Is Critical Thinking Desirable for Children?

Dr. Amasa Philip Ndofirepi

Postdoctoral Fellow, Faculty of Education University of Johannesburg, Johannesburg, South Africa Email: amandochi@gmail.com or ndofiamasa@live.com

Doi:10.5901/mjss.2014.v5n10p325

Abstract

In this paper, I theorise the conception of critical thinking as a normative activity in which certain standards and criteria are applied to what people say or do and even write. I situate critical thinking in the context of children and inquire into its suitability and applicability in the world of young people. There is no consensus on the meaning of critical thinking, what its educational outcomes could be and the most effective means of achieving it especially when applied to children in schools. I illuminate and uphold a conception of critical thinking and the critical thinker basing on Matthew Lipman's Philosophy for Children programme as one opportunity of initiating critical thinking from an early age. I advance the conception that developing critical thinking is the focal aim of educating children and "...the ultimate educational ideal" (Siegel, 1988, p. 137).

Keywords: childhood; philosophising; inquiry; thinking; community

1. Introduction

Discussion regarding the aim(s) of education, particularly its ultimate aim(s), is a crucial and thought-provoking theme to philosophers of education. Education appears to be a goal-directed or teleological enterprise. By educating children, it is assumed that some goals merit pursuing while others do not and that some goals are more worthy of pursuit than others are. To that end, education is, largely value-directed, or normative. Critical thinking, autonomy, morally responsible agency, and the capacity for love and care are among the key candidates for being such an ultimate aim. These aims play a central role in controlling and constructing moral and other types of normative education (Haji & Cuypers, 2011). Of the central aims of education identified above, I isolate critical thinking as, "...a concept periodically fashionable, albeit disputed...(and)... at the very heart of what we mean by "thinking" itself" (Splitter, 1991, p. 102). As Russell puts it, one central purpose of education is to prepare students to be able to form "...a reasonable judgment on controversial questions in regard to which they are likely to have to act" (Russell, 1956a, p. 131). He holds that in addition to having "access to impartial supplies of knowledge," education should advance "...training in judicial habits of thought"(ibid). Transcending access to such knowledge, there is a need to develop certain skills if the knowledge acquired is not to produce individuals who passively accept the wisdom or the dominant beliefs in their own society. In this paper, I attempt to address Splitter's (1991) puzzle: "Critical Thinking: What, Why, When and How" within the context of schooling from an early age. I will defend Lipman's thesis that;

If we are to foster and strengthen critical thinking in schools and colleges, we need a clear conception of what it is and what it can be. We need to know its defining features, its characteristic outcomes, and the underlying conditions that make it possible (Lipman, 1995, p. 145).

Hence, I seek to explore the meaning of critical thinking, justify its presence in schools and suggest ways in which it can be initiated and developed in children. I will argue in support of Matthew Lipman's proposal of the introducing Philosophy for Children through the community of philosophical inquiry pedagogy as one of the most successful and tested methods of improving children's' critical, creative and caring thinking from an early age.

2. What is Critical thinking?

Proponents of critical thinking theory identify two fundamental qualities of a critical thinker, namely, "...the ability to reason well and the disposition to do so" (Bailin & Siegel, 2003, p. 182). While the former implies "...the ability to determine the goodness, or probative force, of candidate reasons for belief, judgment, or action" (Bailin & Siegel, 2003, p.183), the

disposition to do so involves the proclivity to relate those abilities to fitting circumstances and to "...seek reasons, to assess them, and to govern beliefs and actions on the basis of such assessment" (Bailin & Siegel, 2003, p. 183). Hence, an absence of this disposition, what Bailin and Siegel term the "critical spirit" (p.185) promises the absence of critical thought even in the presence of the aptitude for critical thought.

An attempt at the definition of critical thinking may start from the general perspective of the notion. For Willingham, In layperson's terms, critical thinking consists of seeing both sides of an issue, being open to new evidence that disconfirms your ideas, reasoning dispassionately, demanding that claims be backed by evidence, deducing and inferring conclusions from available facts, solving problems, and so forth (Willingham, 2007, p. 8).

