

From Critical Thinking To Critical Being

Catherine Broom

Critical being values all aspects of our human nature equally and, thus, all students with their diverse and unique abilities and interests.

Evans's (2004) review of the history of social studies in the United States illustrates that social studies is a conceptually complex subject. That is, no single definition of the subject exists, rather definitions range from traditionalist views of social studies education as history study to progressivist interpretations based on the work of Dewey to reconstructionist orientations that aim to remake a more socially just society. Nevertheless, most of these orientations, particularly the latter two, aim to develop a number of key skills and abilities in students. The key skill that both progressivists and reconstructionists identify is that of critical thinking. Although the two orientations have different conceptions of what critical thinking is and how it is developed, they both agree on its importance. Indeed, for some, critical thinking is *the* reason and aim for social studies teaching (Darling & Wright 2004), and for schools in general. Dewey can be placed in this tradition, because he understood that the aim of education should be the development of a continually growing democracy, which requires individuals who are able to think critically. The latter involves "extending the limits of experience ... to enlarge the mind ... by remaking ... meaning" (Dewey 2007, 8). For reconstructionists such as Freire, "meaning" is also remade but through a process of critical praxis and with the aim of transforming consciousness that leads to social justice action.

Because critical thinking is given such importance in social studies, a number of theorists have attempted to clarify the elements of critical thinking and the processes through which it is developed. This paper will begin by reviewing some well-known conceptions of critical thinking, which link to social studies aims and pedagogies, such as those by Ennis, Paul, and Bailin et al. It will then illustrate one

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shortcoming found in all of these definitions: they are framed within a Western, Platonic-Baconian tradition that privileges the mind over other elements of human beings' complex natures. This paper attempts to address this shortcoming by presenting an alternative model that considers all elements of our human nature and values all learners with their varied abilities and interests. It argues that all elements of our nature must be addressed if the comprehensive development of students' thought processes is to occur. The model of critical thinking presented here is thus reconceptualized as *critical being*. It draws on current Western literature that refutes the Platonic-Baconian split between mind and body/nature such as that found in postmodernist and feminist literature, as well as Western and non-Western traditions that encompass holistic philosophies of being. It aims to present a reframing of critical thinking that is "outside" of current Enlightenment discourses of rationality (Popkewitz 2010), which often underlie contemporary critical thinking theories and to present a model that is embedded in emerging ecological discourses (Broom 2011).

Well Known Definitions and their Roots

Many models of critical thinking exist, all of which are enmeshed in rational, Enlightenment discourse that argues for individual free will and the reigning importance of reason for effective thinking (Popkewitz 2010). For example, Ennis defines critical thinking as "reasonable, reflective thinking that is focused on deciding what to believe and do" (Darling & Wright 2004, 248). He argues that the process is composed of twelve abilities that are logical in nature, including being well informed, developing and judging the quality of reasoned arguments, distinguishing between statement types (reason versus assumption), and drawing rational, valid conclusions (Enis 2010).

Similarly, Paul's definition of critical thinking is a "mode of thinking in which the thinker improves the quality of his/her thinking by skillfully taking charge of the structures inherent in thinking and imposing intellectual standards upon them" (Darling & Wright 2004, 248).

Like Ennis, he views critical thinking as the teaching of critical thought processes in order to lead to better logical thought, to the "training of the mind,"

so that poor thinking processes such as logical fallacies and the use of incomplete information can be corrected. Teaching thus aims to develop students' abilities to assess the quality of information presented and how well arguments have been logically framed, to explore the points of view inherent in statements and the validity of conclusions that emerge from the argument, and to develop logical thinking elements such as defining terms clearly, including relevant arguments, and using logical procedures. He makes his connection to the ancient Greek roots of his conception explicit: "'critical' derives etymologically from two Greek roots: 'kriticos' (meaning discerning judgment) and 'kriterion' (meaning standards)" (Paul 2009). That is, critical thinking is the development of improved thinking processes through the learning and application of a number of principles of good thinking.

Improving thinking skills is also the definition of critical thinking of Bailin and her colleagues: "thinking through problematic situations about what to believe or how to act where the thinker makes reasoned judgments that embody the attributes of quality thinking (Darling & Wright 2004, 249).

They argue that this valuable thinking can be developed through the use of knowledge and the teaching of habits of mind and thinking skills embedded in a pedagogy that gives students problematic situations ("critical challenges") to work through. "Habits of mind" encompass the character traits that individuals need for critical thought, such as open-mindedness. Intellectual tools are the logical procedures that students can learn and use to think critically, such as syllogisms and decision-making frameworks (Case 2005).

