

# CRITICAL THINKING ABOUT TRUTH IN TEACHING (An Educational Philosophy Perspective)

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**Abstrak :** Pemikiran kritis harus disesuaikan dengan kebenaran yang sesuai dengan kapasitasnya. Boleh jadi beberapa pertimbangan tentang pemikiran dari tujuan pendidikan harus lebih dikhususkan sesuai dengan bidangnya, serta lebih berharga, yang selanjutnya disebut kritis, berhubungan dengan pertimbangan standar *epistemic* yang menginformasikan tentang filsafat Barat melalui Thales, lebih jelasnya sejak Socrates dan Plato. Tulisan ini akan lebih memfokuskan pada pertanyaan tentang mengajar kebenaran, pada saat pemikiran terbentuk di dalam suatu epistemologi kehidupan. Hal tersebut akan disertai pembelajaran tentang kebenaran, yang hanya terlihat sama kritisnya dengan pemikiran yang didapatkan.

**Kata Kunci:** Critical thinking, truth, neutrality, teaching, education, neo-modernism

## Introduction

*“Teaching is not the lever for changing or transforming society.*

*Formal education...cannot really be the lever for the transformation of society.”*

*(P. Freire, 1987)*

Truth in teaching, however, may very well have been the most controversial issue in *educational philosophy* ever since Socrates confronted the Sophists in ancient Greece. Deepened by Plato to the issue of the role of knowledge in education, this question of truth in teaching concerns the nature of knowledge and how it can promote the good life for the individual and society. What is good knowledge? What is knowledge good for?

### *Critical Thinking About Truth in Teaching*

Both questions have remained controversial throughout the ages because of the debates among philosophers regarding the relative importance of sensory data and ideas, i.e., of perception and conception, in the processes of ascertaining the truth. An adequate consideration of the debate between Anglo-American empiricism and Continental rationalism persisting since Bacon and Descartes in the early 17<sup>th</sup> century, however, requires a brief account of the role of controversial issues in education—in our own education about the controversial issue of truth in teaching. This may illuminate the questions of what is good knowledge, what is knowledge good for, and truth in teaching, for it will help to establish the moral parameters of what Suzanne Rosenblith (2004) calls *the epistemic ethos*.<sup>1</sup>

Instead of rushing headlong into the matter by choosing either empiricism or rationalism, depending upon a personal preference for the perception of sense data or the conceptualization of ideas, and instead of rejecting both in the postmodern skepticism that questions the credibility of any normative theory of knowledge as such, only to substitute semiology or sociology of knowledge for epistemology in a category mistake of catastrophic proportions, a touch of Socratic ignorance can encourage one to consider both sides of the issue if one really wants to know what is good knowledge and what it is good for. Socratic ignorance encourages one to take a neutral approach to one's own education in this matter of legitimate controversy, lest one be deceived by some sophist who is more interested in defending a cause than in establishing the truth of the matter. Is not open-minded neutrality the *sine qua non* of becoming aware of something new? Of learning any truth? Of any education?

In other words, neutrality towards the various theories of knowledge may help resolve the epistemological questions precisely where the truth is the most difficult to ascertain, i.e., within the context of the study of controversial issues in education, where the truth is all the more essential to their adequate comprehension and deserves the deepest respect rather than the optimistic, false “spin” of the advocates of their biased perspectives.

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<sup>1</sup> Suzanne Rosenblith, *Cultivating the Epistemic Ethos: On the Necessity of Adjudication in Religious Education* (Tuscaloosa AL : SEPES, 2004)

Several ways of teaching controversial issues neutrally will be stated briefly to contrast them with the teaching of valid, non-controversial knowledge, of the truth, in the school curriculum. Then teaching the truth will be supported with a version of postmodernism expressed by Maxine Greene to preserve the valid characteristics of good knowledge in the epistemic ethos of schooling. A different view of postmodernism will be rejected to show how the neutrality appropriate to the study of the controversial issue with which Western educational philosophy began will lead to a neo-modern perspective of truth in teaching.

