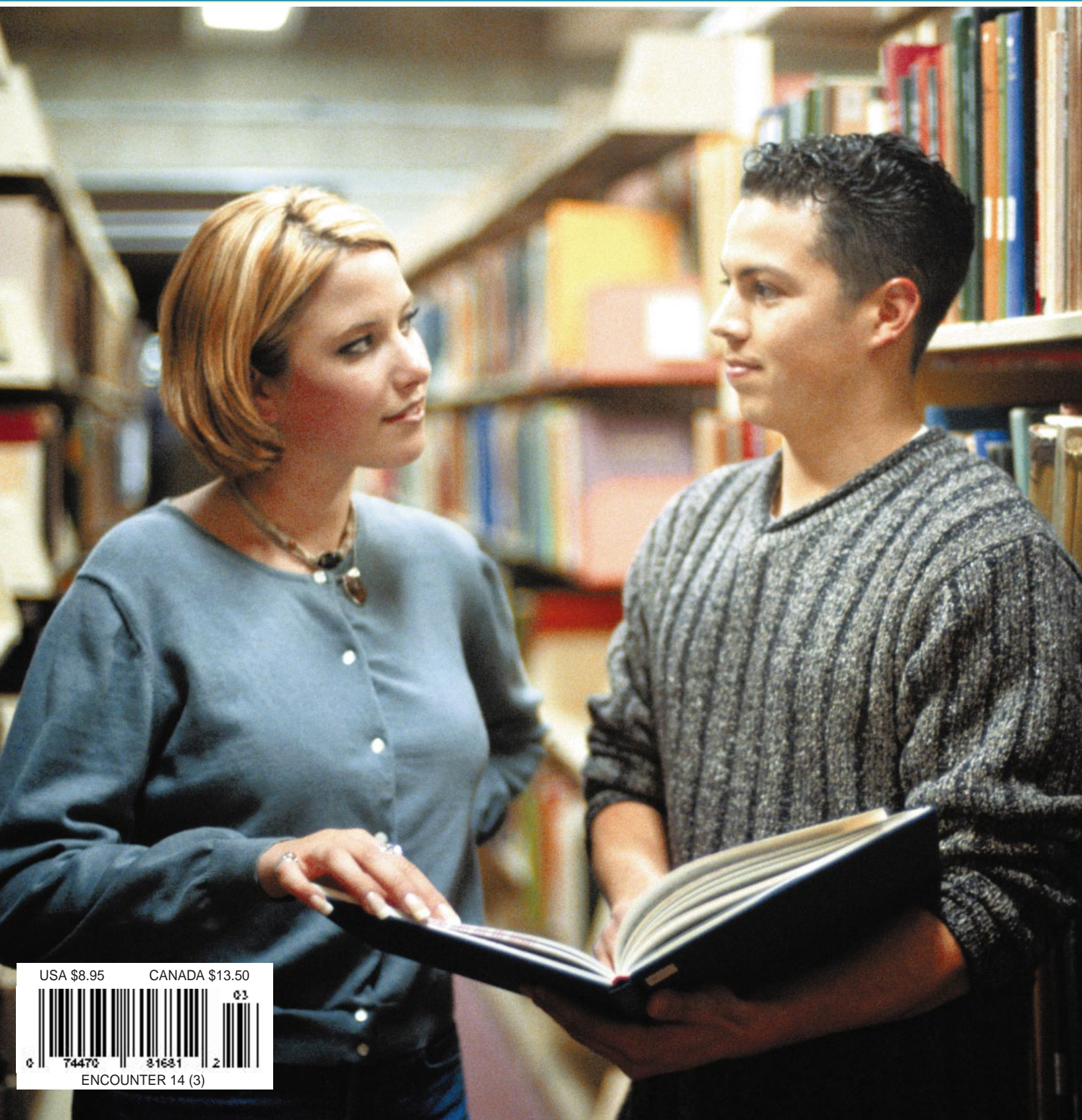


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Editorial

Why I Am Opposed to Standards

Jeffrey Kane

Who could be against educational standards? Would we deny that standards are valuable in various professions from medicine to electrical contracting? Care to visit a doctor ignorant of anatomy? Would you want to turn on the light switch installed without regard to the electrical code? These questions are rhetorical only because we recognize the value of standards, or more precisely, the danger of *not* having them.

So ... we aren't opposed to standards. We lied.... So much for honesty and integrity! Establishing and maintaining standards are essential to our protection and overall well being. They embody and codify our values—in some cases, our ultimate values—that guide us in our work and against by we measure the worth of our efforts. We value our health and insist that those who provide us with medical treatment share that value operationally by acquiring and maintaining the knowledge and skill we believe necessary to support or restore our health. The particular bodies of knowledge and skill may differ depending upon the root beliefs that shape the cultures in which they are embedded (evidence the radically different medical standards East and West), but the value of our physical well-being transcends the rules and regulations we choose. In electrical contracting, the value of property, and hopefully, the higher value for human safety, generates the need for standards. The knowledge and skills we require, the codes, etc. that we establish are in large measure of function of our commitment to the values we hold.

Standards are an expression of underlying values. Standards are means not ends. The question we ask is what values underly the standards being set in education. Just what are the ends we seek? Here, the myth of the "objective" or "authoritative" nature of the standards begins to unravel. One may ask, do we not all want children to learn to read? Perhaps, but at

what time in a child's life, at what pace, in what way? Do we value learning to read at the expense of healthy child development? Many of us would rather seek a balance—a balance that will vary depending upon our beliefs and values.

It is in this respect that I oppose standards in education. The beliefs and values underlying the knowledge and skills we would have children learn in a standards-based school are antithetical to my own worldview and ultimate commitments. I do not value the development of the intellect except as an outgrowth of the development of a perceptive imagination. I do not value abstraction except as derived, in time, from the experience of the meaning that runs through and unites all things. I value childhood as childhood. (Culturally, even as children have been made more aware of sophisticated issues, adults are seeking the childhoods they never had.) I value a sense of belonging over authority, of gratitude over power, moral responsibility over "free agency." These are some of the origins and aims of the educational "standards" I hold.

I am left cold by the abstract intellectualism of contemporary education. The subjects we teach are stripped of context and meaning. The pervasive model of knowledge is pragmatic—knowledge is a tool. For me knowledge acquired with imagination and lively activity can be a source of insight and inspiration. Knowledge acquired in this way can truly be educative, an opportunity to draw forth what is deepest in us, what most connects us with the world and one another. As we learn, we have the opportunity not only to acquire information, but also to undergo transformation—to grow and become.

I am well aware that such ideas may be dismissed as romantic reverie. However, such a quick dismissal is not the consequence of a hard-edged clarity of mind but of a muddled understanding of the limits

of reductionistic thinking—the very abstract intellectualism that is the standard of thought in our schools. We are deceived if we believe the standards we set are in any sense more objective than the ones I hold.

The standards movement in this country was born not of insight into child development, learning, or teaching, but of the corporately driven agenda to use the failing American economy of the late 1970s as a lever to generate a more productive workforce and robust consumer market. The notion that the American economy was a victim of an educational system generating an insufficiently productive workforce was never examined. The American workforce was the most productive in the world then, and so it remains today. Our chief economic competition and models of educational reform models we revered in the then-emerging “information age” of the late 70s were found in countries like Japan and Germany. The fact that the American economy has experienced unprecedented growth for more than a decade while the Japanese and German economies have suffered recessions has not led us to question our assumptions. Consider that during these same years, our efforts at educational reform have not yielded any significant increases in the measures used to assess the quality of our students’ achievement. If our educational system was indeed at the source of our economic problems, why was the *failure* of reform accompanied by the enormous *growth* of our economy? Our only success in reforming education has been in making schools into marketplaces where computers

can be sold and discarded as obsolete in two years, where tests can be marketed and test preparation services hawked, where public schools themselves can become proprietary institutions. When we ask again, what are the *values* behind the educational standards movement, what are the ends we seek, we have our answers.

I oppose the mechanistic view of education and am greatly distressed by the prospect that government at all levels is becoming more sophisticated in enforcing this agenda. There is little, if any, evidence that standards improve student learning over the long term and little research into the anxieties and social inequities standards will (and have already begun to) bring about. It is my view that children are being stressed unnecessarily rather than nourished and that we will see children grow more lost and vacant to the degree our standards-driven policies and reforms take hold. I believe that the standards movement will create greater social/economic inequity: The standards we enforce will have a negligible effect on middle and upper class children, but children living in poverty, children socially shortchanged by society—because of race and language—will not receive the resources they need to succeed. Their failure is inevitable.

So, I am against standards, and I do not wish to debate the specifics. My underlying values, beliefs, and aims are at issue. Discussions of the particulars will only obscure the fundamental problems. Compromise is co-optation.

EDITOR SEARCH

Encounter: Education for Meaning and Social Justice has begun a search for a new editor-in-chief to replace Jeffrey Kane who has decided to hang up his red pencil with the December 2002 issue, after serving so successfully as Editor of *Encounter* since 1992.

The successful candidate will be an articulate proponent of the holistic perspective and social justice in education and be responsible for soliciting and accepting articles for issues of the journal beginning in 2003.

More information about the position and the nomination requirements may be obtained by visiting www.great-ideas.org/search.htm. The deadline for nominations is December 1, 2001, and we expect that Dr. Kane's successor will be announced in the Spring 2002 issue of this journal.

Problems Old, Problems New

Reconciling Heart and Mind

Thomas W. Nielsen

Because it offers an antidote to materialism, fear, and separation, the holistic perspective is important not only for the renewal of education, but also for our own survival.

There are today numerous voices calling for a secular education that caters for the whole person, irrespective of background and religious stance (Dalai Lama 1999; Glazer 1999; Miller 1999; Orr 1999; Palmer 1999; Gatto 1997; Neville 1989). It is a call for schooling that is able to unify the apparent disconnection in contemporary Western society: believer versus nonbeliever, conservative versus liberal, fundamentalist versus moderate, spiritualist versus materialist (Glazer 1999, 1). The struggle, as Glazer puts it, comes down to a split about how to deal with the painful and personal sense of separation that threatens to tear apart not only individuals and schools, but "...the living fabric of our world as well." To heal this struggle, Glazer argues, education must neither be rooted in church, state, nor politics, but in the inner experience where the apparent duality of "sides" meet.

World history has seen both religious and materialistic rigidity when individuals try to understand life, a rigidity that has not escaped education, for, as Dewey (1916; 1938) often pointed out, education is but a reflection of social life in any era. In medieval times, for instance, when the human being was quite susceptible to the world of feeling, a somewhat "spiritual" perception pervaded; yet, the ability to reason was not developed sufficiently to discern the spiritual from the superstitious (Warneke 1998; Steiner 1928). In contrast, the era of modern science (1600-) and the Enlightenment (1700-1800) developed the human intellect to great heights, but this focus on rationality has diminished the connection with feelings and the power of intuition (Sworder 2000; Oldmeadow 1998; Neville 1989).

But this need not be the case anymore, according to this new call for a holism in education. While narrowness may have been an inherent part of human

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evolution and somewhat appropriate in the epoch in which it occurred (since that which is narrowly focused on often is learned to near perfection), we now realize that such a limited view of the world seems inadequate (Glazer 1999). Views that behold life only from a particular and exclusive angle are partial views, views for which we now must find their rightful place within the whole. In education that means understanding how we can educate holistically.

Holistic Education

The very nature of holistic education starts from the premise that every part belongs to the whole, and that it is only when each part is recognized and seen in the light of its connection to the whole that we come to understand its essential meaning and function (Goethe 1997; Froebel 1994; Hesse 1991; Steiner 1928; Richter 1820). Holism in education, therefore, not only promotes the union of thought and feeling, rational and aesthetic learning, but becomes an encompassing principle for the entire school experience. For example, in holistic education the subject-disciplines are not seen as separate fields of study, but as interconnected and interdependent parts of learning. Content is taught by integrating subject matter into a thematic approach, and emphasis is placed on letting the disciplines support each other to assist the acquisition of meaning in children's everyday life. Holism in education is a philosophy in which content and process, rationalism and imagination, matter and spirit, are viewed not as opposites discrediting each other's existence, but as compatible parts of a continuum which is the whole (Goethe 1997; Froebel 1994; Hesse 1991; Steiner 1928; Richter 1820).