Finally, Lipman's definition is "skillful, responsible thinking that facilitates good judgment because it relies on criteria, is self-correcting, and sensitive to context" (Darling & Wright 2004, 249). Lipman (2003) has focused on developing reasonable and rational critical thinking in children. He aims to improve intellectual thought by teaching the elements of logical thought, such as reasoning skills, judgment and recognition of logical fallacies, and teaching students how to consider contextual factors in decision making through inquiry-based learning within a community of inquiry framework.

These definitions, in short, all view critical thinking as an activity of the “mind” controlled by intellectual processes such as reason and logic — all are thus developed from Enlightenment discourse (Popkewitz 2010). While some acknowledge the need to consider contextual factors in students’ environments, they ignore or discount other elements of our being, such as the influences that our bodies may play in influencing thought. They view these as negative influences that must be controlled through the “higher” thinking processes of the mind.

This focus on reason and logic as being our highest attributes can be traced far back in one Western tradition. Plato, for example, hypothesized that individuals were composed of three natures: their appetites, emotions, and mind — the highest of which was the logical mind, symbolized by “golden” individuals in society (Plato 1999). Figure 1 illustrates this hierarchical view of our nature: our natural appetites encased in our physical nature (such as hunger) are the lowest elements of our natures; a little better (higher) is our spirit that encompasses our worthy emotions such as courage. At the top of the pyramid is our “best” feature as humans: our ability to reason and use logic, our mind. As this model privileges the mind over other elements of our natures, it values some abilities and kinds of students more than others.

To become fully human, supporters of this orientation feel that we have to overcome our two baser natures through our highest nature: our intellect. Other Western thinkers, particularly individuals associated with the Scientific Revolution and the Enlightenment such as Bacon and Descartes, have also given primacy to the mind over other elements of our natures. This dualism, or split in our nature, that is inherent in this Western discourse divided us from our bodies and the natural world with damaging consequences for both self and nature and led to the valuation of the “intellectual” student over other types of learners.¹ Critical theorists such as Foucault and Popkewitz (2010) have made these Western perspectives “visible” and by doing so have provided opportunities for transforming our understanding, our lived reality, through the manner in which we apprehend the world around us.

Critical pedagogues’ views differ from those of the “critical thinking” tradition described above because they explore the hidden structures of particular “truth” discourses that may support the oppression of particular groups in society (Burbules & Berk

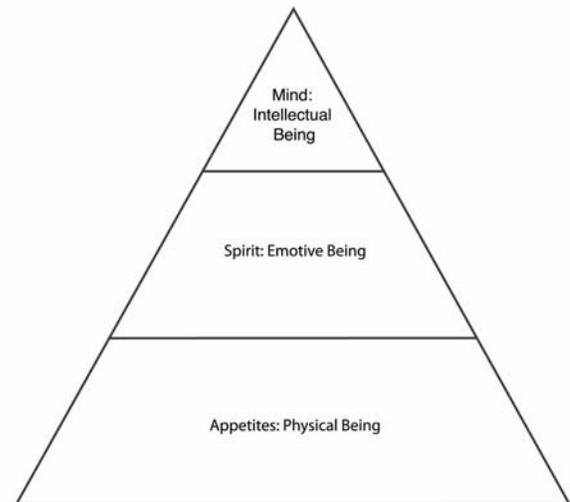


Figure 1. A Hierarchical Privileging of Mind in the Western Tradition

1999; Foucault 1980; Freire 2000). This paper draws on this critical perspective to deconstruct critical thinking models framed within particular Western discourses and presents an alternative reconceptualization of critical thinking framed within twenty-first century ecological discourse that aims to reconnect mind and body, heart and soul, individual and society. The following section illustrates how current conceptions of critical thinking are flawed, and then presents an alternative model of critical being.

Possible Failings

A student may be bright and apt at logical processes, but if that student does not believe in him- or herself, that individual may deny the very logical conclusions he/she comes to: he/she will discard them as being of poor quality, even if they are actually logical coherent. The problem with this individual, his/her insecurity, is not a flaw of the mind. It is a reflection of an emotional need, but it will quash critical thinking. Another individual may have the opposite character trait: he/she may be arrogant (Callan 2008). He or she may believe that any conclusion he/she draws is the best possible. With this

flaw, the individual will not be open-minded (Hare 1979) to the possibility that his/her logical processes or conclusions are incorrect. He/she will not take due diligence in drawing his/her conclusions. Again, the quality of critical thinking will be affected.