### **Neutrality and Truth in Education**

Neutrality in schooling has been severely challenged by the notion of ‘defensible partiality,’ i.e., by the idea that teachers of social studies should be openly committed to the resolution of social problems in favor of the majority of the people in society or the world, originally expressed by Theodore Brameld (1965), who claimed, however, that it should not interfere with the student’s objective, critical study of social problems, for their impartial study would lead anyone to accept the need for social reconstruction<sup>2</sup>. Why, then, is it necessary to argue that the teacher should be openly transformative?

The question of neutrality thus arises in a significant way about matters in which there is considerable controversy in society and in which the controversy is quite legitimate. It is not whether teachers can be neutral but whether they should be and how they should go about it. Six approaches will be specified in order of increasing complexity. At the first level, the classroom can be said to be neutral in the cognitive sense when controversial issues are simply excluded from it, following Horace Mann’s suggestion<sup>3</sup>. The second level includes controversial

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<sup>2</sup> We can find the perspective deal with critical study of social problem in: Theodore Brameld, *Education for the Emerging Age*, (New York: Harper & Row, 1969), p.88, 154.

<sup>3</sup> Horace Mann, *The Republic and the School: The Education of Free Men*, (ed.) L. A. Cremin, (New York: Teachers College Bureau of Publications, 1957), p. 97. He said that: “When the teacher, in the course of his [sic] lessons or lectures on the fundamental law, arrives at a controverted text, he [sic] is either to read it without comment or remark; or, at most, he [sic] is only to say that the passage is the subject

### *Critical Thinking About Truth in Teaching*

issues but only those aspects that can be dealt with objectively, e.g., when students learn information about drugs or sex but do not examine related questions of value and morality. At the third level, 'both sides' of the issue are presented impartially and without comment to enable students to learn about the different views on the issue. On the fourth level, the teacher points out the advantages and disadvantages of each view in turn. These higher levels would do a great deal to promote critical thinking about the issues discussed.

A fifth level is attained when the teacher makes an internal criticism of each view and abstracts its partial truth. For example, the controversy between conservative and progressive educational philosophies in the West started with Plato's attempt to have the most intellectually able students acquire the best knowledge available in society through his invention of higher education. By the time he retired from his Academy, its curriculum included the empirical disciplines that Aristotle said belonged in education, e.g., biology, chemistry, and medicine, with the focus upon their conceptual aspects as outlined in the third level of Plato's 'divided line'. These are still emphasized today in what are called *academic subjects* in honor of Plato's Academy. The half-truth that education involves building the curriculum from the top down, however, was strongly controverted by progressives such as Rousseau, Froebel, Pestalozzi, Francis Parker, and John Dewey, who correctly insisted that genuine education depends upon building the curriculum from the bottom up, i.e., on the child's actual development, by starting each lesson with the child's own.

Thus the greatest conservative and progressive educational theories ever written each has an extremely important truth: maintain the best knowledge in society by having elite students acquire it at the university, but always base one's pedagogy and curriculum on the present state of the pupils' growth. On the one hand, no advanced industrial society is going to abandon the academic tracks in secondary schools that prepare students for the university (and other modes of tertiary schooling), although Plato's rationalistic epistemology is highly

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of disputation, and that the school room is neither the tribunal to adjudicate nor the forum to discuss it."

questionable (even for Plato: see *Parmenides*). On the other hand, experienced teachers will always try to begin where the children and youth are and take them as far as they can go, whether or not they are university bound, although Dewey's instrumentalist pedagogy leaves insufficient room for dialogue with the teacher and the acquisition of organized knowledge.

An educational philosopher involved in teacher education can elucidate the strong points of both Plato and Dewey on the fifth level of neutrality without indicating a preference for either rationalism or empiricism. This juxtaposition of oppositional viewpoints is very likely to induce critical thinking, especially if conducted on the sixth level, where the teacher is like an actor, playing the role of spokesperson for each view in turn because one truly believes each view is a legitimate expression of a human being with his or her own dignity, perhaps following Plato (1956, 1974)<sup>4</sup> and Dewey (1916)<sup>5</sup>, for instance, with Buber (1965)<sup>6</sup> and Freire (1970)<sup>7</sup> to consider both dialogical and problem-posing pedagogies adequately.