Also arguing from a wider perspective, modern educationists such as Robert Ennis and Harvey Siegel attempt a redefinition of the concept of critical thinking. For Ennis critical thinking is "...reasonable reflective thinking that is focused on deciding what to believe and do" (Ennis, 1985, p. 45). To this definition, Siegel adds that it as an ability to judge in such a way as to meet "...relevant standards or criteria of acceptability" (cited in Blake et al., 2003, p. 181). While the above make an attempt at the definition of critical thinking, a few more could add up to a clearer understanding of the concept. Critical thinking is

- ...a way of reasoning that demands adequate support for one's beliefs and an unwillingness to be persuaded unless support is forthcoming(Tama, 1989, p. 64);
- ...a conscious and deliberate process which is used to interpret or evaluate information and experiences with a set of
 reflective attitudes and abilities that guide thoughtful beliefs and actions (Mertes, 1991, p. 24);
- ...the intellectually disciplined process of actively and skilfully conceptualizing, applying, analysing, synthesising, and/or
 evaluating information gathered from, or generated by, observation, experience, reflection, reasoning, or communication,
 as a guide to belief and action (Scriven & Paul, 2008, p. 1);
- ...the ability to analyse facts, generate and organize ideas, defend opinions, make comparisons, draw inferences, evaluate arguments and solve problems (Chance, 1986, p. 6);
- ... involving analytical thinking for the purpose of evaluating what is read (Hickey, 1990, p. 175); and
- ...an active, systematic process of understanding and evaluating arguments. An argument provides an assertion about the properties of some object or the relationship between two or more objects and evidence to support or refute the assertion. Critical thinkers acknowledge that there is no single correct way to understand and evaluate arguments and that all attempts are not necessarily successful (Mayer & Goodchild, 1990, p. 4).

Following all the above propositions for the meaning of critical thinking, I find Lipman's conception more plausible and concise. He asserts that it is "...skilful, responsible thinking that facilitates good judgment because it (1) relies upon criteria, (2) is self-correcting, and (3) is sensitive to context (Lipman, 1995, p. 146). From his definition, six fundamental elements of critical thinking emerge. First, it is skilful thinking entrenched in contexts that provide reliable information and defensible method. Second it is responsible thinking thereby showing the relationship between the critical thinker and the community that he or she addresses(Weinstein, 1991). Third critical thinking focuses on judgment and is directed towards non-routine thinking but rather weighs and assesses alternatives to truth and relevance. The fourth element is criteria in which reasons that reflect the critical thinker's assessment of the essential factors are taken into account. Self-correction as the fifth element requires that thinkers use critical thinking procedures for revealing and correcting the methods employed by the thinker herself. The sixth element of critical thinking is sensitivity to context in which application of criteria is seen in relation to the context of their application. Hence, context regulates the applicability and credibility of the criteria employed. To this end, "... the thinker must recognize when to apply various principles and criteria" (Bailin, 2002, p. 370). In addition to the above, Lipman adds that critical thinking is dialogical, and is best carried out within a community of inquiry — a group of individuals in collective pursuit of inquiry as will be explored in detail in sections below. The question that remains unattended this far is: Why teach critical thinking?

3. Justification for Critical Thinking

I made an earlier claim in defence of protagonists of critical thinking that the activity of thinking critically is educationally fundamental. I follow Siegel's (1988) three arguments. First teachers must recognise the moral worth of all students and treat them with respect. By allowing learners right to question argue and insist on reasons, it means acknowledging each learner's presence and therefore is tantamount to valuing the moral status of learners as persons that is in pursuit of Kant's ideal. In Kant's moral theory often referred to as the "respect for persons", persons are conceived of as autonomous rational moral agents who have intrinsic moral worth. This value of persons makes them deserving of moral respect. Secondly, if the broad aim of education is to prepare learners to be responsible for their own lives as adults, to be autonomous as self-sufficiency, then it is defensible to argue that critical thinking equips children, from an early age,

with the ability to make sound and independent judgements. Thirdly, critical thinking draws from the nature of the various disciplines themselves since in each discipline there are inherent characteristic principles of rationality by which we think or reason. Hence, teaching critical thinking is precisely to develop those traits and attitudes which incline us to reason well within the discipline (Siegel, 1988). Conversely, and in sum, critical thinking in education may be defended in view its role as (i) preparation to think in the various disciplines, (ii) preparation towards intellectual self-sufficiency or autonomy, and (iii) a requirement which flows out of the rights of students to be treated with respect (i.e. treated as persons) (see Splitter, 1991, p. 95).