Yet another individual may be intellectually bright but lazy. The logical ability of this student is of no value because the individual lacks the passion to bother to think critically. Such individuals may be pushed to think, but if they lack the emotive being necessary to drive the intellectual endeavor, no critical thinking will result. They may be easily indoctrinated since they fail to critically engage with and question ideas presented to them. For example, an individual who smokes has bought into the false advertising of tobacco companies. He or she may believe he/she has "chosen" to smoke, but in reality he/she has been led — through advertising and mass media — exactly to the conclusions the tobacco companies aim at. This acceptance of falsities (or indoctrination), however, is more than an intellectual flaw; it is also an emotive flaw, linked to the need for social acceptance. It then also becomes a physical dependency, and our physical being will send false statements of physical well-being to the conscious mind to reinforce its addiction.

Another individual may be uncomfortable in the physical space he or she is in. This circumstance may influence the quality of his/her critical thinking, or the ability of that student to share his or her thoughts with the class. He or she may not feel a sense of emotional engagement (Egan 1997) and shut down intellectually. The physical space may affect a thinker in another manner: it may help to determine the precepts that are used to guide critical thought and the values used to judge the quality of precepts and conclusions drawn. The social construction of concepts such as childhood is an example (Vygotsky 2004). In addition, an individual may have physical features, such as illnesses, that impact on the quality of critical thought. For instance, the precepts thought about and the manner in which these precepts are understood and ordered can be influenced by conditions such as anxiety or depression. Finally, students might be learners whose intellect is embedded in other elements of our being and whose forms of intelligence are thus not recognized in traditional and

limited models of critical thinking. For example, a student might be a gifted dancer whose knowledge is a form of embodied knowing. Another might be an imaginative artist who intellectual gift is creativity. Another might be empathetic, able to understand and nurture other people through a kind and intuitive heart, and have a strong emotional intelligence.

Haidt's (2006) metaphor illustrates the power of emotions: he presents the mind as an elephant ridden by an individual. The elephant represents all our "older" brains, which process most of the automatic functions and processes we engage in daily. The rider represents the logical and conscious mind. The elephant has its own form of intelligence and conducts its daily work without much interruption from the conscious, logical mind. Indeed, it can structure the very manner in which the logical mind works, without its awareness. Haidt (2006, 14) explains:

Likewise, exposure to words related to the elderly makes people walk more slowly; words related to professors make people smarter at the game of Trivia Pursuit; and words related to soccer hooligans make people dumber. And these effects don't even depend on your consciously reading the words; the same effects can occur when the words are presented subliminally, that is, flashed on a screen for just a few hundredths of a second, too fast for your conscious mind to register them. But some part of the mind does see the words ... most automatic processes are completely unconscious, although some of them show a part of themselves to consciousness.

Importantly, the elephant can control the rider with its own "subconscious" agenda. This subconscious is formed during our very first years of life and is pre-consciousness (Greene 2004). Some interesting work has explored how this "pre-consciousness" affects or even predetermines the conclusions and actions of the conscious mind (Velmans n.d.).

Thus, considering critical thinking to be only an activity of the conscious mind is flawed thinking. We have many elements of our being as humans and these interact, and we have many kinds of learners with numerous and varied forms of intelligence (Gardner 1999). These need to be acknowledged and

included in our conception of critical thinking in a manner that does not privilege one element and discount the importance of other elements of our nature. This re-framing of critical thinking recognizes the manner in which effective critical thinking may lead to a variety of different and acceptable conclusions, depending on a number of factors related to our complex, multiple natures and contexts. Further, it understands critical thinking to be relational, that is, to be nurtured within particular social environments (Burbules & Berk 1999) and to encompass a number of varied forms of intelligence.

An Alternative Model: Critical Being

This model defines critical being as methodical and insightful thinking about ideas and problems that emerge from the interaction of character virtues (linked to one's spirit), such as open-mindedness and empathy, with factual knowledge and correct concepts and skills like reasoning (in one's mind), in an individual who is motivated to think (emotive being) and values thoughtful reflection (affective being). It also understands critical being to involve insights and knowledge arrived at through other forms of being, such as intuition and instinct, which are embedded in other parts of our nature, like our physical body or emotions. Critical being is developed through discussion, questioning, and activities with the use of examples and practice, in an open and enabling environment. It recognizes the dynamic, interactive and systems-like nature of being and the importance of acknowledging and reflecting on the manner in which all elements of our being continuously interact and affect our thinking processes and are integral and essential elements of us as living creatures. This model builds on Miller's (2007) conception of holistic education as it encompasses balance, inclusion, and connection between our mind, body, emotions, and spirit, while being framed within an ecological consciousness.