One may ask if this stance is indeed not just another educational theory among the multitude of others, many of which claim supremacy in one way or the other. But the important point to note is that holistic education tries to embrace apparent opposites. Celebrating the mystical side of life, for example, does not negate learning about the non-mystical side. The Enlightenment thinkers' view of education, in contrast, negated the mystical side of life because of its own pragmatic position. The aim of holism in education is indeed that of reconciling the different dimensions of human experience—dimensions that

so often have been, and still are, believed to stand in opposition to each other.

The synthesizing nature of holistic education may also be illustrated by looking at how the ancient Greeks formulated the problem of education. They asked: how can we really learn anything? Either we know already what we are after, or we do not know what we are after. In either case learning is impossible: in the first scenario because obviously we cannot learn something we already know; and in the second, because we cannot find something if we do not know what we are looking for, nor would we recognize it should we stumble over it by chance.

This argument, Dewey (1916) observes, is a nice piece of formal logic, but at the same time an example of the Either/Or tendency in educational philosophy. The argument assumes that the human being is either completely knowledgeable, or completely ignorant. Neither, of course, is the case, an observation that emphasizes that learning is a process by which we move from ignorance to knowledge. Learning is a motion between ends, between the many facets of human experience. It is this process that holistic education aims to embrace for the sake of true learning, not for the sake of carving out its own philosophical niche.

The Holistic Tradition

Although reformational in tone, the present call for holism is not new. A holistic view to education, despite being secluded and esoteric at times, has a long tradition of profound thinkers and educators supporting its philosophical roots (Yonemura 1989). These thinkers may have been labeled as progressives, idealists, mystics, or romantics, and most of them in fact never used the rather modern term, *holistic*, in connection with their ideas (Miller 1997). But what they all shared with the present call for more wholeness in schools was a belief in the necessity of viewing the pupil as more than mere intellect.

For example, Socrates and Plato, the forefathers of the rational reasoning we treasure so highly in our Western society, believed over 2000 years ago that teaching essentially is the art of "tending the soul and its vehicle"—the whole person (Crosby 1981, xx). Through certain questioning, they believed, the teacher can assist pupils in reaching latent universal

truths within themselves. That the student is able to reach such conclusions without prior experience, was to Socrates and Plato proof of the soul's pre-existence before birth, and thus an incentive for having a spiritual-holistic view to education, as well as seeing knowledge as intimately connected with virtue.

Quintilian, a teacher of rhetoric in ancient Rome, saw teaching as a cardinal liberator of the soul within each individual, a tool for "divine integration." Contrary to earlier methods of Roman education, which were rough and mechanical, Quintilian advocated individual treatment of children, allowing for their personal interests to influence teaching directions (Bisgaard and Torp 1996, 153-154). Education should be fun, he believed, and it should embody a holistic and compassionate pedagogy, in which the "heart" is nurtured in the child and taught from by the teacher.

Thomas Aquinas, who worked to reconcile the division between faith and reason in the Middle Ages, believed that learning and knowing draw upon spiritual inner experience, as well as intellectual processes. He did not believe that faith could replace knowing, nor vice versa. Rather, he believed that there is no inherent conflict between the two (Bisgaard and Torp 1996, 158-159). Through active participation, based on informed reasoning, Aquinas argued, students would be better equipped to explore the divine dimensions of life, which, to him, was the most rewarding goal for the pupil.

Desiderius Erasmus, Renaissance humanist and educator, saw the teacher as a metamorphosis of "the Christian Prince," imbuing in the pupil the virtues and goodness of spirit (Gutek 1991). Most interested in reforming the pedantry and emphasis on nonessential features in grammar he had himself experienced at first hand, Erasmus argued that teaching be brought back to "essences." And because affection and devotion was seen by him to be the first step towards effective learning, he argued that the teacher must in himself be a model of the integrated life (Bisgaard and Torp 1996, 182-186).

Johan Amos Comenius, advocate for more critical and independent learning in schools, saw education as the primary institution for nurturing children's innate goodness and moral integrity (Bisgaard and Torp 1996, 162-163). Revolting against the Middle Ages' emphasis on book learning, he maintained that

children, in addition to books, should learn how to read the basic principles in life. In nature, Comenius argued, the real truths about life—those that induce joy, beauty, and wholeness—are found.

Especially in the 18th, 19th, and early 20th centuries, thinkers like Rousseau, Johann Goethe, Jean Paul Richter, Johann Pestalozzi, Friedrich Froebel, and Hermann Hesse exemplified a noticeable movement towards holistic procedures in teaching. Although having very different backgrounds and coming from very different walks of life, they all believed that there is an intimate link between children's imaginations and their souls. Accordingly, they advocated the necessity of nurturing children's creative spheres to cultivate their moral and spiritual growth, and thus their general development as whole human beings.

The early 20th century saw Maria Montessori bringing the holistic approach she had developed as a doctor into education, viewing children as heart and soul, body and mind (Yonemura 1989), while at the same time John Dewey rejected any split between the practical, factual, and aesthetic domains of children's learning. Even though Dewey did not share Montessori's purely "spiritual" premise, they both argued that all of the child's senses are of utmost importance to his development. In fact, given the right experiential learning environment in which the senses are activated and stimulated intelligently, they both argued that the child's intellectual, emotional, and spiritual/aesthetic domains are harmonized and integrated.

But the late 19th and early 20th centuries also saw an educator who, perhaps more than anyone else, expanded the concept of holistic education (Miller 1997, 167). Rudolf Steiner, especially drawing on the work of Goethe, and H. P. Blavatsky, the founder of Theosophy, constructed an elaborate spiritual "science" (known as Anthroposophy), which was to become the basis of his educational ideas. Steiner saw the concept of "imaginative teaching" as central to the child's self-actualization. Through imaginative teaching/learning, Steiner believed the door to the child's inner, genuine self and potential was opened, enriching not only his personal life, but steering him towards meaning and purpose in the world. Imaginative teaching was to Steiner the way to bridge the

gap between the child's material world and the "other" world, bringing wholeness and completeness.

Anthroposophy, meaning "wisdom of the human being," in many ways also encompassed the key holistic ideas of the 18th and 19th centuries, such as Rousseau's secular humanism, Goethe's commitment to constant change, Richter and Pestalozzi's deep humanity and compassion, Froebel's appreciation for mystery and symbolism, and Hesse's call for universalism and synthesis. In other words, Steiner's thesis embodied a complete theory, the application of the holistic perspective to education. When Emil Molt, the manager of the Waldorf-Astoria cigarette factory, took notice of this formulation after the laceration of World War I, he asked Steiner to provide education to his workers, who requested him later to educate their children instead (Yonemura 1984, 60). Waldorf education, as it later was called, would grow into one of the largest independent education systems in the world today, renowned for providing an environment that caters for hands, heart, and head (Mazzone 1999).

The belief that teaching must attend to multiple facets of human experience has always been common to a holistic view of education. Like his visionary predecessors, Steiner saw children to be in need of more than intellectual development. Steiner, however, following and drawing upon the holistic tradition, has proven particularly significant to the development of a holistic educational philosophy and method. Because of Steiner, holistic schooling is no longer esoteric, hidden in the records of time (Mazzone 2000; Kaltenbach 1999; Yonemura 1989; Edmunds 1979). It is here, practiced, and available for those who wish to study it.

Problems Old: Modern Science as Totalitarian

One might ask why one should study the legacy of Steiner and the holistic movement, since mainstream education appears reluctant to explore the mystical and spiritual side of life (Glazer 1999). Is there indeed something missing in teaching if it focuses primarily on the tangible side of life, on facts and reasoning? After all, is reasoning and rationality not the ground of learning, the nourisher of cultural progress and achievement?

If we consider our educational practices in historical perspective, the predominant emphasis on rational and concrete modes of learning certainly cannot come as any surprise, nor can it be seen as accidental. Rationality and reasoning are based on the authority that modern science has enjoyed in the modern era, beginning with the Scientific Revolution in the 1600s and gaining strength through the following centuries (Schuon 1965). When Friedrich Nietzsche proclaimed that "God was dead," and that people now had to face the world as it is and not "look towards the heavens for a fictional reality," his words exemplified the major shift in authority from religion to materialism that had taken place in the Western consciousness (Oldmeadow 1998). Suddenly it was accepted (and reasonable safe) to believe that the existence and mechanisms of the universe can be accounted for in a strictly material and empirical fashion, which further elevated the status of scientific modes of inquiry and learning.

But the contrast in consciousness between belief, feelings, and imagination and that of disciplined knowledge, facts, and thinking can be traced beyond the birth and development of modern science. Ever since the first educational institutions appeared on the European continent a thousand years ago, reason for its own sake has been strong in the Western mind. Before then, many churches and monasteries served as educational institutions, "looking after the development of the good heart" (Dalai Lama 1999, 86). Religious establishments maintained this responsibility after the rise of these new schools, but educational institutions were now given free reign to focus on the knowledge side of things, to foster intellectual development (Dalai Lama 1999, 86). Reconciling the disconnection between reason and faith was to be attempted many times, most notably by St. Augustine and later Thomas Aquinas; still, the distinction between the spiritual/aesthetic life of the individual and that of her reasoning flourished.

The separation of mind and heart was further nourished in the 12th and 13th centuries in southern Europe with the translations of the philosophical works of the classical Greek writers Plato, Aristotle, and Euclid from Arabic to Latin (Merson 1999, 73). With the establishment of the great universities of Paris (1167), Cambridge (1209), Padua (1222), Naples

(1224), and Salamanca (1254), these writings, with their emphasis on rationality and observation, spread rapidly throughout Europe (Merson 1999, 73). The worldview taught by the church fathers, in which God, the creator of all, and the earth, his creation, were seated in the center of constellations of stars, began to be seriously questioned. Interestingly, it mattered little that these classical writings also contained a spiritual assumption. Aristotelian logic and the injection into the medieval world of reasoning derived from the Greek philosophers' writing in general, primarily served to create real doubts about "reason" as provided by the Church.

In the centuries that followed, it was only a short step to direct the focus on God's dispassionate "reason and "logic"" onto the universe itself (Merson 1999, 73). By the same path that had brought Aristotelian logic to Western Europe, Fibonacci introduced Arabic algebra and Indian numerals in 1202; and when combined with Euclidean geometry, these tools of mathematics were to prove calamitous for traditional cosmology (Merson 1999). Three centuries later, when astronomers were able to use these mathematical tools with enough accuracy to develop hypotheses about the cosmos that could be tested numerically, the Christian view of the universe crumbled. Copernicus's *On the Revolution of the Celestial Spheres*, saw the hierarchical picture of the world created by the Church tumble to the ground (Merson 1999, 73-74). The sun did *not* go around the earth; in fact, the opposite was true. God, it seems, was removed from His own creation.

But the establishment of the modern scientific view of the world had an impact greater than the legitimization of the distinction between reason and faith. When the Church seemed to finally accept, and even in some circles to appreciate, the merits of modern science, an amateur biologist arrived on the scene. With his studies and the subsequent publication of *The Origin of Species by Means of Natural Selection*, Charles Darwin in one blow not only deepened the cleft between faith and modern science; he also validated leaving divinity out of the equation altogether (Merson 1999, 76). Darwin's theory claimed that the evolution of animals and humans occurs by itself through a process of natural selection. There was not much room for divine intervention in this

line of thinking, and if a deity had *any* part in the creation at all, nature certainly seemed to have taken control (Merson 1999). Modern science was no longer merely a new friendly neighbor to the Church, trying to illuminate the faithful but ignorant mind; it now provided significant material to suggest that the world was governed by natural laws that only scientists could explain.

From revealing the laws of nature, it seemed only a natural continuation when Sigmund Freud put forth a theory that our behaviors hardly have anything to do with grace or divinity, but mostly are a mask with which we disguise our crude self-interests (Merson 1999; Oldmeadow 1998). The very same reproductional instinct that Darwin accredited to the survival of the fittest, Freud now explained as the underlying drive in all our actions. The attempt to relate to something beyond the material self, any inner or divine dimension, suddenly seemed, as Freud indeed argued, pathological, a failure to commit to reality. Accepting the mechanics of the exterior and social world, as presented by these new disciples of modern science, meant that not only had the existence of divinity or sacredness as a deity become remote but that the human aspiration towards it was illusory.