Bertrand Russell maintains that critical thinking involves "a wide range of skills, dispositions and attitudes which together characterize a virtue which has both intellectual and moral aspects, and which serves to prevent the emergence of numerous vices, including dogmatism and prejudice" (Hare, 2001, p. 3). For him, critical thinking will provide critical thinkers with 1) the ability to form an opinion for oneself (Russell, 1939, p. 530), (ii) the ability to find an impartial solutions (Russell, 1956b, p. 174), which involves learning to accept and control their own preferences and estimating issues on their merits; and (iii) the ability to identify and question assumptions by employing what Russell calls constructive doubt in order to test unexamined beliefs (Russell, 1927, p. 299). Hence, critical thinking is likewise, not only narrowly connected with rationality but also with autonomy. To this end, Siegel writes:

The ideal [of cultivating reason] calls for the fostering of certain skills and abilities, and for the fostering of a certain sort of character. It is thus a general ideal of a certain sort of person whom it is the task of education to help create. This aspect of the educational ideal of rationality aligns it with the complementary ideal of Autonomy, since a rational person will also be an autonomous one, capable of judging for herself the justifiedness of candidate beliefs and the legitimacy of candidate values (Siegel, 2003, p. 307).

Hence, we can argue that critical thinking can be defended on the basis that it enhances "a probing inquisitiveness, a keenness of mind, a zealous dedication to reason, and a hunger or eagerness for reliable information" (Facione, 2011, p. 10). Furthermore, Linda Elder adds to the defence for critical thinking by explaining that

Through critical thinking...we acquire a means of assessing and upgrading our ability to judge well. It enables us to go into virtually any situation and to figure out the logic of whatever is happening in that situation. It provides a way for us to learn from new experiences through the process of continual self-assessment. Critical thinking, then, enables us to form sound beliefs and judgments, and in doing so, provides us with a basis for a 'rational and reasonable' emotional life (Elder, 1996, n.p.).

Critical thinking would help individuals to develop the ability to imaginatively put themselves in the place of others and understand the viewpoints of others. It would advance the ability to listen with an open mind, even to a contradictory point of view. Besides, it would assist in enhancing the patience to think before acting by developing ways to organise through our feelings and constructively control our emotions. We would strive for a better understanding of issues, defying "quick fix" solutions. We would hold ourselves to higher-order thinking, and which, in turn will help us search for these standards in the thinking of others.

In summary, I find Facione's (2011) characterisation of critical thinking dispositions defensible for the introduction of critical thinking to children. He tables that critical thinkers are



Adopted from Facione (2011, p. 12)

The question that will recur is what is the place of critical thinking as the aim of education? Harvey Siegel answers: "critical thinking is, at a minimum, 'first among equals' in the pantheon of educational ideals.... [It] is rightfully seen...more dramatically, as the ultimate educational ideal" (Siegel 1988 p. 137). Besides, the puzzle of when critical thinking should

be introduced in schools has not been addressed. At what stage in teaching and learning ought teachers and the curriculum to give attention to critical and abstract thinking? In what place and at what stage of a person's life is critical thinking most worthwhile. Facione (2011) provides a more succinct answer. He proposes that

Considered as a form of thoughtful judgment or reflective decision-making, truly, critical thinking is pervasive. There is hardly a time or a place where it would not seem to be of potential value. As long as people have purposes in mind and wish to judge how to accomplish them, as long as people wonder what is true and what is not, what to believe and what to reject, strong critical thinking is going to be necessary.

From the above, one can add Laurence Splitter's contention that we need to incorporate thinking skill instruction into formal education more or less from day one, and moreover, to keep the dimensions of inquiry and wonderment at the forefront of children's day-to-day learning activities from K to 12 and beyond (Splitter, 1991). Joel Feinberg's remark that the extent of a child's role in the shaping of his own self is a process of continuous growth begun at birth reinforces the above. He writes:

Always the self that contributes to the making of the newer self is the product of both outside influences and an earlier self that was not quite as fully formed. That earlier self, in turn, was the product both of outside influences and a still earlier self that was still less fully formed and fixed, and so on, all the way back to infancy. At every subsequent stage the immature child plays a greater role in the creation of his own life, until at the arbitrarily fixed point of full maturity, he is at last fully in charge of himself. ... Perhaps we are all self-made in the way just described, except those who have been severely manipulated, indoctrinated, or coerced throughout childhood. But the self we have created in this way for ourselves will not be an authentic self unless the habit of critical self-revision was implanted in us early by parents, educators, or peers, and strengthened by our own constant exercise of it (Feinberg, 1986, pp. 34-35) (original emphasis).