An ecological system is understood to be comprised of multiple entities that interact with each other in open and closed systems, and that need each other to live. One entity is not considered "better" than another; rather, all play a part in sustaining the system as a whole, sometimes in symbiotic relationships. The

aim is not progress, but continually evolving balance. Applying this model to critical thinking leads to a view that individuals are composed of a number of different natures, or "beings" that interact with one another. We have intellectual, spiritual, emotive, affective and physical beings. Each of these elements is porous and open as it continuously interacts with and is acted upon by others, and is equally valued. This non-hierarchical model connects to current work in ecofeminism (such as Brammer 1998) and Connected Knowing (Broom 2010, Belenky et al. 1986).

Conceptual Terms

Physical being is our living body. It interfaces with the external world and has its own needs, wants, and knowledge. It is rooted in a physical place and requires identification and connection with this space. Lack of connection to place can lead to a form of "conceptual violence" (Jardine et al. 2004) against the other elements of the self and the physical environment. The physical being's needs must be satisfied to maximize critical being. Depriving these needs can have consequences for general well-being. Physical being wants must be explored and critically questioned through dialogue and reflection and may be influenced by culture. Damage to physical being must also be addressed. For instance, the use of drugs damages all elements of our being. Studies have also found that consumption of too much sugar by students, or bad diets, can affect their emotions, behaviors, and abilities to learn (Jones et al. 1995).

Our body has forms of embedded knowing we call instinct and intuition. A study of how the "body" has been viewed in different times and societies and the impact this has had on "thought" can be illuminating. For example, during the Middle Ages in Western Europe, the body was seen as the "evil" seat of passions. This led to a splintering of the connection between mind and body, which has continued down to the present in Modernist thought. Western medicine today continues to treat isolated body parts, and not the whole person (Foucault 1980). Environmental destruction is accepted because we have separated mind (person) and body (place). This split is also illustrated in the traditional valuing of intellectual work more than physical work.

Emotive being are our emotions, housed within the subconscious brains (“elephant”) and body. They express and influence the spirit, mind, and/or bodily conditions. Bertrand Russell (1915) acknowledged the power of emotions with the example of fear and its connection to social relationships and critical thinking:

But if thought is to become the possession of many, not the privilege of the few, we must have done with fear. It is fear that holds men back — fear lest their cherished beliefs should prove delusions, fear lest the institutions by which they live should prove harmful, fear lest they themselves should prove less worthy of respect than they have supposed themselves to be.

In addition, the feeling of shame can be an indication that we have not lived up to our values — expressions, that is, of our spiritual being.

Emotions can be guides to subconscious thoughts that affect critical being. They can also be expressions of intuitive or alternative ways of knowing and can lead to creativity. Their power to shape and alter thought should be discussed. Appealing to our emotions has often been used by those aiming to shape public opinion, such as propagandists, with great success. The question of transforming emotion through other elements of being requires consideration. Transformed emotion can alter thought, and vice versa. Emotions are the drivers of motivation and thus of the desire to engage in learning. Their power needs acknowledgment: Hume went so far as to say, “Reason is, and ought only to be the slave of the passions, and can never pretend to any other office than to serve and obey them” (in Haidt 2006, 17).

The emotions are communicated, “exposed” and possibly transformed through art and discussion. Unlike Plato who viewed the arts as dangerous, the arts, both musical and visual, are a necessary part of humanity and education (Castiglione 1959). When explored, validated, and possibly transformed, these “passions” animate all our beings and can also lead to virtue (Roeder 1933), thus connecting to our spiritual and affective beings. Noddings (2003) illustrates the importance of emotive being in her work on the Ethic of Care. She describes the need for care to foster the relationships necessary for creating a space in

which critical exploration can occur. This caring environment should be one in which all students are welcomed and included, in which each feels valued for his/her individual strengths and abilities. This emotion of care should extend beyond relationships with others to self-care (self-esteem) and care for the environment. Mass media is particularly good at exploiting our emotional need for social relationships; they insidiously influence our perception of social success. Developing our students’ emotional intelligence is a requirement for critical being.

Intellectual being is our conscious mind. It is composed of knowledge, concepts, and skills (the “rider” of Haidt’s elephant) and is the easiest element to control and develop consciously. Skills include researching, inferring, classifying, and writing. It is often affected by other elements of our being.

Spiritual being is our philosophy of existence that is manifested through our character and our virtues and vices. It “transcends” across different elements of being and shapes the manner in which concepts/precepts are chosen, constructed, and processed in the mind. For example, if I value (spiritual being) and live (affective being) open-mindedness, I will consider multiple points of view when investigating an idea. It includes character traits such as open-mindedness, empathy, courage, integrity, and respectfulness.