Nietzsche's words that "God is dead," therefore, are significant not only because they symbolize a culmination of a gradual separation between modern science and religion, reason and faith, but also because they symbolize the birth of modern science as totalitarian. The notion of science and the notion of spirituality were no longer merely separated, made distinct: One was claimed to be illusory by the other. It was not that Nietzsche meant that God had lived and now was dead for some strange reason, and therefore presumably could return again; what he meant was that the *possibility* of believing in God finally was dead (Oldmeadow 1998). God had never lived, apart from as a figment of human imagination, according to Nietzsche. The knowledge and findings of modern civilization had proven that there is nothing deep down in us, or above us, except what we have put there ourselves.¹

Thus it is also hard to blame schools for adopting a scientific and rational attitude in the classroom, because it is inescapably linked to at least a thousand

years of increasing authority bestowed on modern science as an encompassing worldview. It can, of course, be maintained that various movements of progressive and liberal education movements effectively questioned whether modern science as a worldview can be applied directly to schools, but, as Neville (1989, 10-12) argues, no matter how many diversions from the general trend we have seen in education, we must admit that modern Western society sees Apollo—the god in Greek mythology who governed the rational and scientific mind—as the ideal towards whom the school pupil should aspire first and foremost. Although not prevailing totally, modern science has become, as Merson (1999, 73) put it, “the pretender to the throne of cosmological certainty.”

Towards Postmodern Insights

No matter how beneficial modern science has been, it becomes, like any other discipline, insufficient if it excludes other modes of knowing, or in the case of education, other modes of experiencing (Schuon 1975; Northbourne 1963). Given the insights of postmodernity (Merriam 1998; Waks 1998; Blumenfeld-Jones 1995; Crump 1995; Eisner 1991; Guba 1990; Brockley 1976), the viability of still using scientific inquiry as the *exclusive* model for knowing should be critically reconsidered. The emergence of post-positivism informs us that “scientific knowing” is only a mode of inquiry, not synonymous with the merits of inquiry itself. A musician can hardly be said to rely on logic or facts in writing an inspired song, any more than a painter when creating a painting; and thus our grounds for considering science as *the* standard mode of knowing disappears. Even in modern scientific thought it has become accepted that scientific inquiry, albeit set in a systematic inquiry regime, partially relies on creative thinking, intuition, and sometimes guesses. In any case, there are many modes of knowing (Gardner 1983), none of which by itself can be said to describe inherent worth or be universally applicable; such modes are entirely dependent on the human ability, intention, and values behind them to measure their worth.

In other words, if modern science forgets the original ideas of Copernicus, Galileo, and Bacon—which were never meant to exclude the intuitive, abstract, or spiritual/aesthetic dimensions of life (Oldmea-

dow 1998; Northbourne 1963)—it becomes totalitarian, unable to understand the compatibility of its own findings with other viewpoints. Galileo hoped that looking at God’s creation through the lens of science would make humans better, wiser, and more tolerant towards each other (Merson 1999, 76). Plato and Aristotle never excluded a spiritual/aesthetic dimension, but aimed to elucidate for the sake of understanding the relationship between matter and spirit (Oldmeadow 1998). The holistic movement of the 18th, 19th, and early 20th centuries, as exemplified by Steiner, Goethe, Richter, Froebel, Hesse et al., advocated the use of empirical science, but saw creativity, mysticism, and symbolism as additional ways to interpret the world. The claim for supremacy has not come from those who launched, or understood the use of, the scientific method, but from those who for various reasons have paid homage to modern science as an exclusive worldview, and not the tool among other tools it was meant to be.

But realizing the incompleteness of an exclusively modern scientific view of the world does not mean that schooling today should be based on a particular set of religious beliefs or on another exclusive mode of knowing. There is a call today for a holistic, secular stance that embraces the human diversity that is so apparent in today’s society. Moreover, in line with this present call, it should be noted that the question of whether or not a purely spiritual reality is accepted or not, or whether one mode of knowing is preferable to another, is fundamentally not an educational concern. The real question is whether or not we will allow education to be open to the wholeness of life, including its non-rational, non-concrete, and non-tangible aspects. The danger of any attempt at exclusive categorization to aid educational theory is delusive and will only spark more separation. As indicated above, such categorization, while intending to help us understand knowledge and knowing, is more likely due to philosophers’ desire to chisel out their own niche. To the point: Regardless of whether or not a purely spiritual dimension exists, unquestionably unseen worlds—creativity, thoughts, feelings and spiritual-like or aesthetic dimensions—exist in a child, which cannot be approached sufficiently through scientific, rational, or factual learning activities.

Dewey, for instance, although converting from a religious to a more pragmatic and scientific orientation as he grew older, always emphasized that some of our most profound learning as human beings involves that inner part of imaginative, spiritual-like or aesthetic experiences that deal with the meaning and purpose of our lives. To have an aesthetic experience, according to Dewey (1934), is to depart from the observable and objective to the ineffable and subjective; it tells us about love, truth, and the beauty of life; it helps solve the pseudo-problem of the existence of another world and aids us in making sense of the material world through our imagination.

Hence, whether or not a spiritual world truly exists is a matter for individual exploration; education does not have to take a stand, only *allow* that exploration is able to take place. Where scientific experience could be said to start in wonder and end in understanding, spiritual, aesthetic, creative, or imaginative experience departs from what is being understood and ends in wonder. This is not to say that the creative or imaginative experience is not a way of interpreting and understanding life, only that there is a definite need for experiences in schools that stimulate the wonder of life as well as the known, especially since we do not, and cannot, know all. The true legacy of holistic voices of the past (Goethe 1997; Froebel 1994, Hesse 1991; Steiner 1928; Dewey 1916; Richter 1820) and present (Glazer 1999; Miller 1999; Orr 1999; Gatto 1997; Neville 1989) is that the truth about life may be relative or fixed, mundane or divine, but whatever it is, it ought to be sought with all our faculties.

Problems New: The Modern Impasse

The need to nurture the whole person seems all the more important in our modern world, where it is useful to neglect the spiritual/aesthetic experience and ratify learning that has an immediate material effect or benefit (Glazer 1999; Gatto 1997; Neville 1989; Rugg 1963). In line with the misconstrued submission to modern science as a worldview, education is today, according to many commentators (Glazer 1999; Gatto 1997; Suzuki 1997; Neville 1989), generally geared towards developing factual or technical competence for material or vocational purposes, and not so much for the independent self-actualization of

the individual. Many countries would probably claim that their educational programs aim for their students to achieve self-actualization, but it is not the self-actualization to which the founders of holistic education refer. From a holistic perspective, modern

There is a gap between what some say should go on in schools and what actually happens, and there are indications that this might be so because education as a whole does not truly possess a conception of the whole human being.

Western society as a whole does not have a sufficient conceptualization of the internal nature of human beings and their place in life. Consequently, according to this perspective, the goals we set for education do not result in true self-actualization, but only vocational or economic development. Whether we agree with any perspective will, of course, always depend on whether we share the underlying values on which the theory is based. However, if we are willing to consider the holistic perspective, we must acknowledge that education in the Western world today is built upon something other than holistic values.

True, the 1970s and 1980s manifested an inclination towards child-centered, student explorative, and experiential learning in the schools. Yet, the 1990s, with its focus on accountability, measurable outcomes and performance, captured the schools' curriculum to suit a generally materialistic society (Glazer 1999; Woods 1999; Gatto 1997). Today many countries have established various forms of accountability to raise the efficiency of schools, and in some cases, they are invested with the power to close a school if it does not perform satisfactorily (Woods 1999). While undoubtedly raising standards in some areas, such systems necessarily rely on primarily observable and measurable learning outcomes, some-

thing largely incompatible with the realms of imagination, creativity, and spirituality/aestheticism. Music and art are usually seen as important, but often only because they serve as a diversion, a period of rejuvenation, a break, from "real" studies, which must be mastered and measured at the end of the year (Neville 1989, 16). Measurable, visible growth is favored—and preferably as fast as possible.

Certainly, as Parringer (in Crump 1995, 209) points out, the student of today needs to meet the requirements of a multi-levelled technological society in order to be able to prosper in it. Yet, work, material welfare, and the technological and factual skills needed to acquire it, should not be the only concerns we have for our children's future. As Gatto (1997, 13) notes, we live in a social crisis where "we seem to have lost our identity and our way." Society is geared towards economic growth and the constant consumption of goods, which in turn requires more economic growth, *ad infinitum*. In this narcotic economy, and the cosmetic shallowness of advertisement and entertainment that sustains it, we have adapted well to the material reality, but we seem to be moving further and further away from a spiritual/aesthetic reality. The teenage suicide rate is rising, along with the percentage of divorces (Gatto 1997, 13). Antagonism, friction, and turmoil are everyday news all over the world. Our natural environment is breaking down under our material consumption and economic growth. The questions arising from looking at the crisis of our present-day world are too numerous to mention. But what should be said at this juncture is simply that an examination into more holistically viable procedures, and especially Steiner and the holistic movement's call for educating children to find the meaning and purpose of life as a whole, seems appropriate.

It should also be noted that an updating of these holistic foundations is appropriate if only because admirable philosophies written many years ago demand revision and empirical qualification with those whom it purports to serve. The original timing and setting of the holistic movement were quite different from that of today. The fact that major sources of input for children today are computers, shopping malls, and consumer culture, as well as the fact that Australian culture is different from the European

and American culture in which the holistic movement took shape, constitute a rationale for reevaluating the holistic voices of the past.

It should also be noted that, compared to the magnitude of traditional educational research available, few students have in fact sought to validate, empirically and academically, a holistic and philosophical position like Steiner's. Furthermore, the studies that do exist on holistic philosophies are claimed by some (Petersen 2000) to often be circular and mere recitals, contributing little to an informed acceptance or disapproval of the holistic proposition by mainstream educators. Although Steiner and others have contributed significantly to the subject, a holistic view of education has been, and still is, largely confined to the particular educators and schools within the stream of alternative education.

Hence, new research into the foundations of the holistic movement, seems important not only as an approach to the many problems of our postmodern world, but also because such research is inductive, having the potential to shed new and empirical light on a not so well documented area of educational philosophy and practice.

Facing Our Fears

Apart from updating and enriching our scarce shared knowledge of education, there are other more subtle, yet very significant reasons why studying Steiner and his educational philosophy and those who think like him are relevant. The undeveloped concept of "being whole" lies, according to the Dalai Lama (1999), Glazer (1999), and Palmer (1999) *at the heart* of the problems of our time. To them there appears to be a correlation between the lack of fully understanding the place of wholeness in our lives and the many dilemmas facing our postmodern society. Why are some people afraid of holism and spirituality, not only in schools, but also in life in general? What is the reason behind the apparent paradox that a minority is advocating that understanding the wholeness of life is a necessity for happiness (Dalai Lama 1999), and perhaps even survival (Oldmeadow 1998), while a majority knows little, and at times do not even want to know, about the unseen parts of life?

Glazer (1999, 1-3) suggests that people are afraid of spirituality in education because they are con-

cerned about the indoctrination of particular beliefs, values, and habits. They fear the imposition of identity, the “filling up with beliefs prior to having actual experience” (Glazer 1999, 2). While rooted in a reasonable concern—and the voice of holistic education is indeed advocating that preconceptions should never replace genuine experience—the fear of imposition has created an indiscriminate abandonment of the inner world in schools, Glazer argues. And once we forget to look to the inner world of resourcefulness, Glazer continues, our sense of well-being and confidence become fragile. Feeling incomplete, we search for something outside of ourselves that can only be found within; and unsure of what or who we are, we tend to be hypersensitive, overcritical, and even defensive (Glazer 1999, 13). In such a state of being, it is easy to judge the world as being made up of only matter, and that such matter is free to be owned, manipulated, and consumed. In the absence of wholeness, we are driven from a feeling of lack—which is really a feeling of disconnection and separateness—towards consumption and materialism (Glazer 1999).

Supporting Glazer’s comments is the fact that holistically inclined psychologists (Govinda 1997; Jung 1991; Peck 1983) often argue that fear is the root of all resistance towards the unfamiliar. The fear of what one does not know, what one cannot see, what might involve change, can manifest itself in unwillingness to ponder any aspects of the unknown, the unseen, that that might transform. As a result, a natural, though misconstrued, wish to preserve a belief structure that only includes the material, physical self, that which one knows and has at least some apparent control over, can occur, often accompanied by an overreaction against anything that might challenge the status quo. This overprotection against other viewpoints is, of course, not confined to materialists (just refer to the experience of Copernicus and Galileo). But even though such “protection” may be a common, human defense mechanism against change, the important variable to recognize is that it is only so if one does not *want* change. As we noted in the previous section, the problem is not having different viewpoints, whether one is a materialist or a spiritualist, but having a viewpoint that is not susceptible to change, and thereby not open to *other*

viewpoints. For if we do not want change, we will not only abstain from seeking it: We will actively suppress it. The problem is not modern science itself but when it becomes a belief system that has become totalitarian.