In the early years of schooling, children begin the process of looking for meaning and making sense of things that appear in their world. It is at this stage of their development that they should be preoccupied in abstract as well as concrete activities from the beginning of their formal schooling, if not earlier. Splitter provides a defence for this by maintaining that

(i) Older students will transfer and apply abstract thinking skills more effectively if they have had plenty of practice in their earlier years. (ii) Inviting these students to change thinking patterns which conditioning has reinforced many times over can be both difficult and threatening to all concerned. (iii) Pressure is on adolescents and young adults, both inside and outside school, tend to work against finding time and space to pursue the critical or inquiry dimension which does exist in every discipline but which is too easily crowded out by short term considerations (content-based exams) requiring more mundane thinking (rote learning and memorisation)(Splitter, 1991, p. 100).

Hence, the cases above go a long way in arguing that critical thinking is desirable in children from an early age. Assuming that it is critical to include the teaching of critical thinking into the curriculum and to do so at all the levels of schooling, how, in practical terms, should this be done? Given the abstractions and contestations embedded in the notion of critical thinking, attempting to answer the question "critical thinking how"? is a mouthful task especially when contextualised within the world of children. The next section turns to the justification of the methods of enhancing critical thinking in children.

4. Philosophy for Children for Critical Thinking

Proponents¹ of the Philosophy for Children movement often claim that philosophy is the ultimate subject to teach children if we pursue improving their critical thinking(Fisherman, 2010).Lipman, for example, pungently implies that philosophy is the only discipline whose practice comprises the entirety of the critical thinking (Lipman, 2003, p. 229). Philosophy has been considered as an intellectual activity that requires rigorous acquisition of knowledge, focused on complex cognitive skills (to elucidate, examine, review, discriminate, distinguish, evaluate, criticize, etc.) and predispositions (curiosity, open-mindedness towards others, thoroughness, acceptance of criticism, etc.) that are related to critical thinking (Daniel & Auriac, 2011, p. 415). However, if we acknowledge the conventional description of critical thinking as an activity demanding both aptitude and disposition as shown above, the discipline of philosophy, free of any special pedagogy, does not advance the distinctive ability of enhancing either aspect of the critical thinker. I argue that claiming that only philosophy promotes meta-cognition and that it exclusively embraces the totality of the critical thinking enterprise would be too shortsighted. I submit that the pedagogy of community of inquiry, models the process of critical thinking, thereby making it act as the "training wheels" of the critical thinker, allowing the individual to both observe and participate in the process (Fisherman, 2010). The community of inquiry becomes an environment in which thinking well is practised, valued

¹See (Lipman, 1988); Lipman (1988a), Sharp (1995), Lipman (1993)

and modelled. However, although philosophy itself may not develop the capacity to think critically or disposition thereof, the character of the discipline does outstandingly enable efficient, productive, and comprehensive practice of community of inquiry in context of education.

As indicated earlier in the discussion, before children start schooling, they are vibrant with questions in order to comprehend and investigate their world. However many a time adults attempt to provide answers to children's questions, and sometimes they dismiss or discourage them. However, developing confidence and skill in questioning allows children to evaluate critically the relentless flooding of information that floods them and accumulate what they need to making effective decisions. As Lone puts it, "The more accomplished a child becomes at framing good questions, the more able he or she will be to think clearly and competently for herself" (Lone, 2011, p. 78). Hence, Matthew Lipman, in his pursuit of John Dewey(2008) developed a comprehensive conception of the community of inquiry as a reflective inquiry and education as an inquiry-based activity. Hence, he writes:

My own opinion is that there is no better way of involving students in an independent course in critical thinking than by making it a course in philosophy. Not the traditional, academic philosophy of the university tradition, but the narrative philosophy that emphasizes dialogue, deliberation, and the strengthening of judgment and community (Lipman, 2003, p. 230) Lipman's model of the community of inquiry is characterised by the following features:

- the enterprise is based on mutual respect:
- students build on one another's ideas and follow the argument where it leads;
- it's expected that students will give reasons for their opinions;
- students assist one another in drawing out inferences from what has been said; and
- students endeavour to identify one another's assumptions(Lipman, 1991, pp. 13-16).