The spiritual being also places elements of thought into a hierarchical framework according to the importance of the value underscoring the material thought about and understands values to be context-developed and fluid. For example, if I value equity more than justice, I might, with logical validity, support unequal actions to achieve equity. Students should be aware that some values, such as open-mindedness, humility, and empathy, foster critical being. They should also be aware of their own values and how they interface with intellectual being. They can question the values undergirding situations and issues and recognize that a number of possible conclusions can be both different and equally valid. One possible means is through the exploration of the beliefs and values of a number of different social-cultural groups across both time and space.

Affective being is the expression of our values in our actions. It can be explored through values identification and clarification activities as part of a unit on

controversial issues (which also links into emotive being), as well as through hands-on activities such as service projects. Affective being is apparent in what we do, and it is in the doing that it influences the other beings of which we are composed.

Significance of this Model

This model acknowledges, values, and encompasses all aspects of human beings and the interrelations and interconnections of these different “beings” that compose us. It integrates logical thought with other elements of our nature in a non-hierarchical, interactive manner. Each being has its role and is involved in the process of critical being. Just as each of our beings ought to be recognized and validated in the model, each student is valued: each is composed of our multiple, yet varyingly manifested, natures. As Whitehead (1929) argued, this model studies “life” (or being) as an integrated whole. It views our nature and thought as fluid and constantly evolving. It recognizes that critical being can be expressed in a number of varied ways in students of different abilities and interests. Valuing all aspects of ourselves as enriching us in different ways, it values all people as enriching our society as a whole as well.

Figure 2 illustrates the splintering of Plato’s hierarchical pyramid into that of a metaphorical circle. In

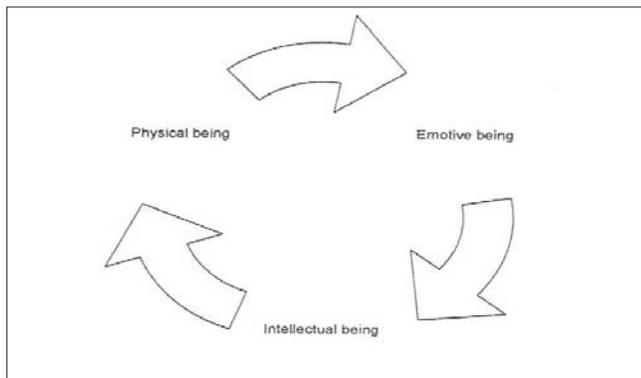


Figure 2. A Non-hierarchical Model

the figure, Plato’s three elements — appetites (physical being); spirit (emotive and spiritual beings); and mind (intellectual being) — become of equal value as they continually interact with each other and are acted upon. Thus, intellectual being does not exert control unilaterally as our “best” human quality. Rather, our other beings influence the intellectual being in their own right and form, just as individuals

have different abilities and express varying types of intelligence. For example, emotion can be an expression of the spirit as illustrated in intuition and creativity; emotions can fire the mind, and physical being is affected by (and affects) intellectual being; when I am physically healthy, my emotions are affected which influences my intellectual thought, because the premises I choose to focus on will be different than those I will chose in other circumstances. My actual thought processes will legitimately differ.

The model’s aim to promote harmony and balance can be considered a nonwestern, or “Eastern” tradition. However, the model presented here is not truly embedded in Eastern philosophies. Many Eastern philosophies understand all things to be interrelated (Haselhurst & Howie 2011). Capra states:

The most important characteristic of the Eastern worldview — one could almost say the essence of it — is the awareness of the unity and mutual interrelation of all things and events, the experience of all phenomena in the world as manifestations of a basic oneness. All things are seen as interdependent and inseparable parts of this cosmic whole; as different manifestations of the same ultimate reality. (Fritjof Capra, *The Tao of Physics* [1975], quoted in Haselhurst and Howie 2011)

Three key philosophies that illustrate this concept include Buddhism, which aims to have individuals find peace and harmony through the letting go of earthly desires and the imagined “self.” Hinduism understands all living matter “is one” and that “everything is everywhere, always” in a dynamic form (Haselhurst & Howie 2011). Meditation is viewed as a way for individuals to see the unity of all. Finally, Taoism was developed by Lao Tzu. Tao translates into English as “the force of life” (Haselhurst & Howie 2011). Taoism is a way of living with, and perceiving, nature. Tao, Nature, and Reality are understood as one. All living forms are seen to be interconnected and composed of a balance and harmony of forces (yin/yan).

My understanding of Eastern philosophies is that one “gives up” one’s sense of self, becoming “one” with the natural environment (Haidt 2006; Reagan 2000). Further, one aims to remove one’s desire for

physical needs and wants. The model presented in this essay aims to fuse Western and Eastern thought and to draw on Western traditions that eschew the Platonic and Baconian-like splitting of self and nature, such as postmodernism, gender theories, and social constructivism.