The general significance of neutrality to the epistemic ethos of teaching the truth may become clearer through a brief comparison of the role of controversial issues and good knowledge in schools. Except for issues of legitimate controversy, the only knowledge that qualifies as curriculum content in public, state-supported schools is drawn from the arts, crafts, trades, sports, professions, and academic disciplines<sup>8</sup>.

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<sup>4</sup> Plato, *Protagoras and Meno*, trans. W. K. C. Guthrie (Baltimore: Penguin, 1956), and Plato, *The Republic*, trans., D. Lee (Baltimore: Penguin, 1974). Originally written circa 375 B.C.E., Book VI. 509d-511e.

<sup>5</sup> John Dewey, *Democracy and Education: An Introduction to the Philosophy of Education* (New York: Macmillan, 1916).

<sup>6</sup> Martin Buber, *Education, and, The Education of Character*, trans. R. G. Smith, in "Between Man and Man" (New York, Macmillan, 1965), p. 83-117, Originally published 1926 and 1939.

<sup>7</sup> Paulo Freire, *Pedagogy of the Oppressed*, trans. M. B. Ramos (New York: Herder & Herder, 1970).

<sup>8</sup> D. Vandenberg, *Education as a Human Right: A Theory of Curriculum and Pedagogy* (New York: Teachers College Press, 1990), or in : D. Vandenberg, *Education in Existential Perspective: The Dialectic of Education for Democracy*, in P. Higgs (ed.) *Metatheories in Educational Theory and Practice* (Johannesburg: Heinemann, 1998), p. 141-165.

### *Critical Thinking About Truth in Teaching*

Because much of their knowledge is not controversial, it can be taught and learned objectively. The knowledge of the disciplines, however, is the most controversial the closer it is to the frontiers, even in the natural sciences. Teaching controversial things within the disciplines requires attention to their epistemic characteristics due to their variable basis in evidence. The student should always learn the degree of acceptance a fact or theory enjoys within a discipline and understand how well it is established evidentially because part of acquiring knowledge as knowledge is becoming aware of the degree of confidence one can place in it. For example, the theory of biological evolution may be only a theory, but it enjoys a basis in evidence so massive that complete confidence can be placed in it.<sup>9</sup> On the other hand, the theory that human intelligence is reducible to brain processes is speculative and should be studied along with other speculative theories of the mind/body relation.<sup>10</sup> Otherwise the epistemic grounding and truthfulness of such theories are not fully appreciated.

To establish a consensus in the classroom regarding a controversial issue as advocates of transformative pedagogy often desire changes the nature of its cognitive components by obscuring the real issue in a serious lack of truthfulness. This sectarian use of the classroom manifests the semi-liberated consciousness and is contrary to human dignity<sup>11</sup>, especially when it occurs in the teaching of educational

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<sup>9</sup> Morowitz, H., Hazen, R., & Trefil, J., *Intelligent Design Has No Place in the Science Curriculum*, *The Chronicle of Higher Education* (September 2, 2005), p. 6-8.

<sup>10</sup> Do neurologists explain away the truth of their own empirical research by referring to their own brain processes as causing it? Of course not. As the director of neurosurgery at John Hopkins Children's Center, in: Ben Carson, *Your Mind Can Map your Destiny Ledger-Enquirer* (Columbus, GA), in Parade section, 2003, p. 30. He says: "The human brain, as I came to realize, is simply a mechanical component of an entity of far greater beauty and power: the mind." This attests to a person's self-conscious, free initiative, but it is not meant to deny the embodiment of the living stream of wakeful consciousness.