Participants in the group of inquirers engage in a structured, collaborative inquiry whose goal is to construct meaning and acquire understanding by examining philosophical questions or concepts of interest. There is acceptance by all that all members are fallible, including the teacher/facilitator, what Lone (2012) refers to as "a consensus of 'epistemological modesty' (p.183). Besides, the facilitator should demonstrate reserved advocacy of his or her own philosophical views by modelling uncertainty, with the fact that there are no finite answers to most of the questions being explored by the community. In order to even the playing field, participants are discouraged from employing technically philosophical jargon in building arguments between children. Gregory (2008) proposes that children should be encouraged "to formulate their own judgements about what is what, and how things relate, and how their corner of the world could be more just, more beautiful, more meaningful" (p.7); this is part of what it means to engage fully in society. This is in line with Dewey's assertion that

Thinking which is not connected with increase of efficiency in action, and with learning more about ourselves and with learning more about the world in which we live, has something the matter with it just as thought. In addition, skill obtained apart from thinking is not connected with any sense of the purposes for which it is to be used... Moreover, information severed from thoughtful action is dead, a mind-crushing load... We speak, legitimately enough, about the method of thinking, but the important thing to bear in mind about method is that thinking is method, the method of intelligent experience in the course which it takes (Dewey, 2004, pp. 146-147).

The UNESCO report summarises Lipman's approach thus:

Lipman's primary goal is to foster critical thinking—and formal logic in particular—in children, based on his belief that children possess the ability to think abstractly and understand philosophical questions from an early age. Rather than attempting to instil any specific philosophical doctrines, Lipman's approach centres on the child's own reasoning and questioning, by working through universal concepts such as rights, justice, or even violence. Lipman believes that children can use their own references to develop a more concrete understanding of these topics, drawn from their experiences and personal knowledge (UNESCO, 2007, p. 3).

Hence, the community of philosophical inquiry serves children to illuminate how vital questions are to examining the world in which they live and their place in it. For Splitter and Sharp there are relationships between philosophy on the one hand and the teaching and improvement of thinking and inquiry on on the other by observing that philosophy is

- ...thinking about thinking
- ...the quest for meaning
- ... conversation as dialogue
- ...asking open questions
- ...creative thinking
- ...value-laden thinking (Splitter & Sharp, 1995, pp. 89–98).

By allowing children to access philosophy from an early age, it is clear from the above, that children will start to attend to those common everyday facets of experience that are often taken for granted. Schools that permit critical

reflection then become sites where children start to view connectedness, unity and harmony in human experience that is not associated with children. Since philosophy promote people's ability to think for themselves, it entails the freedom perspective thereby encouraging children link old with new experiences. To that end, "Children who think for themselves are both critical thinkers and creative thinkers" (Splitter & Sharp, 1995, p. 98).

5. Conclusion

In the exposé above, the notion of critical thinking has been explored in the context of active, reflective thinking. The paper located critical thinking as the ideal aim of education in which children in schools should be permitted opportunities to ask questions, to think about their own thinking, to create their own ideas with the help of others and open up to newer views in order to grow into critical, reasonable and responsible adult citizens. I proposed that if schools disciplines could follow the principles of the community of philosophical inquiry as pedagogy of doing philosophy with children, the virtues of the critical thinking child and hence adult will come to the much-desired fruition.

References

Bailin, S. (2002). Critical Thinking and Science Education. Science and Education, 11(4), 361–375.

Bailin, S., & Siegel, H. (2003). Critical Thinking. In N. Blake, P. Smeyers, R. Smith & P.Standish (Eds.), *The Blackwell Guide to the Philosophy of Education* (pp. 181-193). Oxford: Oxford University Press.

Blake, N., Smeyers, P., Smith, R., & Standish, P. (2003). Philosophy of Education. Oxford: Blackwell.

Daniel, M.-F., & Auriac, E. (2011). Philosophy, Critical Thinking and Philosophy for Children. Educational Philosophy an Theory, 43(5), 415-435.

Dewey, J. (2004). Democracy and Education. New York: Dover Publications.

Dewey, J. (2008). The need for a Philosophy of Education. In J. A. Boydston (Ed.), *The Later Works of John Dewey*, 1925 - 1953: 1933-1934: Essays, *Reviews*, *Miscellany and A Common Faith* (Vol. 9, pp. 192-212). Illinois: Southern Illinois University.