The model maintains a belief in a unique “self” in interaction with its natural and social environments; it does not aim to “erase” that self. It aims to integrate the different elements of our nature through consciousness-raising discussion and exploration in a manner that builds students’ empathy by developing awareness of the contextual nature of being and the multiple ways in which students can be intelligent (Gardner 1999).

Critical Being thus conceives of critical thinking differently than some well-known Western philosophers. Passmore (1967), for example, argues that critical thinking is a character trait, and not a skill. Passmore and I both agree that critical thinking is more than an intellectual skill, but critical being is broader still in meaning than critical thinking as a character trait. Character traits are considered to be components of our spiritual being. They are not sufficient in and of themselves for critical being. The model presented here, moreover, acknowledges elements ignored by Passmore, such as our bodies and our emotions. It acknowledges the role of the mind, and the manner in which learning some skills, such as researching information, observing, and communicating can influence critical being, thus providing us with possibilities for transformation through education. Character traits are much harder to modify.

Passmore, in addition, argues that critical thinking should be considered to be an amalgamation of critical and creative thought, an area also explored by Bailin and Siegel (2002). This is problematic for his view of critical thinking as a character trait, because it implies that creative thinking is also a character trait, unless it is embedded within the first. Yet, creative thinking, or imagination, can be present when critical thought is absent. Mozart and other great artists have stated that their art “emerges” complete from within, rather than being a product of conscious thought or deliberation: creative thought and critical thought may exist apart.

In the model presented here, creative thought would be viewed as a different form of thinking that emerges from the interactions of the body’s knowledge (intuition or embodied knowing), the expression of emotions, and the processes of the mind, including the subconscious (elephant). Creative thought can enhance critical thought by allowing for “connective leaps” of understanding that are intuitive (and thus rooted in body and emotions), not logical in nature. Egan (2008) has defined imagination as “the ability to think of what might be possible ... the reaching out feature of the mind.” His theory of different kinds of understanding includes within it somatic learning, or “bodily understanding” (Egan 2008). It is a different thought process than critical thinking.

Practical Application

Teaching critical being should be integrated into all classes, modeled by teachers, and pervade the school’s atmosphere — it must, in short, be experientially lived, because that is the form of knowing encompassed in the body. It can be taught to students explicitly by respectfully developing their awareness of the many elements that compose our natures and how these interact upon (and are in turn acted upon) by each other, as well as how they can be modified. Possible techniques include concept clarification, discussion, stories (excellent for emotive being), research findings (Haidt 2006 presents some interesting findings), and exploration of interactions. Each subject can draw on its strengths to develop awareness of different elements of being. For example, art, stories, and reflective writing can help expose and transform emotional and spiritual being. Physical education classes can highlight the nature and needs of our body, and the manner in which physical health impacts other elements of being. Service and experiential activities can help to develop affective being. These classes will occur in warm, inclusive settings that value all of the beings that compose us in a manner that illustrates and values the unique strengths and abilities of each student. They will include a variety of activities so that each student can develop his or her individual abilities and interests to his or her potential.

Developing critical being can occur through practical classroom activities. For example, lessons can include the body through kinesthetic-based learning, such as ecological walks and living labs. These engage students in making sense through action. The mind and spirit can be developed through reading, comparing, and discussing the work of famous people, including Eastern thinkers and philosophers such as Lao Tzu. Activities that inherently model critical being such as inquiry-based activities, investigative learning, and group work are recommended. Stories, poetry, art, and other forms of expression can lead to discussions that explore emotions and their power. Most importantly, however, developing critical being occurs best when activities link together our various beings through interdisciplinary studies and projects. For instance, a unit on the health of our physical body can be used as a starting point for exploring our other beings and the interrelated nature of our world. Students can study what our bodies (and those of other living creatures) need for health and growth. Concurrently, students can explore nutrients by growing food or participating in a hands-on activity at a farm. This links into Bi-

ology and general science classes. Students can also explore how food is embedded in power relations and how it is distributed and managed worldwide, thus linking into History, Geography, International Relations, Economics, and Math. Alternatively, students can study and practice a number of dances (or music) from different countries in gym classes and relate them to cultural studies and spiritual traditions (the Social Sciences), as well as to Physics (motion and energy), and to art as an expression and manifestation of emotion. Designing lessons that include all of our forms of being and that link across subject areas to the world is an effective way of developing critical being.