<sup>11</sup> Please check in: P. Freire, P., *Pedagogy of the Oppressed*, trans. M. B. Ramos (New York: Herder & Herder, 1970), p.21-23; and see: P. Freire, & Shor, I., *A Pedagogy for Liberation: Dialogues on Transforming Education* (South Hadley MA: Bergin & Garvey, 1987), p.11-20.

philosophy through emphasizing one epistemology at the expense of others, or by denigrating all epistemologies.<sup>12</sup>

### **Teaching the Truth: Neo-Modernism**

A loyalty to human dignity--and human possibility--is maintained when the teacher is loyal to the knowledge and/or skill being learned. It is maintained in regard to controversial issues when the teacher is truthful to the various perspectives on the issues, e.g., to both conservative and progressive exemplars such as Plato and Dewey in educational philosophy. This constitutes an epistemic ethos that transcends the nihilism resulting from negative postmodernism and naïve constructionism, and it makes education possible. The sophistry of dissident postmodernism is apparent when its major spokesperson claims that any 'meta-narrative of knowledge' lacks credibility, but in a subsequent publication shows he is a Christian apologist<sup>13</sup>, defending his faith in the doctrines of the Judaic-Christian tradition that have been falsified by the natural sciences. These doctrines simply cannot be restored by doubting the truthfulness of scientific knowledge, to which all teachers should be loyal. Sophistry also shows in Foucault's confession, 'I have never written anything but fictions'<sup>14</sup>.

One way to maintain the epistemic ethos and truth in teaching in the face of dissenting postmodernism is found in two claims of Harry Broudy: 'Each discipline has its own method of investigation,' and, 'To persuade the learner to perceive, classify, and relate as does the expert in a given domain of knowledge is the unabashed objective of Realistic teaching method'<sup>15</sup>. Without a minimal realism, both teaching and truth are impossible. Teachers in the natural sciences, social sciences, and humanities, for example, teach about real things in

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<sup>12</sup> I.Gur-Ze'ev, *Adorno and Horkheimer: Diasporic Philosophy, Negative Theology, and Counter-education*, Educational Theory 55, 2005, p. 343, 344-345, 352, 356, 365.

<sup>13</sup> J.F. Lyotard, *Heidegger and the 'Jews'*, trans. A. Michel & M. S. Roberts (Minneapolis: University of Minnesota Press, 1990), p.34, 38.

<sup>14</sup> M. Foucault, *Power/Knowledge: Selected Interviews and other Writings*, (ed.) C. Gordon (New York: Pantheon, 1980), p.193.

<sup>15</sup> H.S. Broudy, *Building a Philosophy of Education*, Englewood Cliffs, (NJ: Prentice-Hall, 1961), p. 323, 339-340.

### *Critical Thinking About Truth in Teaching*

the natural, societal, and lived worlds, respectively, and they truthfully disclose them to students<sup>16</sup>. As Charles Sanders Peirce claimed, the real is that which is discovered by communities of qualified investigators when the investigation is carried sufficiently far<sup>17</sup>. Referring to it as a *minimal realism* allows for subsequent investigations by qualified investigators, paradigm shifts, etc.

Teachers who majored at the university in the subject they teach in high school often understand the various kinds of empirical, rational, quantitative, qualitative, historical, or interpretive methods and canons of inquiry used in their area of expertise in domain-specific ways relative to the characteristics of the things or phenomena in the domain. As Alfred Schütz claimed, each discipline is a distinct province of meaning with its own cognitive style and epistemic protocols<sup>18</sup>. Thus the importance of perception, conception, experimentation, quantitative, qualitative, historical, or interpretive research<sup>19</sup> can vary by the domain to promote truth in teaching. A meta-narrative of knowledge that fits all domains is not needed to establish truth in teaching within a specific domain<sup>20</sup>.

A second way to maintain the epistemic ethos of truth in teaching and learning is to accept a loose, flexible combination of the main theories of knowledge that retains the half-truth of each. Kant, for example, roused from his dogmatic, rationalistic slumber by David Hume, claimed that concepts without perceptions are empty, just as

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<sup>16</sup> D. Vandenberg, Knowledge and Schooling, *Phenomenology & Pedagogy*, 6, 1988, p. 63, 70, 74.

<sup>17</sup> C.S. Peirce, How to Make Our Ideas Clear, in *Values in a World of Chance* (ed.) P. P. Wiener, (New York: Doubleday, 1958), p. 133-134. Or read : D. Vandenberg, *Education as a Human Right: A Theory of Curriculum and Pedagogy*, (New York: Teachers College Press, 1990), p.130-132, 218-220.