It is from this perspective that the paradox of a majority not knowing, or wanting to know, the foundations of another world, and a minority advocating the necessity of doing so, seems less of a paradox, and perhaps even more important to unravel. In this line of thinking there appears to be a mutual relationship between the problems of our time and the scarcity of research into holistic foundations. It may in fact be a vicious cycle in which fear is the instigator and that the object of that fear is possibly its only healer.

Education is But a Reflection

And, of course, to teach holistically in a society that at heart has not managed to break such a cycle of fear, requires courage. There are evidently many excellent teachers who appropriate a curriculum geared towards material and factual ends so that it caters for the whole child (Woods 1999). Yet, if the collective view of the world does not support viable movement in this direction, it is understandably safer for teachers to fall into line than to stand out. As Carr (1995) notes, it is much easier to teach in the safe traditional way, whereby the teacher caters primarily to the child’s intellect, than to try to stimulate a youngster’s aesthetic/spiritual dimension against which there is much resistance.

In fact, schools themselves often fail to carry out the philosophical ideas that they say they are based on (Carr 1995). Many school charters do indeed articulate statements pertaining to an intent of catering to the whole child; the only problem, seen from a Steinerean perspective and holistic education, is that a genuine conception of the human being and life’s purpose is lacking, and therefore the intentions can never come to fruition, no matter how genuine they may be. As a result, for individual teachers to *really* implement the educational philosophy that schools often say is desirable, is to risk ridicule (Carr 1995). As soon as a teacher steps outside the norm—so saturated with an emphasis on measurable and factual knowledge that has to be learned by the end of the

year—she cannot work towards the accountability to which she is held responsible by society at large.

However, from a holistic perspective, the problem for many contemporary teachers is indeed that the notion of accountability is built on something other than a genuine understanding of the human being. In line with the materialistic, modern scientific worldview, teacher accountability is leaning more and more towards a simple measurement of what children have accomplished at the end of the year (Woods 1999). In such a view, the teacher's responsibility as a teacher is met when identified learning outcomes—most of a solely observable nature—have been ticked off on each child's personal record. In other words, the one-sided learning outcomes we want for children at the end of the year may simply not match the learning objective of assisting the child to develop the wholeness, that is so often found as an objective in school charters. Education as a whole values immediate and observable gains, not understanding that what we sow with imagination and soul in children's hearts, we are not able to reap, to tick off, at the end of the year.

Steiner (1928; 1947; 1974), for example, often stressed that the pictures we as teachers paint in the child's mind and heart do not necessarily pay us back with immediate evidence that we have done well. What is imparted as an image to the imagination of the child, he argued, will remain latent until it is brought to consciousness again when the course of life events stimulates that particular recollection—and this line of continuity may stretch far beyond the years of schooling. The adult then recognizes through his own life experiences what was only perceived as a feeling or thought in childhood, Steiner argued, and thus he comes to find personal truth out of life itself. But this only happens when one is able to draw on what has been absorbed in the past. Life is not a string of broken segments, but a whole in which the schoolchild and the adult are the same, connected to each other by the continuity of experience (Steiner 1928; Dewey 1916). What we as educators should be careful about, according to holistic voices from the past, is to think that our accountability—and potential—as teachers relate only to the short moment of a child's life where it is in our care.

Thus, there appears to be a gap between what some say *should* go on in schools and what *actually* happens, and there are indications that this might be so because education as a whole does not truly possess a conception of the whole human being, nor understand that the child is such a human being, only given to us in the initial stage of his or her life. And since we generally do not understand the child's full being, it is argued, we assess him or her entirely by narrow, observable measures that are only applicable to the world of here and now.

Can Schools Change Anything?

Having detected a possible connection between the scarcity of research into holistic foundations and the problems looming in society at large, the question that must be asked is whether education really has anything to do with the core problem. If the root problem is indeed a spiritual/aesthetic crisis, is it not a resolution of this that shall solve the problems in education and not the other way around? Put another way, what good is research into holistic teaching going to do for education at large, when the problem needing resolution may in fact be found outside education, in societal and cultural values and attitudes?

Now, we know that education is but a reflection of society, that society has a substantial influence on education. Changes in social norms, values, family structures, and the increasing impact of technology have all challenged the education system with new demands (McInerney and McInerney 1994, 392). But what we must also realize in order to fully understand and appreciate the relevance of studying the legacy of holistic education, is that the relationship between society and education is reciprocal. The school is, as Sarason (in McInerney and McInerney 1994, 392) states, the main institution for socialization, because children are "the fundamental link of passing on the norms for social behavior, knowledge and moral values from one generation to the next." The school is not only a reflection of society; it is also a co-creator of it. As Dewey (1916, 3-4) put it, education is to social life what food is to biological life.

Consequently, the search for valid educational theories is in many ways an axiological issue reaching far beyond education itself. After World War II,

for instance, Americans tried to change what they considered to be undesirable characteristics in the Japanese society (the teaching and devotion of the emperor concept, etc.) by changing the school curriculum (Potts 1997). Before that, Adolf Hitler had not only used the Gestapo and SS to influence the German people through fear, but he had also changed the German schools' curriculum in order to indoctrinate Aryan nationalism and separatism (Palmer 1999, 19-20). In other words, schools are a means for change at large, good or bad.

Today, an axiology of education is no less urgent. As indicated earlier, it has perhaps never before been more important that we find values and understandings that are rooted in something other than progress for the sake of progress, in something other than self-focus for the sake of personal or national gain. More and more developing countries now possess weapons of mass destruction; new fields of molecular biology have given scientists the power to not only destroy whole ecosystems but also create new ones (Merson 1999, 76). It is in this dangerous reality that education is invited to realize its potential—as well as its responsibility. Schools can assist in the development of cognitive skills, which is valuable and noble, but what past and present holistic voices point out is that without these being connected to something other than the mind, to some type of ethical or moral base (whether we call this our spirit or heart), they are empty and often dangerous tools without purpose and direction.

Conclusion: Building Bridges

Because there are significant reasons to counterbalance the dominance that modern science as a worldview has gained in the last millennium, and the resulting overemphasis on scientific modes of reasoning and material ends in schools, a holistic view of education suggests itself as a tradition with which we may achieve such a balance in the new millennium. Although teachers and schools may in different ways exhibit wholeness, it has been suggested that it still takes courage to teach holistically because education at large is infiltrated by a somewhat reasonable fear that we do not want fixed values or beliefs prescribed for us, and because society appears to have renounced the aesthetic/spiritual part of our

lives. And since the problems of today seem concealed in a web of materialism, separatism, and fear, we can only hope to solve them if we are open to something beyond our exterior reality, whether that is of a spiritual nature, or simply, as Bertrand Russell once put it, a sincere aspiration to "be the highest we can be."

Links between a notion of science and a notion of spirituality have always been close. Both are concerned with knowing and ways of knowing, and in a way symbolize the quest in education to understand the ground of learning. But it is *between* these two polar ends, according to holistic foundations, that we must now find an equilibrium that is rooted in understanding rather than either/or tendencies. People are more than economic units, and in the absence, for most, of a societal institution which can encompass opportunities to explore the inner meaning and purpose of life, education must acknowledge its responsibility of connecting people to wholeness, to themselves, and to each other. Certainly, in the midst of the well-known trappings of life today—competition, intellectual and religious combat, obsession with a narrow range of facts, credits, and credentials (Glazer 1999)—the need to build bridges seems ever more urgent. The legacy of the holistic tradition might be one such bridge.

Endnote

1. That Nietzsche in fact attacked both modern science and religion seems to have eluded those on whom his words took strong hold; for in effect, his contributions to the philosophy of religion assisted a departure from religious views to that of a more modern scientific stance (Oldmeadow 1998).

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The Story of Their Lives

Understanding Our Students' Literacy Practices and Events

Linda S. Bausch

The literacy paradigm currently used in schools needs to be expanded to incorporate the life-literacies of everyone in the classroom.

The premise of this paper is that learning to investigate and honor students' shared understanding of literacies, both in and out of school, by utilizing the knowledge they bring from sociocultural contexts holds great promise as an avenue of extending the literacy paradigm currently available to children in school. I believe any real improvement in the evaluation of the discourse of school literacy, with the advent of new state standards, is not likely unless the students uses of, and experiences with, reading and writing from within their lives, are given the same cultural capital, the same respect and honor, as the existing predetermined criteria for educational success.

If we want to understand how to build upon what our students' know and learn from our teaching, understanding and valuing practices within the students' life literacies, the literacies they negotiate on a daily basis, is a critical activity for educators. In everyday schooling contexts literacy has been associated with an individual's ability to read and write (Richardson 1998):

This view, which regards literacy as a set of asocial individual skills dislodged from their sociocultural moorings in human relationships and communities of practice, neglects the role and influence of situation, activities, and participants. (p. 115)

Within this reductionist model literacy becomes a set of skills for individuals to undertake reading and writing. Mistakenly, it is implied that once these skills are acquired early on in a child's life they are then seamlessly transferable without impediment across contexts and situation.

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I believe there are school literacies and educational discourses that are situated within the context of specific schooling orientations and it can be said that one must learn this terrain in order to negotiate the land. But, the amount of weight placed upon this specific discourse as the measuring stick of literate acceptability within a society, commits a serious injustice to the sophisticated ways in which the majority of society negotiates their everyday literacies.

My Experiences

From my experience as a classroom teacher, literacy specialist, and university professor, I have found that many educators state that all children can learn, but few really believe it. Previous teacher education usually focused on research that linked failure and socioeconomic status, failure and cultural difference, and failure and single parent households. When many teachers receive this kind of education, there is a tendency to assume deficits in students rather than to locate and teach to the strengths (Delpit 1995). To counter this tendency, educators must have knowledge of children's lives outside of school to be able to recognize their strengths.

Ira Shor (1992) explains that people begin life as motivated learners, not as passive beings and that children naturally join the world around them. "They learn by interacting, by experimenting, and by using play to internalize the meaning of words and experience" (p. 17). According to Shor, we are what we say and do. The way we speak and are spoken to help shape us into the people we become. "Through words and other actions, we build ourselves in a world that is building us" (1999, 1). The world, explains Shor, addresses us to produce the different identities we carry forward in life: Men are addressed differently than are women, people of color differently than whites, elite students differently than those from working families. Shor maintains that "we can redefine ourselves and remake society, if we choose, through alternative rhetoric and dissident projects" (p. 2). It is with these thoughts in mind that I began my journey into the *outside of school lives* of my students.

Throughout my career, as I walked through the halls of schools, I listened to the words spoken by teachers and parents. I thought about what they were

saying and what they meant by their words. I tried to guess what were the unspoken messages of their thoughts. I wondered about the lens through which learning was viewed and I wondered about their expectations of achievement, which are held up for their students and children to obtain.

"Look at her, she's an airhead, she'll make someone a wonderful wife." Britt, a brown haired, blue eyed third grader sat at her desk twirling a strand of hair around her finger as she looked at the math work sheet in front of her. There were ten word problems on the page. Britt has just begun to read the *Henry and Mudge* Series by Cynthia Rylant (1996). Her classroom teacher is very frustrated with her and often talks about Britt's inability to keep up with the class. Britt receives reading support in the remedial reading program four times per week and math remediation two times per week.

"This is Carly. She's in Rennie's class. Carly's the good reader. Rennie wishes she could read like her, don't you Rennie?" Rennie's mother was introducing Rennie's tutor to Rennie's friend Carly just before their reading hour together. Rennie was being tutored in reading and writing over the summer. She had not made enough progress in first grade and was considered to be "at risk" according to her teacher who cited the year-end testing battery as proof of Rennie's difficulty.

"Oh, Jamal can't read that. He can't read anything. He's just like his father." Jamal is sixteen and attending a military high school. He spends his weekends at home in the Bronx working with his father at his repair shop. Jamal does not like to read. He often complains when he is given his reading assignment and does not complete the work until after the due date. The work that is handed in is often minimal and does not give the teacher the sense that Jamal actually read the text. Jamal did become interested in one assignment. According to his teacher, he had to rewrite Edgar Allen Poe's *The Raven*, in "rap." Jamal handed that assignment in on time, and he offered to perform it in front of the class.