Social studies can play an important role, because critical thinking is one of its main goals in curriculum documents. In these guides, critical thinking is conceptualized in a traditional manner, as the process of assessing information for good decision making, including awareness of multiple viewpoints and developing hypotheses. More attention can be given to developing critical being through the integration of the elements described above into curriculum documents, with a decrease of emphasis on content learn-

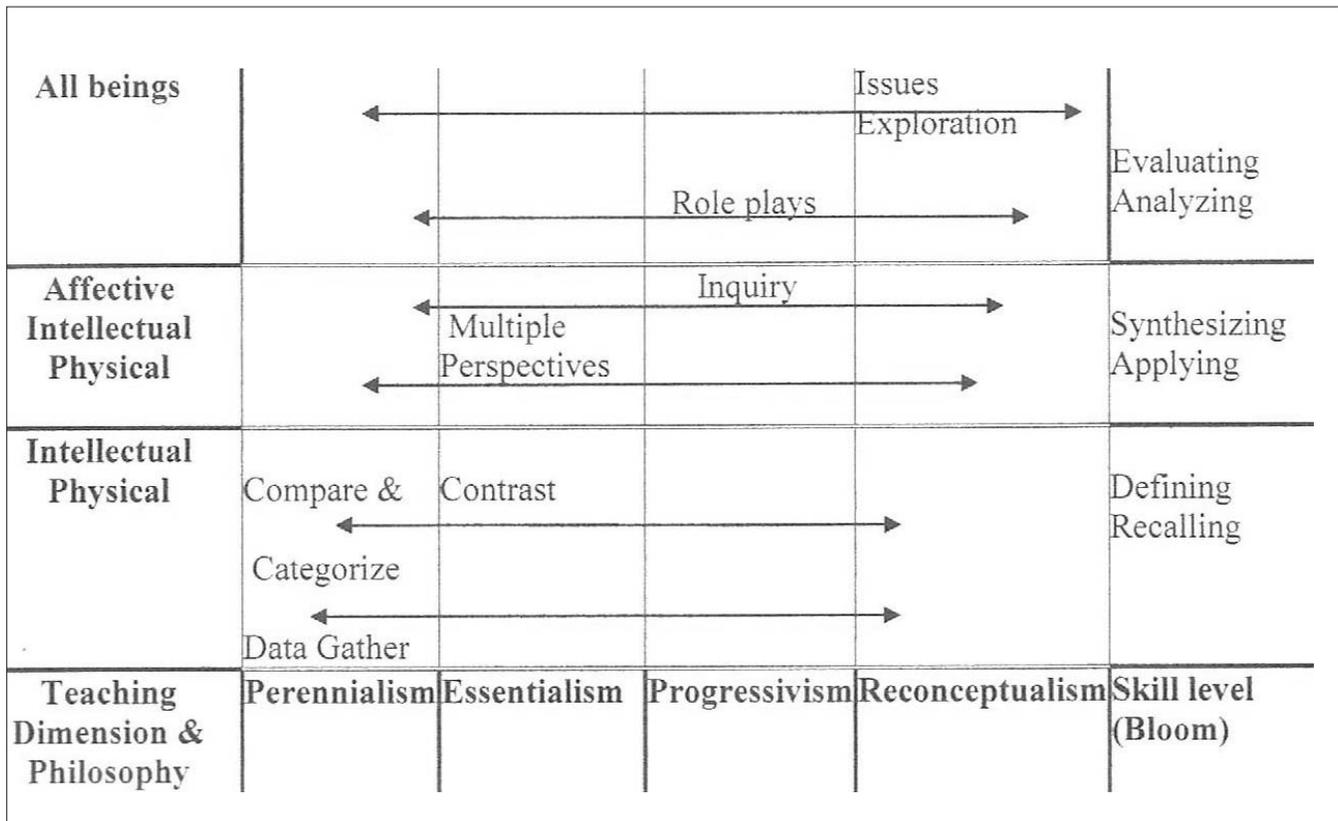


Figure 3. Possible Methods for Teaching Critical Being, builds on Zevin (2000)

ing and the deliberate attempt to cultivate national identity (which could be construed as propaganda [Broom 2008]), in a manner that validates multiple abilities.

Possible methods for teaching critical being in social studies are summarized in Figure 3. The figure illustrates that the social studies methods presented can be used across a number of philosophic perspectives. As well, some methods are more effective than others because they aim to develop higher elements of critical thinking (such as evaluating information), which are listed on the right side of the table and come from Bloom's hierarchy of thought, and which engage varied learners, because the activities draw on a number of our beings. The right side of the figure lists which types of being are developed through the different methods found in the central section of the figure. More effective methods engage more elements of our beings, and thus foster the learning of students with varied interests and abilities, as well as critical being. Issues exploration, the method that simultaneously develops the largest number of elements of our being, involves students in actively exploring issues in their nation or society, while acknowledging the need to consider the personal experiences of students (Forrest 2008) and draw on their strengths and abilities in exploring real-world problems.