<sup>18</sup> D. Vandenberg, Phenomenological Research in the Study of Education, in D. Vandenberg (ed.) *Phenomenology and Educational Discourse* (Johannesburg: Heinemann, 1997), p. 9, 11,12.

<sup>19</sup> It may be worth noting that this paper engages in interpretive research understood as a hermeneutic of exemplary texts to bring historically significant understandings to bear on a contemporary problem.

<sup>20</sup> D. Vandenberg, Charlatans, Knowledge, Curriculum, and Phenomenological Research, in *Philosophy of Education* (Normal: Illinois State University Press, 1983), p. 201-211.

perceptions without concepts are blind. This combination of rationalism and empiricism can be thought of as an *aggregate*, rather than as a synthesis, to allow that some domains of knowledge need to be more conceptual to disclose things truthfully, while others need to be more perceptual. The aggregate is compatible with the versions of postmodernism that can be called *late modernism* or, preferably, *neo-modernism*. It does not try to exalt an empiricism in the footsteps of Bacon, Locke, Berkeley, Hume, Spencer, and Popper, nor a rationalism in the trail of Descartes, Spinoza, Leibniz, Kant, Hegel, and Habermas, although it strongly includes their modernist traditions—both of them. Unlike Kant, however, the proportion of perception to conception and the nature of their interrelation to constitute an epistemic ethos that allows truth in teaching can remain domain-specific, as Broudy suggests.

Indeed, the epistemic ethos can remain lesson-specific. Perception of sense data through showing, describing, pictures, demonstrations, computer imagery, doing something, laboratory work, and field trips help insure that students are learning about something *in the world*, i.e., that the conceptual framework used does indeed open up something in the world to the students. This disclosure that is truth keeps concepts from being empty. On the other hand, conceptualization through telling, explaining, defining, quantifying, questioning, discussion, quiet reflection, reading, and writing may open up things in the world that the students cannot yet discriminate perceptually. Their conceptualized disclosure keeps the perceptions from remaining ‘blind’.

### **A Pedagogic Epistemic Ethos**

This flexible aggregate is well illustrated in teaching by Maxine Greene (1973)<sup>21</sup>. After surveying major theories of knowledge, she turned to the phenomenology of the child’s world, relying on Merleau-Ponty<sup>22</sup> (1962, 1964) before making her pedagogic recommendations.

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<sup>21</sup> M. Greene, *Teacher as Stranger: Educational Philosophy for the Modern Age* (Belmont, CA: Wadsworth, 1973).

<sup>22</sup> M. Merleau-Ponty, M., *The Phenomenology of Perception*, trans. C. Smith (London: Routledge & Kegan Paul, 1962), and M. Merleau-Ponty, *The Primacy of Perception* (ed.) J. Edie, Evanston, (IL: Northwestern University Press, 1964).

### *Critical Thinking About Truth in Teaching*

The small child has its being in the world perceptually such that it comes to live in the primary world of the senses, which becomes structured by nonverbal activities and the informal language of the family. This tacit knowing, to borrow a phrase from Michael Polanyi<sup>23</sup> (1964), who seems to strongly parallel Merleau-Ponty, persists independently of school learning, sometimes in opposition to it, unless a pedagogy brings these pre-judgments of things, these prejudices, up into explicit awareness by the students' exploration of their inner horizons. When the interior exploration leads to the exploration of the outer horizons in the world through curriculum content, it allows the child or youth to pursue truth as well as its own being in the world by letting things in the world be disclosed by the knowledge in the curriculum--with the teacher's guidance, of course. After indicating how the child lives in the primary world of perception that will inform the rest of its life unless revised through education, Greene suggests:

The crucial concern is for self-awareness and critical cognitive action for the sake of gaining perspective on personal life and remaking the social domain. How should the teacher determine whether this should be his [sic] focal concern? How might the differences among the philosophical points of view affect his [sic] practical judgment? Can he [sic] not function on some occasions as a latter-day rationalist and, on other occasions, as an empiricist? Can he [sic] not, while functioning as a pragmatist, pay sufficient heed to the truth of a student's being to integrate a notion of liberation with the Deweyan conception of what is most worthwhile?<sup>24</sup>