"Listen to that accent, no wonder he can't read." Jim's family is from Laos. They speak Laotian at home. The family was flown over from Laos through a community effort whose goal was to offer a safe haven for a refugee family in a wartime situation. Jim's im-

mediate and extended families have made their home for the past twenty years on Long Island. Jim's father was one of the last members to join the family and had lived on the streets of Laos for ten years. Education is very important to Jim's family. He will often share with Jim's teacher how his father viewed schooling in Laos and the physical consequences of not achieving acceptable grades. Jim is in third grade. He receives ESL support two times a week and remedial reading support four times a week. He is considered to be "at risk" for fourth grade, according to the district-mandated assessments, and testing by the Committee on Special Education Team in his school is scheduled for early in the next school year.¹

The Discourse of Schooling

There is a common thread that runs through these statements. It is a vision of schooling and learning and literacy understood by the speakers and which is expected to be achieved by the students. These descriptions of literacy learning, or not learning, are based on different underlying assumptions about *what counts as literacy* (Goodman 1999). These speakers are focusing on school expectations, not the other aspects of these students' lives outside the schooling environment.

Sonia Nieto (1996, in Goodman 1999) describes three major theories that attempt to explain the "school failure of students, particularly those from culturally diverse and poor backgrounds." In a deficit theory, school failure is viewed to be "the fault either of the students themselves, who are genetically inferior, or the social characteristics of their communities, which suffer from economic and cultural disadvantages" (Nieto 1996, 229). An economic and social reproduction theory proposes that

schools reproduce the economic and social structures of society. A cultural incompatibilities perspective suggests that school failure is caused by incongruities between the culture of the home and culture of the school. (Goodman 1999, 11)

Nieto points out that while "characteristics students bring with them to school including their race, ethnicity, social class, and language, also often have a direct impact on their success of failure in school,"

there is not a causal effect between these characteristics and school failure.

Instead it is the school's perception of students' language, culture and class as inadequate and negative, and the subsequent devalued status of these characteristics in the academic environment, that help to explain school failure. (Nieto 1996, 230, quoted in Goodman 1999)

Britt and Rennie are just learning how to negotiate the print on the page. For Britt to read directions, compute in her head, and then write the answers may at this point be beyond her emerging ability. Rennie is just finding her way in reading books, yet she is being labeled and her developing abilities are being deemed "not good enough" in comparison to others who are the same age. Jim is living between two borderlands, his fathers' and his schools'. These stories are not new or different. There are many others like them, some better, some much worse, but the existing commonality is the stereotypical belief that the product: the math page, the size of the texts, not the process utilized to achieve understanding, is judged as the perceived ability. What Rennie, Britt, Jamal, and Jim bring to school, their literacy practices (Barton 1994) honed at home, internalized through practice and experience, developed as the situation demanded, is not necessarily what is *counted* as school literacy practices.

What is Fair and Equitable?

Currently, in many schooling environments reading and writing and speaking are assessed and the child's literate worth is gauged by being able to successfully participate in the "top" reading group, by successfully answering comprehension questions at the end of a story contained in an anthology, and by completing a "creative writing" essay and receiving an "A" in mechanics. These dominant school-based definitions of literacy are often at odds with what people do in their everyday lives. We all know that a child can be a great athlete, a wonderful mechanic, or an outstanding artist, but if that child does not meet the criteria set in the educational world for "a good student," meaning one who receives acceptable grades in the core curricular areas, those other talents don't count for much. Debra Goodman (1999) states that there has been "a disturbing and regres-

sive return to deficit-driven school policy in the last several years." Goodman cites the recent *New York Times* profile of a group of

Brooklyn third graders who are in summer school in order to pass a test that is their "ticket to the fourth grade." This test not only determines who will pass or fail, but what teachers will do during the summer course. The summer school plan is closely correlated to the city's reading and math tests. It states what books to read, when to read them, and even what is written on the chalkboard. (Goodman 1999, 12)

What counts as literacy for these children is determined by their test scores not by their literate lives outside of school.

The State Department of Education currently has within its educational community schools that are within a percentage point of meeting the same percentages of legally enforced apartheid maintained 50 years ago in the South. Furthermore, the past ten years of high school graduation data have shown that in some city districts, only 8% of the approximately 2000 students enrolled meet the standards for an education in a more "successful school" (successful meaning a higher percentage of graduating students), and less than 65% meet the criteria for graduation from their neighborhood schools (Kozol 1999). In addition, according to state records approximately \$5,000 to \$8,000 is spent on each student in these schools. On the average most districts usually spend from \$11,000 to \$18,000 on each student. The question then becomes, how is it possible to provide the same materials in a school that receives less money, but which needs to teach the same curriculum? How can we, as educators, create fair and equitable environments where learning is authentic, purposeful, and meaningful to each student when the chances of equitable success are minimal?

Literacies as Cultural Capital

Carole Edelsky (1996) distinguishes the difference between *reading* and *reading in school* by using the term *exercises*. "Exercises," Edelsky explains, "are primarily for instructional and evaluational purposes." Exercises in literacy are what the students do in school. Ultimately, it refers to the amount of control a person has over the print-use and the direction

of the literacy event. In school there is usually a topic or a goal for the students to write toward. Their choice of topic may be limited or nonexistent. The difference between literacy as an exercise and all other literacies reflects a difference in the purpose of the literacy event. In school, we as teachers are constrained by the curriculum, state testing protocols, and district mandates. Many teachers struggle with trying to fit it all in and the idea of adding on to an already overloaded curriculum by implementing a writer's workshop (Graves 1984) or allowing for free writing, does not seem worth the risk. Therefore, more often than not, the writing is designed to match upcoming tests or end of the year reports, or to fulfill curricular demand. It is this issue and the struggles I have encountered as a teacher that has led me to explore ways in which I would be able not only to meet the educational mandates of my district but also to invite my students into a world of literacy where *their* voices count.

In *Literacy: An Introduction to the Ecology of Written Language* (1998, 7), David Barton writes:

School literacy is one of many forms of communication and should be developed alongside other forms, such as spoken, graphical, and physical communication. Institutional and social networks are essential in determining the purposes literacy serves. Schooled literacy is a form of cultural capital; other forms of literacy do not necessarily carry the same cultural capital.

Cultural capital refers to the behaviors, values, and practices that are valued by the dominant society. It is a process of powerful practices: ways of behaving, talking, acting, thinking, moving, etc. These practices are determined unconsciously by the dominant culture and are used to promote success for specific groups in our society. Often, literacy capability in the schools is connected to achievement. There is reading and writing that "counts" in school and there are the other kinds which are not considered to be schooling literacy events. Black and Martin (1982) and Moss and Stansell (1983) distinguish between school reading and home reading. Florio and Clark (1982) contrast authorized versus unauthorized writing. Often children also distinguish these categories. Edelsky (1996) describes "a sad turn of affairs" where many of the children Hudson (1988, 88) stud-

ied refrained from calling the unauthorized, furtive notes they passed to each other as writing, reserving that designation for something connected to achievement.

We know it takes more than the ability to read and write and speak to succeed. It takes more than receiving an "A" in mechanics. We know it takes mental and emotional strength. It takes reading and writing and speaking and listening and thinking. It takes living and understanding within one's culture. It takes the understanding of other cultures and communities. It takes synthesizing all that is known and developing new concepts and ideas within our own lives. It is taking the traditions and stories of lives lived before, and with, the children and creating new stories. We know it takes a new vision for literacy. What it takes is a more social view of literacy that incorporates the whole child.

Literacy as Social Practice

The research and theories of the New Literacy Studies (Gee 1990; Barton 1994; Street 1997) see all literacies as being situated, offering the idea of multiplicities of literacies which exist in any culture rather than the concept of literacy as something solely located in people's heads as cognition (Barton 1998). Spoken, read, and written language are seen as occurring and being located in particular times and places. Research from the New Literacy Studies represents learning and knowing as participatory activities. Proponents not only acknowledge the complexity of what is learned, they also appreciate the support to learning that is understood, when attention is directed away from the skills being developed and placed within meaningful, authentic discourse. They acknowledge that the social construction of the community discourse is directly dependent upon the setting and the purpose that determines the ways of being for the members. School literacy therefore, can become a dynamic process in which what literate action means is continually being constructed and reconstructed by the community in the classroom setting, in respect and collaboration within the community lives lived outside the classroom (Green 1992).

What this means is that we need innovative curriculum that will challenge prevailing attitudes and empower students to examine critically the world in

which they live. James Comer (1988) cautions that there is "no cheap easy fix" for the problems facing the educational system. Comer (1980) advocates, as a first step, professional development schools which concentrate on a whole spectrum of development issues. Child development, according to Comer, means focusing on the "whole child," including their physical, emotional, and family-related aspects. This perspective considers the child's socioeconomic status as well as her individual strengths and weaknesses. Every child is seen as equally capable when given equal resources and opportunities. According to Comer, there is a need to change the belief in school systems from "those who can, will" to "all can!" As Delpit (1988) suggests, it is within the power of educators and curriculum developers to determine the view of the world presented to children.

Learning About the Students' Histories

This alternative view of education places much greater emphasis on the importance of educational activities being meaningful and relevant to students at the time they engage in them (Wells 1995). This alternative view involves the teacher negotiating the curriculum and accepting that the most valuable learning opportunities are often those that emerge when students are encouraged to share the initiative in deciding which aspects of a class topic they wish to focus on and how they intend to do so. This alternative view proposes that by acknowledging and learning about the sociocultural literacy experiences children arrive at school with, and building upon what they already know, real improvement in the discourse of schooling can be achieved.

Literacy is not a generic process located solely within the heads of individuals, or a process that is the same for all people in all situations (Baker and Luke 1991; Bloome 1986; Cook-Gumperz 1986; Street 1984; Green 1992). Sociocultural factors interact with cognitive factors in extremely complex ways and are of critical importance in the achievement of academic literacy. It is this awareness and understanding of the sociocultural-educational implications for students and for teachers that needs to be addressed. The students' lives outside of school need to be invited within the school. But, within this invitation

there has to be a knowledge base that the teacher can draw upon which knows what to do with and how to connect the multiple lives the students are living in the classroom.

Inquiry into students' literacies brings many benefits for students and teachers. Educators can discover the life stories students bring to their school experiences and learn more about their home and local literacies (Barton 1998). The connections the students make to the school literacies can enable teachers to gain insights into how the students have learned the discourses of schooling and what they have learned. I believe if learning involves creating meaning, more meaning in our lives and more meaning in how the subject connects to our lives, then it is "story" the students' story, by which they can make and shape their own personal meaning.

Inviting the Students to Teach

Students' stories and talk about cultural histories and traditions can translate in various ways in the classroom and within a curriculum. For example, there is the structure of group discussions where current events and the impact upon the students' lives can be addressed. Students can choose items of interest and prepare for discussions interpreting connections between their lives and the information being reviewed. Personal written or oral responses to books, movies, and other media events, which contain biased or stereotypic illustrations, are another avenue where the perpetuation of the disenfranchising of a people can be brought to the consciousness of the students and where this public manipulation of the consciousness can be addressed and deconstructed. These possibilities, of course, will not bring answers or closure to the issues addressed, but they will allow for discussions which may enhance students' awareness, precipitating their empowerment to make choices when confronted with the potentiality of personally experienced situations that may be similar.

Such textual experiences can also provide powerful means of self-instruction, as the readers experience the thoughts of others and internalize them, changing and reconstructing their own understandings with the additions of the new knowledges. As Lotman (1988) states, texts are not only valuable

when read "univocally" in an attempt to reconstruct the author's intended meaning, but treating the text "dialogically" (Bahktin 1986) can be even more productive, as the readers use it as "a thinking device" to develop meanings that are new not only for the reader but perhaps also for the culture as a whole.

For example, Jorge attended a military academy on Long Island, N.Y. I was his "supportive reading teacher." On weekends he went home to his family's apartment in the Bronx. As midterms were approaching, Jorge had begun to look tired. I asked him about his studying habits, thinking that perhaps he was cramming for the tests. Jorge's response was not what I expected, "Mrs. B., I'm staying up late to read my notes, after my little brothers and sisters are in bed. Can't do anything when they're around. It's weird though. I'm ducking down on my couch cause the gunshots are so close and I keep thinking one is going to come through the window. It's weird. I'm here during the week and I'm ducking bullets on the weekend." Then he gave me a big smile and said, "But, I'm studying. I'm gonna do good." And he walked away. Toward the end of the military school year my students and I completed a project where we entwined photography with our writing. One of the most powerful pieces written was by Jorge in relation to his photograph. His photo was of his apartment. Specifically, inside the door of his apartment where there was a coat rack, the kind that is nailed into the wall. There weren't any coats on the pegs, only a handgun, hanging by the trigger. Beneath the rack was Jorge's sister playing with her toys. The title of his paper was "Gun Control."

