bergin & Garvey.
- Siegel, H. (1988). *Educating reason: Rationality, critical thinking, and education*. New York: Routledge.
- _____. (1997). *Rationality redeemed? Further dialogues on an educational ideal*. New York: Routledge.
- Swartz, R. J., & D. N. Perkins. (1990). *Teaching thinking: Issues and approaches*. Pacific Grove, CA: Critical Thinking Press and Software.
- Taba, H. (1965, May). The teaching of thinking. *Elementary English*, XLII.
- Tishman, S., D. N. Perkins, & E. Jay. (1995). *The thinking classroom: Learning and teaching in a culture of thinking*. Boston: Allyn & Bacon.
- Toulmin, S. (1958). *The uses of argument*. Cambridge: University Press.
- Wallerstein, N. (1983). *Language and culture in conflict: Problem-posing in the ESL classroom*. Reading, MA: Addison-Wesley.
- Weinstein, M. (1993, Winter). Critical thinking: The great debate. *Educational Theory*, 43(1), 99-117.

Wheary, J., & R. H. Ennis. (1995, Spring). Gender bias in critical thinking: Continuing the dialogue. *Educational Theory*, 45(2), 213-224.

Young, R.E. (Ed.) (1980). *New directions for teaching and learning: Fostering critical thinking*. San Francisco: Jossey-Bass.

For example, a college composition textbook, *The Writer's Express* (McWhorter, 1997), includes "Thinking Critically" under the heading of Reading in each chapter (pp. v-x). These skills range from reading skills such "analyzing tone," and "understanding symbols" such as "swastika, skull and crossbones, Uncle Sam, shamrock" (p. 88), and "understanding connotive language," to more rhetorical skills such as "discovering the author's purpose," "point of view," "applying and transferring information," "identifying and examining supportive evidence," to skills of assessment such as "evaluating cause-and-effect relationships," "examining your sources," "examining alternative viewpoints," "evaluating persuasive writing," and, finally, "predicting exam questions."



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