Elder, L. (1996). Cognition and Affect: Critical Thinking and Emotional Intelligence. *Inquiry: Critical Thinking Across the Disciplines,, XVI*(2). [Online] Available: http://www.criticalthinking.org/page.cfm?PageID=485&CategoryID=73

Ennis, R. H. (1985). A logical basis for measuring critical thinking skills. *Educational Leadership*, 43, 44-48.

Facione, P. A. (2011). Critical Thinking:What It Is and Why It Counts? [Online] Available: http://www.student.uwa.edu.au/__data/assets/pdf_file /0003/1922502/Critical-Thinking-What-it-is-and-why-it-counts.pdf (December 7 2011)

Feinberg, J. (1986). Harm to Self New York: Oxford University Press.

Fisherman, D. (2010). Thinking as two-philosophy thinking and community of inquiry. Childhood & Philosophy, 6(12), 211-227.

Gregory, M. (2008). Philosophy in schools: ideals, challenges and opportunities. Critical & Creative Thinking: The Australian Journal of Philosophy for Children, 16(1), 5-22.

Haji, I., & Cuypers, S. E. (2011). Ultimate Educational Aims, Overridingness, and Personal Well-being. Studies in Philosophy of Education, 30(543-556).

Hare, W. (2001). Bertrand Russell and Critical Thinking. Inquiry: Critical Thinking across the Disciplines, 20(2), 3-50.

Lipman, M. (1988). Philosophy goes to school. Philadelphia: Temple University Press.

Lipman, M. (1988a). Critical Thinking: What Can It Be? Critical Thinking: What Can It Be? (Vol. 1): Resource Publication.

Lipman, M. (1991). Thinking in Education. New York: Cambridge University Press.

Lipman, M. (1993). Philosophy for Children. In M. Lipman (Ed.), Thinking children and education. Dubuque: IA.

Lipman, M. (1995). Critical thinking - what can it be. In A. Ornstein & L. Behar (Eds.), Contemporary issues in curriculum (pp. 145-152). Boston, MA: Allyn & Bacon.

Lipman, M. (2003). Thinking in Education (2nd edition ed.). New York: Cambridge University Press.

Lone, J. M. (2011). Questions and the community of philosophical inquiry. Childhood & Philosophy, 7(13), 75-89.

Lone, J. M. (2012). Teaching Pre-College Philosophy: The Cultivation of Philosophical Sensitivity. In J. M. Lone & R. Israeloff (Eds.), *Philosophy and Education: Introducing Philosophy to Young People*, (pp. 13-22). Newcastle upon Tyne: Cambridge Scholars Publishing.

Mayer, R., & Goodchild, F. (1990). The critical thinker. New York: Wm. C. Brown.

Mertes, L. (1991). Thinking and writing. Middle School Journal, 1(22), 24-25.

Russell, B. (1927). *Philosophy*. New York: W. W. Norton.

Russell, B. (1939). Education for democracy. Addresses and Proceedings of the National Education Association, 77, 527-534.

Russell, B. (1956a). John Stuart Mill. In B. Russell (Ed.), Portraits From Memory. London: Allen and Unwin.

Russell, B. (1956b). Portraits From Memory and Other Essays. London: Allen and Unwin.

Scriven, M., & Paul, R. (2008). Our Concept of Critical Thinking, Foundation for Critical Thinking. [Online] Available: http://www.criticalthinking.org/aboutCT/ourConceptCT.cfm>(April 22, 2008)

Sharp, A. M. (1995). Philosophy for children and the development of ethical values. Early Childhood Development and Care 107(1), 45-55.

Siegel, H. (1988). Educating Reason. New York: Routledge.

Splitter, L. J. (1991). Critical Thinking: What, Why, When and How. Educational Philosophy and Theory, 23(1), 89-109.

Splitter, L. J., & Sharp, A. M. (1995). *Teaching Better Thinking: The Classroom Community of Inquiry*. Melbourne: Australian Centre for Educational Research.

Tama, C. (1989). Critical thinking has a place in every classroom. Journal of Reading, 33, 64-65.

UNESCO. (2007). Philosophy: A School of Freedom- teaching philosophy and learning to philosophise: status and prospects. Paris: Unesco: Social and Human Sciences Sector.

Weinstein, M. (1991). Critical; thinking and education for democracy. Educational Philosophy and Theory, 23, 9-29.

Willingham, D. T. (2007). Can Critical Thinking Be Taught? American Educator, Summer, 8-19.