In another study I focused on Terry, a fourth grade student, and analyzed the degree of comprehension levels according to personal reflective connections, in addition to the prepackaged questions included with the reading series used by the school. According to formal and informal benchmark testing, she was considered to be a struggling reader and writer. One particular instance stands out in my memory as evidence of the depth of understanding and connection a reader can create when encouraged to develop a personal relationship with the text. We sat together in my classroom reading *Night of the Twisters* (Ruckman 1986). We had paused for a minute to discuss what had just occurred in the story (the main charac-

ter's father had picked the son up by the arm and dropped him in anger over a bicycle left outside). I had begun the conversation by asking Terry what she was thinking about. She said she was uncomfortable with the angry behavior of the father in the story. She said it reminded her of her grandfather who had become quite angry at Terry for something she had done that had been out of her control. Her grandfather had slapped her across the face because he had thought she was allowing her nose to 'run' on purpose.

The stories students tell can reveal connections past and present, histories repeating, realization of self in the stories of others, and the possibility of self-actualization within ones' own story. These stories can also suggest how they not only interpret the discourses of school literacies, placing meaning, authenticity, reality in correlation with mandated curricula, but more importantly, the stories of our students will also suggest how we, as educators, can interpret the discourses of our students' life-literacies.

Did Terry comprehend the text? Of course she did. She understood the story, she internalized it, and she connected it to her own life experiences. She connected to the violence of the written character to her own experience with violence. She transcended the print on the page and traveled across the words to her life. But how is this assessed? Where does the educational system allow for Terry's ability to personally interpret text, evidencing a high level of understanding, to count for something? How can she choose a multiple-choice answer that will illuminate her thinking? How will she meet the school criteria for an accomplished reader? How can her story be incorporated in school? What do educators need to be cognizant about the learning processes, socially and culturally, to understand the abilities Terry possesses? What do the comments about Brad, Britt, Jamal, Rennie, and Jim suggest? How does Terry's story fit into the mix? Could Jorge write? Could he move the reader with his story? Were their difficulties specific to the environment of schooling? Were they due to an immersion in unfamiliar discourses (Taylor, 1991)?

Over a hundred years ago John Dewey, one of the forefathers of fair and equitable education, regarded the most effective language learning as one that in-

involved students "having something to say rather than having to say something." A century later, are these students still being judged because they are having to say something? or are they still unfamiliar with negotiating the discourses of schooling (Taylor and Dorsey-Gaines 1988)?

Dewey continued,

Language teaching, in other words, should be done in a *related* way, as the outgrowth of the child's social desire to recount his/her experiences and get in return the experiences of others. (Dewey 1943, 55-56; emphasis in original)

Learning To Listen When Our Students' Teach

I believe we can empower our students by being powerful in our teaching. Their knowledge no longer needs to be treated as separate from the schooling context and the stories of their lives do not need to be just events that have happened to them. The story, their stories, is how the event is interpreted from their experiences. Donald Murray (1996, 77) writes in *Crafting a Life*:

Story allows us to bring order to experience, to find pattern in events, to discover meaning in confusion and story allows us to share the order, pattern meaning. Through story we remember, understand, instruct, entertain, celebrate. The range of all human experience and the intellectual, emotional, and spiritual response to experience is held within story. Stories contain and reveal our beliefs, our fears, our hopes, our knowledge of how the world works.

Katherine Bomer (1999) and Randy Bomer (1999) suggest some "habits of mind" that enable this type of social action, whereby students will not be passively listening to facts that are not connected to their lives. They suggest critiquing issues of fairness and setting things straight, searching for the truth between the lines, trying on the perspectives of others, questioning what is needed for happiness and well-being, questioning authority, critiquing feelings of anger and indignation, identity and affiliation. The Bomers propose collective action: getting people together to do something and empathizing and critiquing difference. By investigating family structure, culture, race, sexuality, class, gender, and age,

the students, according to the Bomers, can write for social justice in their lives, their schools, and their communities.

Inquiry into how students' negotiate text, reflect upon their understandings and make connections intertextually and personally can begin by listening to their talk, their stories about the texts and their worlds (Green 1992). By critically and analytically questioning, the students' voices can be stirred and their voices and stories heard. Encouraging and teaching students to question, interpret, and critique the texts, by bringing something to the text that is not in the text, by examining the silences and the deliberate "sounds" within texts, these opportunities for the empowerment of knowing and questioning can become a habit of mind for students.

Powerful learning involves creating meaning; thus the way we teach depends on our understanding of what it means to know (Sanders 1998). Educators need to be able to articulate their vision of knowing. Teachers may not change the financial inequities faced by their schools, but the awareness of what they know as professionals connecting to what the students know upon entering school is a dynamic way of knowing. By teachers expanding their knowledge base to include not only the theory of teaching and learning but also to be cognizant of the life stories being brought into the schoolroom by each student, can be an effective way of implementing the instruction of the curriculum and in creating an effective, respectful discourse of schooling.

An asocial perspective on literacy and learning is no longer desirable as we begin the journey of learning from, with, and about our students. Once we accept that language and literacy are social processes, our idea of what it is to "mean" changes completely. Literacy is enmeshed in our daily lives. It is related to and with cultural, ethnic, and religious identity, social and economic status, community mores, gender identity and political beliefs. It is entwined with national identities, national economic developments, citizenship, languages, and cultures. Critical reading and writing demonstrate that the discourse of literacy education has a wonderful and positive future if students are provided the opportunity to exercise control over their literacies in respect to their lives. Students can learn to appreciate different discourses

in order to work and live in harmony; students can expand educational discourse to allow themselves the freedom to question the authority of the text, to think for themselves, to write for themselves, to tell their stories, and to act democratically, responsibly, and compassionately. They can use their literacies to make sense of their lives.

Note

1. These small examples, though not representative of all students and teachers, are a snapshot into some of the perspectives and opinions held by some of the people I have encountered.

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**INSERT PATHS OF LEARNING AD
FROM PAGE 16 OF THE SUMMER
2001 ISSUE OF ENCOUNTER HERE**

Mandalas

Circling the Square in Education

Allison J. Young

The creation of student mandalas, when guided by a sensitive teacher, can help them glimpse into their own psyches at that moment in time.

"As soul thrives, everything around it thrives as well." (McNiff [1992, 26])

"A compassionate attitude, an affectionate attitude, a sense of caring is not only of benefit to society, but for oneself." (His Holiness, The Dalai Lama [1997, 6])

The phrase "squaring the circle" refers to an ancient Greek geometric problem that is unsolvable (Jaffé 1964). Webster's defines the phrase "to square the circle" as "to do or attempt something that seems impossible." The psychologist Carl Jung (1974, 198) used the phrase to describe the alchemical process which "breaks down the original chaotic unity into the four elements and then combines them again in a higher unity. Unity is represented by a circle and the four elements by a square." Thus, in Jungian psychology, squaring the circle entails a transformation whereby the unconscious and the conscious are synthesized into a higher consciousness, which may, indeed, be impossible.

If squaring the circle involves the process of bringing the unconscious to bear on the conscious thereby making a unified consciousness, then bringing the process back into the community might be described as "circling the square." In essence, then, sacred space is created when the individual's transformative process is enacted within the context of a community or as von Franz (1997b, 109) when "the unconscious is allowed to show through the person and then have a positive effect on the surroundings." I have inverted the phrase "squaring the circle" to "circling the square" to better describe my experiences with mandalas in my classroom: I use mandalas in the attempt to unify all facets of consciousness—spiritual, socio-emotional, cognitive—for my-

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self and the learners with whom I work as I address issues of community in the classroom. This is my attempt at the impossible, the insoluble.

The spiritual element to the practice of teaching and learning is often overlooked in contemporary schooling. A wide variety of work in education highlights a recent trend toward exploring things sacred and spiritual, and their impact on the educational landscape (Dillon 2000; Hansen 1995; 2001; Noddings 1993; O'Reilly 1998; Palmer 1998; 2000; Purpel 1989; 1999; Yob 1994). Indeed, a 1997 special issue of *Holistic Education Review* featured articles by His Holiness, the Dalai Lama, Palmer, Gatto, and Miller. This special issue focused on the need to bring "compassionate spirit" into the classroom, an idea which is especially appropriate when we understand "psychology" as the "study of the soul." This definition, though, can make the teaching-learning endeavor a daunting task. However, this concern for the psyche, popularized by the humanist perspective (e.g., Maslow, Rogers) has never been more relevant. In the context of the postindustrial technocracy that has effectively fostered a heavy emphasis on accountability in education, as evidenced by an increase in standardized testing and tracking, concerns of the spirit have been "checked at the door." Gablik contends that "one of the peculiar developments in our Western world is that we are losing our sense of the divine side of life, of the power of imagination, myth, dream, and vision" (1991, 42). The question we face now is what is the cost of this kind of loss to students, teachers, and ultimately our community and society?

When the focus of education is oriented back toward the psyche, it is necessary to turn our attention to ways of framing curriculum in the transformative tradition (Jackson 1986), which should include the process of running of the course, as in Pinar's (1976) "currere." Currere is a method used to investigate one's experience using an autobiographical and relational approach with three distinct steps: regression, progression, and analysis. This process is necessarily spiritual in that the sense that the essence of the individual is transformed by and through the investigation of self, others, and context. A shift towards this kind of educational process requires a reorganization of our thinking about the relations among learners,

teachers, classrooms, and schools. For instance, in a recent article, Klein presents an overview of the considerations of the sacred within the physical geography of classrooms and schools. She argues that "paying attention to the *genius loci* of our life experiences and the spaces we inhabit can bring about the necessary transformations that may reshape curriculum with more grace, beauty, and the divine" (2000, 9). While there is a need to attend to these "spirit places," within the physical space of the classroom and within the curriculum, we must also attend to the spirit places within the person, since students and subject matter are the natural limits of curriculum (Dewey 1990). It may be important to understand the inner sacred spaces in order to develop more effective relationships between the inner and outer spaces.

Inner sacredness, knowing the divine within, is particularly important to teacher education. If, as Palmer (1998, 2) argues "We teach who we are," then it follows that those of us in teacher education should be helping our students to develop an awareness of themselves in a variety of contexts and to understand the reciprocal nature of their influence. Hansen (1995; 2001) refers to these ideas in his discussion of "vocation," and Purpel (1999, 62) frames this effectively:

As educators, we need to ground our work in a vision that, in some significant way, resonates with what matters most and is of the most profound nature, to matters of cosmology, religion, and spirituality.

Martusewicz (2001, 21) is more specific about what this means:

Of all professionals, educators ought to be able to think about who they have been, who they are becoming, and what the world they live in has to do with any of this. Moreover, they ought to be in the habit of asking what their relation to and experience of the larger world around them has to do with what they believe about teaching and learning, about education, and therefore what they believe education offers a person or a community or the larger world. They ought to be able to ponder what kind of person the world needs and thus make choices for what they ought to be doing in their own classrooms.

In order to achieve this, one must embark on a journey of self-discovery. Learning to teach, in itself, requires such a journey. There are any number of ways to approach the development of this kind of self-awareness in education; for example, the visual arts, music, dance and, drama.

Oftentimes in academia we rely most heavily on writing and reading as the primary texts for understanding ourselves and our students. Drawing, and art more generally, can provide different ways to access inner beliefs and views. The idea that drawing is a process that is neither limited by language nor subject to logical assertions is part of the argument that Eisner makes for arts in education. He states (1998, 62) that

the creation of a picture, or a poem, or a musical composition requires, at minimum, knowledge of the unfolding qualities with which one works. These cognitively mediated qualities must be seen, modulated, transformed, and organized in the course of one's work.

Thus, drawing allows us to access our experiences without any kind of linguistic mediation. The process of drawing transforms these experiences without having to translate them into language.

Further, we change in response to images (McNiff 1992). It is quite natural to have emotional responses to the visual images presented to us in drawings, photos, and sculptures. Visual art, in particular allows us to partake in "reenchantment," which Gablik (1991, 48) contends,

is [ceasing] to be hypnotized by the rational bias of Western society, through developing a more open model of the psyche, so that as a culture we can recover the ability to "dream forward" and reclaim the power and importance of vision.