This perspective is postmodern, for it does not exalt one of the theories of knowledge as if it were the only valid meta-narrative, but it does not throw out the baby with the bath water by dismissing them completely. It is neo-modern because it functions as did the aggregate of Plato, Dewey, Buber and Freire mentioned earlier in this paper--on the sixth level of neutrality. It retains the partial truths, i.e., the

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<sup>23</sup> M. Polanyi, *Personal Knowledge: Towards a Post-Critical Philosophy* (New York: Harper & Row, 1964).

<sup>24</sup> M. Greene, *Teacher as Stranger: Educational Philosophy for the Modern Age*, (Belmont, CA: Wadsworth, 1973), p. 168.

disclosures, of at least four epistemologies and presumes that public schools should transmit good knowledge, i.e., truth, throughout society, which has been a core belief of modernism since the invention of the printing press and that remains paramount after the invention of the computer and mass communication systems.

If it seems too progressive for Greene to include Dewey's and Freire's social concerns among the others, the point is, rather, to include their epistemic ethos. Teachers often hear students ask, after learning something new: 'So what?' 'Of what use is this?' 'What difference does this make?' The question of what a bit of knowledge is good for can be addressed with Dewey's pragmatism. It is good for the student's experienced problems when it is related to these problems. Similarly, if Merleau-Ponty was correct about how the child's development of its perceptual world informs the rest of its life, there should be frequent consciousness-raising to insure that previous mislearnings do not interfere with learning new things through curriculum content, as in Freire's pedagogy. The critical thinking stimulated by these pedagogies, furthermore, is supplemented by the inclusion of rationalism and empiricism in Greene's flexible aggregate because these allow for the presence of factual, propositional knowledge and its conceptualization in the modes of the standard, academic disciplines of conservative education when the teacher who is offering new knowledge finds it appropriate to emphasize the perceptual aspects of propositional knowledge and/or the conceptual aspects of theory.

When Greene adds that she is raising unanswered questions, it suggests they are matters of legitimate controversy, but answers to them seem implied: 'Yes, the teacher can sometimes do a, b, c, or d.' Together the questions constitute the epistemic ethos that requires teachers to decide when to focus on perception, conception, practical use, or the student's existential becoming someone, too. Whereas for Broudy these questions are domain-specific, for Greene they are lesson-specific. Not only can the lessons in one subject vary to focus on perception, conception, practical use, or existential understanding in turn, these variations can occur within a lesson to help promote truth as disclosing something in the world. It all depends upon the particular

### *Critical Thinking About Truth in Teaching*

teacher in a particular classroom with particular children or youth, i.e., upon the exigencies of the immediate situation.<sup>25</sup> Further elucidation requires lesson-specific research to correctly interrelate these aspects, but the epistemic flexibility may very well fulfill the goals of multicultural education as well as those of critical thinking.

#### **The Stream of Consciousness**

The problem with traditional epistemologies is that their authors reify perception and/or conception or aspects of them, such as sense data, hypotheses, quantitative data, clear and simple ideas, primitive axioms, basic concepts, signs, paradigms, falsifiable sentences, and so forth, as well as so-called processes such as induction, deduction, abduction, experimentation, quantification, etc. These reifications, and their parallels in recipes for critical thinking, have to be put into brackets, out of play, if one is to grasp and describe phenomenologically the swift stream of consciousness as simultaneously perceptually *and* conceptually conscious of things in the world, at least when one is wide-awake and possesses a holistic consciousness of things in the world that is not alienated from the world nor from its perceptual or conceptual modes of being.

The stream of consciousness, moreover, should not itself be reified as a thing that exists independently of the embodied disclosure of things in the world of which an existing person is aware. The teacher should be perceptually and conceptually aware of the things and phenomena in the region of the world to which one is introducing students in order to open them up to the students through the relevant and appropriate domain-specific aspects of inquiry. The teacher should therefore use inquiry, expository, didactic, dialogical, collaborative, and other pedagogies interchangeably, perhaps switching between them within a lesson, as Greene suggests, to utilize those over-emphasized aspects of traditional epistemologies that nevertheless truthfully disclose some partial truths of the epistemic ethos to critical theorists with open minds.