For example, students can investigate the issue of the health of our food and our planet. They can begin by watching the documentary *Food Inc.*, and then carry out investigative research into the use of pesticides in agriculture through a variety of methods, including interviews, individual and group research, and analysis of varied art forms. They can explore the noxious chemicals in pesticides and their links to increasing rates of environmental damage and cancer in living creatures. Students can go on a field trip to see pesticides being sprayed into the air; they can grow their own plants and learn about the complexity of agriculture. This can be complemented by a "nature study" of the areas surrounding farms in their Biology classes. They can even consider their cafeteria lunches and their links to environmental damage (Stone 2007). They can engage in research projects and panel discussions on the multiple points of view that are encased within this complex issue and then discuss how our situatedness influences

our beliefs, and our actions. For positive change, students can discuss and physically, emotionally, and ethically *experience* humans' actions in a variety of socio-economic and physical contexts.

Other effective pedagogies include simulation games such as a United Nations meeting on poverty or gender, debates, panels, investigative reports, devil's advocates, mock trials, research projects in local communities (such as compiling local histories through archival work or investigating the actions of company practices on the environment), interviews with individuals from different political backgrounds on issues in the local community, policy making role plays, community service projects, and field trips to garbage dumps and sewage treatment plants to illustrate how "waste" does not simply disappear and how everything is connected together. Further, students can be involved in the governance of the school through student councils. All of these methods should be encased in a caring community of learning essential for the emotive, spiritual, and affective engagement of students and include deep, complex and respectful exploration of values. The classroom itself should be a physically comfortable space with student-friendly seating and arrangements, light, fresh air, and varied activities that provide spaces for physical movement in which all of the varied abilities and interests of many types of learners are valued and encompassed in learning activities.

Conclusion

Critical thinking has long been argued to be an important aim of schooling. However, current conceptions of critical thinking privilege one form of our being over other elements that compose our nature. They draw on Platonic-Baconian models that focus on the mind and thus fail to acknowledge our complexity and the many interacting elements of which are composed. This paper has attempted to heal this limited perspective by presenting a reconceptualization of critical thinking as critical being, which equally values all of our human nature and, thus, all students with their varying abilities and interests.

This ecological model views our intellectual being as one element among other forms of being — emotive being, affective being, spiritual being, and

physical being — that interact together. Thus, critical being acknowledges complexity and multiplicity and builds empathy and harmony by acknowledging that varied thought processes can lead to different conclusions. This model has implications for teaching practice, particularly for teaching as a transformative activity: Teaching should do more than focus on the conscious intellect. It should integrate and explore all elements of our being and their relations to the mind in an environment that values all in order to nurture our emotive and spiritual beings.

Some teaching methods are thus better suited than others, for they develop not only our intellectual being, but also other elements of our natures, including our emotive being (thus leading to engagement), our spiritual being (thus developing our character), our affective being (thus leading to action) and our physical being (through experientially rooted learning and thus developing grounding in and for place). These better methods also provide for, and value, a variety of learning styles and abilities. They include inquiry projects, role plays, and issues exploration and will help to expose the “pre-conscious” roots of much “critical thought”:

When preconscious mental processes have an appropriately complex architecture they can make informed choices (within the constraints of heredity and environment) in the light of inner needs, goals and external contingencies. Conscious experiences arise from such preconscious mental operations. Once they arise, they usually represent those operations in a highly compressed, global way — but nevertheless faithfully, and for practical purposes we can take them to *be* those operations.... “I” include my unconscious and preconscious mind/brain as well as my conscious experience (Velmans, n.d.).

Teaching critical being will break the Western mind-body divide that privileges the mind and thus splinters us from ourselves and our world. It will bring us the potential for transformative education as well as individual and social harmony. Consider this quote from the perspective presented in this paper:

Who sees all beings in his own Self, and his own Self in all beings, loses all fear...When a sage sees this great Unity and his Self has become all

things, what delusion and what sorrow can ever be near him? (Upanishads, quoted in Haidt 2006, 213).

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Note

1. Writers such as MacIntyre, *A Short History of Ethics* (1998, New York: Macmillan) have described this mind-body dualism. Some Western academics and movements (Postmodernism, Gender, and Ecology), have also written about this dualism with the aim of presenting more holistic alternatives, for example, Carolyn Merchant's *The Death of Nature* (1981) and Patrick Curry's "Rethinking Nature: Towards an Ecopluralism" in *Environmental Values* 12:3 (2003) 337-360. Blythe Clinchy has criticized rational critical thinking for not considering women's ways of thinking (Darling & Wright 2004).