Our emotional response to images can help us to develop a vision of what is yet to exist. Indeed, mandalas as products have as much transformative potential as the process through which they were created.

Circles and Cycles

The development of mandalas in the classroom offers an opportunity for individuals to learn more about themselves in a way that includes the heart as

much as the mind. This is particularly important in the teacher education classroom, where the vocation demands an understanding of the self. One particular kind of drawing is the mandala. The word *mandala* is the Sanskrit word meaning "magic circle" (Rosen 1996; von Franz 1964). Mandalas are circular images which are characterized as sacred art and can be found cross-culturally, from Tibetan Buddhism to Native American medicine wheels, from Taoism to Hinduism as well as many others (Cornell 1994; Fincher 1991; von Franz 1964). They can be two-dimensional drawings on paper or they can incorporate other media such as sand. Some mandalas can be transposed into three dimensions, as in some of the Tibetan mandalas. Carl Jung discovered the universality of these symbols and he pioneered the use of mandalas as a way for individuals to understand their own psyches.

Mandalas have contemplative, educative, and therapeutic uses. Von Franz (1997a, 340) states,

In Eastern cultures, mandala images are particularly used meditatively to restore inner balance.... [T]o his astonishment, Jung discovered that such mandala images can also appear spontaneously out of the unconscious in people who have no idea of such meditation practices.

Such images could be used as part of a process of developing self-awareness as well as creating for the individual a sense of interdependence with the universe. This awareness of interdependence has implications for moral learning and development (Bowers 1995; Purpel 1989; 1999). For example, interdependence is a core element of ecological awareness as well as many feminist paradigms.

In the past, mandalas were initially viewed as a natural means of healing because mandalas are used in a variety of cultures expressly for that purpose, both psychically and physically. Jung (1976, 426) wrote,

All that can be ascertained at present about the symbolism of the mandala is that it portrays an autonomous psychic fact, characterized by a phenomenology which is always repeating itself and is everywhere the same.

Jung saw mandalas as a spontaneous expression of the self that would lead to the goal of integrating the many schisms in Western culture, such as masculine-

feminine and the Cartesian mind-body split (Cornell 1994). Moreover, mandalas occurred in dreams as well as in the conscious world. This made them ideal for meditation and introspection. Von Franz (1964, 230) posited that "the contemplation of a mandala is meant to bring inner peace, a feeling that life has again found its meaning and order." Thus, Jung used the mandala as a way to access the psyche and to lead the individual toward a peaceful center.

Regardless of the intended purpose for any given mandala, all mandalas present the viewer or author with myriad transformative possibilities. Mandalas have the capacity to make visible things for which there is no other means of expression (Cornell 1994). Von Franz (1997a, 353) writes,

On the one hand the mandala serves a conservative purpose, restoration of the old order; and on the other hand, a creative purpose: providing form for something new. It is like a spiral, which returns again and again to the same point as it continues to grow in a particular direction.

As with all learning and growth, we take what we have and we re-work it to create something "new." In essence, the mandala transforms thoughts and feelings about current and possible selves into a graphic that can be shared and reflected upon.

Circles of Community

My inquiry stems from my experiences as a teacher educator whose pedagogical focus is on developing transformative opportunities for self-knowledge within a critical-feminist framework. In a course that focuses on school climate and culture, I have incorporated an exercise using mandalas. After spending much of the semester immersed in theoretical and contemporary issues in classroom climate and organization, I create an opportunity to explore representations of identity and to reflect upon all that we have accomplished, as well as to project into the future using the new ideas. I prefer to do this exercise toward the end of the course so that students feel as comfortable as possible with their classroom community. Generally, students are arranged in small groups of four or five in order to share materials (i.e., crayons, paper plates, etc.), but I ask that they try to attend only to their own work.

My interest in mandalas comes out of my personal experiences with them. I used mandalas to explore a point of personal crisis and later became interested in their use in groups. After adopting Deal and Peterson's (1999) *Shaping School Culture* for the course I teach on classroom culture and climate, I decided to try the mandala experience with my students. And like McNiff (1992, 40), I have found that

working together with a group enables a different energy than talking. Soul communicates with soul through the process of painting, and group members "sense" their leader in a different way.

Therefore, once I get my students started in this exercise, I join them in putting crayon to paper.

Using soft music as an auidial background (Deuter 1998; Kater and Nakai 1992), I prime students by asking a series of questions such as: "Who are you? Who do you want to be? Who do you want to be in your classroom? In five years, what do you want to be known for? What do you want your reputation as a teacher to say about you?" Then I tell them to allow themselves to be drawn to the colors that they will use, in essence, to let the mandala just come out of them. They draw in silence, except for the background music, for forty-five minutes to an hour. I will then ask that they stop and, if they feel comfortable, to share their mandala with the community by holding it up over their head for a few moments. Nearly everyone does this.

Immediately following this experience, the room is quiet and peaceful. Compared to the usual bustle of my classroom, things feel centered in a focused, contemplative way. When I ask for discussion, there is little to none. A few observational comments are all that are generally contributed by one or two students. Debriefing is better left for the next class session, though I do ask that students inform me of any upset or anxious feelings that might have been created by the experience. I am available for students after class and any time before the next class session. I also encourage students to reflect on their mandalas in writing before the next session.

As texts, there are many ways to "read" and interpret mandalas. There is no right or wrong way to create or interpret a mandala, though there are often symbolic elements that are evi-

dent within a mandala. Colors, numbers, and shapes or objects can be interpreted within the context of the circle as it is oriented by its author (Cornell 1994; Fincher 1991). Daniels (1992, 15) explains that mandala symbols are based upon the principle of four, represented by the four directions in which an object may move on a two-dimensional surface, i.e., forward, backward, left, and right.

Generally, the upper and right hemispheres can be considered the "conscious" portions of the mandala, while the lower and left hemispheres are thought to represent the "unconscious." For example, I have seen several mandalas with a tree or plant moving up from the lower hemisphere into the upper hemisphere, which would indicate movement from the unconscious to the conscious self. Other mandalas are flower-like, emanating out from the center of the circle with a number of "petals." Each mandala is a testament to its creator with vibrant colors or pastels, and obvious themes and shapes or seemingly random squiggles. The mandala is whatever comes forward from inside the student at that moment.

While I do not intend to use the mandalas as a way to "analyze" my students, I do intend for them to interpret their own drawings in some way. I make available a number of resources such as books by Cornell (1994) and Fincher (1991) for them to explore their work, if they wish. Written reflection on the mandala itself or the mandala process is encouraged, though I make it clear that I will not be evaluating the mandala or the reflection. Some students choose not to share their reflection with me while others share poems, affective sentiments, as well as more cognitively oriented analytical introspection. For some, the mandala becomes a way to navigate their identity as teacher-learners. Teachers who develop an increased self-awareness may themselves be more effective at weaving together the cognitive, socio-emotional, and the spiritual in their own classrooms. Thus, these students who experience the mandala may be better able to enact elements of critical-feminist pedagogy.

Cycles of Self

In a sense, then, the mandalas allow students to take ideas they have about themselves and their

goals, and transform them into "new" alternatives. In the mandala, students create a glimpse of their own individual psyche at that moment in time. The ideas they have about who they are and who they want to be, and the ideas and concepts we have discussed in the course of the semester are re-arranged and recombined in the circular space of the mandala. In many cases, this process allows them to understand things differently as a result of the process of drawing.

To begin with, students often describe their mandala process as something that "just happens." Many students say that they just started drawing and the image just comes out of them. They describe being drawn to particular colors or shapes. As McNiff (1992, 47) argues, "The hand is truly between two worlds and therefore cannot be tied completely to either." This experience of being between two worlds leads to a sense of focus directed toward the self, and then projected through the self into the outer world. The first time I enacted the mandala experience in my classroom, one woman told me that her mandala experience was the first time in many years that she was able to relax and be in the moment. Self-described as having difficulty with attention, she reported being able to transcend this challenge and focus clearly on the process of creating her mandala.

This sense of focus can lead to feelings of healing. Another student, a man, reported feeling mildly disconcerted by his mandala experience because, upon reflecting on his work in comparison to others, he had only used a black crayon to create shades of gray in his work. However, he created a very textured mandala, with a series of waves peaking toward the center of the circle. In his subsequent written reflection, this man talked about the recent deaths of both his mother-in-law as well as his own mother and how he felt that the waves in his mandala might represent waves of grief. This was one interpretation among two or three that he offered in his writing, and he was still contemplating his mandala at the time the course ended. He talked about the experience as "cathartic" and that he was able to release some of the pain of those losses.

A third student explicitly described the healing she experienced in a moving email, she sent the day

after the class session in which the mandala exercise occurred. She wrote:

...at first, I didn't think I was going to be able to concentrate on it but when you played the music and asked us the questions while our eyes were closed, it was easy. Then I just picked up an orange crayon and started...it was so freeing to me for some reason. Also, I was fighting back tears twice (once, in particular) and I have no idea why, when I left class, I was like refreshed or I felt like a weight had been lifted from my shoulders—but anyways, I just wanted to tell you that I felt that what I made last night was valuable and I am happy/relieved that I had the opportunity to do that. I am proud of my mandala, and I also feel that the rest of the class made some really beautiful ones!

Clearly, this woman was responding to a significant experience in a deep way. She also recognized the efforts of others in her community to do the same. Several students have shared with me that the mandala was a deep experience for them, that they felt a sense of relief at the conclusion of the session.

Finally, the healing these students describe is a necessary part of the process of learning to attend to others. The process of reflection on the self through the mandala exposes the places of connection with others and the physical realm, allowing a focus on the interdependent relationships in the world. Recognizing the sacred within makes it possible to see connections, thereby recognizing the sacred without. For instance, one woman used pastel purples, pinks, blues, and oranges as she drew a mountainous island in the setting sun. Her reflection explicitly described her spiritual connection with nature and the strength she derives from interactions with nature. Another student submitted a poem as her reflection and included words like "strength," "persistence," "calm," "refresh," "change," "growth," and "exploration." She wrote "I will learn about/ Myself/ And how I am a part of nature" and how "one day/ They will melt into each other/ Mind and spirit." This particular woman has tapped into what Purpel (1989) calls "the human condition of interdependence," or as Jung states, "Our psyche is part of nature, and its enigma is as limitless" (1964, 6). It seems that such conscious connection is necessary to develop the

kind of habits of mind that continually focus on issues of social justice and more complex moral and ethical reasoning and behavior.

Each time I have done this exercise, a student will suggest that I do this activity at the beginning as well

In our standards-driven, accountability-focused educational systems the Self is marginalized in the process of schooling.

as at the end of the semester. These students want to be able to "see" their transformation over the course and feel that a pre-post mandala experience would be an effective way to approach this. There are two ways to interpret this statement: one is that the pre-post framework only makes sense to students whose education is steeped in a logical-positivist epistemology. Another interpretation is that these students are interested to examine the mandala process and feel that patterns may emerge from more than one mandala. This second interpretation is more in keeping with the use of mandalas in contemporary psychology. I do encourage students to continue using mandalas as ways to explore their development as learners and teachers.

Finally, I realize that this exercise is pedagogically risky. It can raise questions about oneself that would otherwise go unnoticed. Each time I begin this exercise, I provide a disclaimer that this experience is a somewhat risky one in a classroom. During one debriefing session, one of my students asked "What makes this so risky?" so I opened the question up to the class. Another student, whose mother is a psychologist, responded by describing the experience's spiritual essence as having significant effects with which a teacher is not prepared to deal. This echoes Yob's conclusion regarding the teaching of world religion in education. She writes (1994, 238),

Wrongly handled, it might have "blown up in our faces." Rightly handled, it could play a constructive role in illuminating matters of deep significance that are usually neglected.

This is the case with mandalas. To explore them with students is to open up opportunities for productive growth, though such growth may manifest itself through the discomfort of addressing challenging or painful issues. It is important to prepare for this discomfort, not necessarily to avoid it. This exercise would be problematic if the facilitator were unaware and unprepared for the challenges that might arise from the exploration of psyche.