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<sup>25</sup> John Dewey, *Democracy and Education: An Introduction to the Philosophy of Education* (New York: Macmillan, 1916), p. 201-203.

This epistemic flexibility requires continual dialogue with students to ensure the teacher helps them to explore *their* world, not the teacher's world but the world as the students see it out there. Then the truth disclosed by the teacher will open up the world to the students as they open to it in a genuine co-disclosure that occurs when the teacher and students have their being in the world together because they consciously focus their attention on the same thing or phenomenon in the world.<sup>26</sup>

This description of truth differs somewhat from the notion that factual statements, or propositions, are true when they correspond to some aspects of something in the world, for students can learn factual information verbally without seeing what is referred to if and when the concepts are empty. They are not in the truth, however, unless the factual information actually discloses something in the world to them. As Martin Heidegger said, "Truth" is not a feature of correct propositions which are asserted of an "object" by a human "subject" and then are valid somewhere, in what sphere we know not; rather, truth is disclosure of things through which an openness essentially unfolds'.<sup>27</sup>

In other words, propositional knowledge is not truthful because it corresponds to things or phenomena in the world as if truth were a property of linguistic statements in and of themselves. This merely reifies sentences into propositions that are truthful, however, when and only when they actually disclose things or phenomena in the world to someone who allows them to disclose themselves through allowing them to open themselves up in one's lived world, i.e., through allowing them to be. These disclosures require the teacher to function sometimes as an empiricist, rationalist, pragmatist, or raiser of consciousness as Greene suggests so that propositional and/or conceptual learning allows things in the world to open themselves up to the students as the

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<sup>26</sup> Martin Heidegger, *Being and Time*, trans. J. Macquarrie & E. Robertson (New York: Harper & Row, 1962), p. 145, 197, 334, and see : D. Vandenberg, *Phenomenology and Fundamental Educational Theory*, in A. T. Tymieniecka (ed.) *Phenomenology World Wide* (Lancaster, UK: Kluwer, 2003), p. 589-601.

<sup>27</sup> Martin Heidegger, *On the Essence of Truth*, trans. J. Sullis, in *Martin Heidegger: Basic Writings* (ed.) D. F. Krell (New York: Harper & Row, 1977), p. 113-141.

### *Critical Thinking About Truth in Teaching*

students open themselves up to them. This does not denigrate propositional knowledge but grounds it ontologically in the being of the students and in the being of the thing or phenomenon depicted, i.e., in the being of the world, i.e., in being. It simply brings propositions back to life.<sup>28</sup>

#### **Conclusion**

Truth in teaching therefore requires that the teacher be neutral in regard to the controversies regarding various epistemologies, as Greene recommends. This includes being neutral toward any model of critical thinking that isolates thinking from a domain and from a domain-specific epistemic ethos, for truth in teaching requires the flexible, domain-specific epistemic ethos in the classroom. What is knowledge good for? It opens one to the world as it opens the world to one. It lets the being of the world and the being of the students come into being. At least good knowledge, truth, enables one's being in the world as it enables the being of the world. Truth lets the Earth be four and a half billion years old because it lets it be what it is<sup>29</sup> Dis-closing the world in its beauty and goodness, truth lets being be. *Wa Allâh a'lam bi al-shawâb.\**

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<sup>28</sup> For example, 'Water freezes at 32 degrees' and 'Water freezes at 0 degrees' are both true not because they correspond to reality but when and only when they disclose some possibilities in the world to someone. Either can help one adjust a refrigerator's thermostat.

<sup>29</sup> E. Jones (ed.), *The Atlas of World Geography* (London: Octopus, 1977), p. 22. And see : G.S. Soreghan, Lessons From Earth's Deep Time, *The Chronicle of Higher Education*, July 15, 2005, p. B10.