Changing Metaphors: Teacher as Healer/Shaman

The mandala has transformed my own understanding of teaching and learning, providing me with a new metaphor: teacher as healer or shaman. The act of defining sacred space within the classroom using music, the silent process of drawing the mandalas, the feelings of release and healing as well as the subsequent transformation of the community through the act of sharing the mandalas publicly can all be construed as shamanic artifacts and rituals. This metaphor of "teacher as shaman" is not entirely unfamiliar to me. As a learner of the Irish language, I am aware that the Irish word for "professor" is "ollamh," which is a term that is supposedly used to refer to the highest class of druid in ancient Celtic communities. Druids were thought to be the learned caste, providing the community with guidance in physical and metaphysical matters, facilitators of spirituality. Since learning of this word, I have taken to heart the broad meaning of being an "ollamh," with the mandala exercise as a significant contribution to my own understanding.

In comparison, McNiff's experience as an art therapist is parallel to my own, though he also argues,

The label is far less significant than the contents of practice and attunement to the nameless movements of soul.... There does not have to be a conscious involvement with "shamanism," since the images emerge autonomously, again affirming the soul's instinctual process of caring for itself. (1992, 18-19)

While in general, I agree that we each have an "inner shaman," I feel that sometimes a more literal, archetypal shaman can orient us to our own divine presence. And given the context of the classroom environment in which mandalas are employed, it is important that I wear my shaman hat. Once I point

students in a direction, I can become more of a participant.

Most often, the students who engage in the mandala experience are enrolled in a course that immediately precedes their student teaching. This can be a place of concern and stress for many of them, as learning to teach involves an identity crisis of sorts. Many students tell me of anxiety that they feel around finishing their teacher preparation program and the transition from college student to teacher, from late adolescence to young adulthood. This stress, compounded by the stress of the academic work they are negotiating, can be overwhelming. Reconciling these various shifts prior to their actual student teaching experience is important. There is a need on the part of students for some kind of healing before they embark on the next part of their life's journey.

Mandalas are a way to help the soul thrive. They shed light on the psyche in a way that words cannot. As Pinar (1976, 21-22) points out,

The psyche is the source of outward activity; it is the integrative center from which the hidden reveals itself, that which is given and that which we may transmutate.... Self-understanding and self-development: these are the aims of the coming era.

Teacher educators, in particular, need to take Pinar's charge seriously, especially in light of the famous Goodlad adage that "teachers teach the way they are taught." If we want teachers to develop more meaningful learning opportunities that offer students experiences in self-actualization and healing, we must begin in our teacher education classrooms.

One point of particular interest is that these attributes, self-actualization and healing, lead to what Eastern spiritualists would call "balance." For example, in the practice of Taijichuan, the idea is to develop stillness in motion and movement in stillness, thereby integrating opposite forces. In addition, there is a posture called "wu chi" which is the point where yin and yang energies are in balance. This idea of balancing opposing energies is consistent with Jung's view of mandalas. The mandalas themselves have provided each of us with meaning and order, a degree of balance. They have also brought balance to our community.

As the facilitator, I am as transformed by the mandala experience as my students are. When students share their work with me, I am struck by the sheer vividness of the mandalas they create—the colors, the images, the meanings. I am further awed by the idea that they are willing to share their mandalas with me, in essence, sharing their souls. This is not a typical university classroom experience, where the environment is often marred by well-formed mistrust. The members of the classroom community must trust one another enough to share their innermost selves. They must also trust the facilitator. This is important because this kind of sharing is so infrequent in our schooling experience and in our larger culture. So much of the schooling presented to students in our standards-driven, accountability-focused educational systems is driven by knowledge that comes from outside the self, knowledge that they are expected to internalize. The Self is marginalized in the process of schooling in our culture. Sharing mandalas becomes a meeting of psyches where the self is at the center—of both the process and the product.

This is important because it is a moment of presence for us as a community. We are present to one another in a way that is immediate and intense because we are coming from a place of presence within ourselves. In the moment when we share mandalas, students are able to acknowledge their own transformative process and to appreciate the processes of others. Each person gains insight into the depth of their fellow community members. Again, this kind of presence is unusual in most educational settings where the focus is on the next step on the ladder or the next hoop to jump. We cannot be present when we are worried about test scores and grades. We surely cannot focus on our self-development in a deep and meaningful way when we are competing with others. The traditional trappings of the classroom have given way to a place where people feel comfortable sharing themselves and the meaning they are trying to make of the world around them. In some small way, we have illuminated the spiritual within our community.

However, the mandala exercise is not a panacea. It is one experience that can assist students in navigating the anxious space of the transition to both young

adulthood and to teacherhood. Therefore, I remain focused on the openness of this experience, letting students take whatever they need or want from it. Like McNiff (1992, 26), "I become more interested in acknowledging and feeling the condition rather than in 'fixing' it." I believe that trying to "fix" things is a wrong-headed notion that would contribute to any existing damage, similar to Yob's (1994) conclusion that the teaching of religion is a powerfully emotionally and spiritually loaded experience. Mandalas are a natural and spontaneous approach to the psyche. It is important to allow the process to simply *be*.

Ultimately, the mandala experience transforms our understanding of the spirituality of teaching and learning. As Jaffé (1974, 281) writes, "a true symbol appears only when there is a need to express what thought cannot think or what is only divined or felt...." The mandala can be a symbol that provides students with a glimpse of the divine within themselves and each other. It can allow them to value each other in a different way. And if they can carry this sense into their own pedagogy, if they can honor the spiritual in their own students, we have circled the square. Together, we have made the transformation of our conscious and unconscious processes part of the community.

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**PLACE STEINER COLLEGE AD
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Creating a Space for Embodied Wisdom Through Teaching

James Overboe

A disabled student and teacher discusses his personal experiences in the classroom.

How Desire and Risk Can Create a Space for Embodied Wisdom in Education

The organization of this paper into two parts corresponds with my experience as a student and my experience as a teacher. I employ autobiographical anecdotes as a means of grounding my theoretical critique in my "lived experience" as a student and a teacher whose spasticity and lack of body control are the opposites of the professional comportment typified by the corporeality of the white, nondisabled, heterosexual male (Young 1990).

More often than not, people of differing races, genders, sexualities, and abilities who are successful within educational institutions are socialized to incorporate the embodiments, sensibilities, and characteristics of this white masculine prototype that has been invoked as the personification of rationality and logic. Because I learn and teach through my body, one that cannot conform to this non-disabled prototype, I often find my embodied wisdom is subsumed under the pedagogical dominance of rationality and logic. Yet in my own life I have found my experience of embodied wisdom enriches my education both as a teacher and pupil. However, I maintain that embodied wisdom should complement logic and rationality, not subsume them.

While this chapter specifically concentrates on my embodied wisdom as someone with cerebral palsy, I believe the notion of embodied wisdom can apply to the corporeality of other people who are not white, heterosexual, non-disabled males. It is the "interactive moment" (Shotter 1997) between varying individual notions of embodied wisdom that will enrich the classroom. Throughout this chapter I illustrate the struggles I endure in my attempts to validate my own embodied wisdom and that of others. The resis-

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tance within the teaching profession in educational institutions to embodied wisdom often jeopardizes my progress as a student and my status as a teacher.

The Disavowing of Wisdom Derived from a Student's Disabled Embodiment

I began my education in a "crippled children's school" because I was deemed not normal. The concept of normality began during modernity. Davis (1997, 10) places the origination of the "idea of the norm" over the period 1840-1860. In 1835 statistician Adolphe Quetelet developed the concept of the "average man" that became the benchmark for normality (Davis 1997, 11). With the rise of normality the school became an institution of disciplinary techniques, which are implemented to improve knowledge and skills (Foucault 1984, 209).

I was not normal but the abject other. The act of abjecting allows for one to make sense of something or someone that is paradoxically meaningless yet disturbing (Kristeva 1982, 2). Kristeva (1982, 4) argues that abjection is not the lack of either health or cleanliness but the disruption of identity, system, and order. At the age of six I was tested to determine my suitability as a candidate for integration into the mainstream education system from a crippled children's school. In short, I was being tested to determine if I could be orderly and fit within a system and if I had the capability of moving beyond abjection to some semblance of normality.

At an early age I realized that my mind worked differently than others in that my intelligence stemmed from my body with its spasms and sensibility of cerebral palsy. Upon being selected for inclusion into mainstream schooling I was amazed that others who were intelligent and also experienced embodied wisdom were not chosen. As I underwent testing, I realized that I must keep my way of thinking to myself unless I wanted to become the abject other again. I understood that I must relate my process of thinking and my subsequent answers to the logical and rational pedagogy of the non-disabled world with its restrictive normality. As I went through the testing procedure, I found that my spasms travel a circuitous route and contribute to my discovering the correct answers. These circuitous

routes, emanating from different areas of my body, establish an embodied wisdom.

At this point I would like to try and explain what is meant by embodied wisdom, as it manifests itself in my experience of cerebral palsy. Embodied wisdom derives from my spasms that circulate throughout my body, including my brain. My spasms are like dolphins skimming near the surface of the ocean or like depth charges plummeting to the deepest part of my being and exploding. They cannot be completely controlled or contained. At other times my spasms are feather-like as they move throughout my body.

I do not want to leave the impression that my spasms move in an orderly or predictable fashion. On the contrary, these differing types of spasms interact and are often intertwined. Yet, each type of spasm can be both intermittent and consistent. The interaction of differing spasms with their varying sensations causes me to meander down various paths. It is not a matter of me directing these spasms in order to find wisdom. Rather, it is a case of my spasms circulating through my body and causing me to investigate differing routes. These investigations interact with my education and impact how I process information. Intuitively, I am frightened to allow others to view my spasms or explain my subsequent embodied wisdom to them.

Perhaps it was not simply a matter of my intuition. I had been segregated from the regular school system because my body was considered inferior and therefore my intelligence was suspect too. Consequently, I was chosen because of my ability to conform to the regular education system. As I watched other non-disabled children complete their lessons I noted that they employed a linear rational method that matched their controlled corporeality.

Of course, I could not be sure that other students also were shifting their thinking to adapt to the rational thinking of the education system. But for me there was and still are physical consequences for me to adapt to a rational logical way of thinking. For example, when I attempt to do simple mathematics or statistical evaluations I suffer from seizures which manifest as blinding flashes in front of my eyes accompanied by pain in my head. It feels to me as if my spasms are struggling to break free from the shackles of logical and rational thinking. To this day I have

never been able to unlock the secret of how to do either algebra or statistical analysis.

It is difficult for me to explain what the path I meander down or up might be like. The trouble is that the paths are never the same. Consequently, to explain my spasms in hindsight would do a disservice to the spontaneity of their movement. Moreover, such an explanation to some extent suggests that I have the ability to step back and observe my spasms, whereas more often than not I am too busy interacting with my spasms to analyze them.

Even at a young age I was perplexed because if "normal" people were superior to me, then why could they not understand disabled people's "inferior" way of thinking? Put another way, why did I have to demonstrate that I was capable of discerning their method of understanding the world? This method of integration has little to do with helping disabled students reach their maximum potential and more to do with maintaining the social construction of normality.

My experience of integration is not an isolated incident. The educational system accepted without question the principle that normality was a given and any deviation from it was a tragedy to rectify if possible. The goal of this form of integration was commonality over diversity through assimilation.

Susan Lonsdale (1990, 93) writes, "Most children with disabilities, however, attended (and still do) special schools, where they are not only segregated from the majority, but socialized into a lesser, minority status." Those of us who attain a university degree are overachievers, sometimes with overly high expectations for ourselves (Lonsdale 1990, 94). In their interviews Leicester and Lovell (1997, 113) found that many disabled adults felt that "Special Education is a kind of apartheid and encourages the ignorant and hurtful attitudes which they have encountered in mainstream society."

One's ability to succeed in mainstream education lessens one's exposure to ignorant and hurtful attitudes. Oliver (1996) and Wendell (1996) both argue that to a certain extent academic success for disabled individuals validates and legitimizes an educational system that excludes most disabled people. From public school to university I have been able to obtain substantial cultural capital by tacitly agreeing with

others that logical rationality is the basis of my success rather than my disabled sensibility.

My experience illustrates the belief "that the voice of the other has not been granted an adequate hearing, and this because the other has either been silenced or forced to speak according to the restrictive dictates of dominant discourses including the human sciences" (Huspek 1997, 11-12). In order to maintain my status I have had to disavow and silence the embodied wisdom stemming from my cerebral palsy and instead interpret it in terms that uphold the discourses of normality.

Thus, integration with its notion of normality preaches the tolerance and acceptance of special needs children (Oliver 1996, 88-89). The problem is that the provider of this tolerance may revoke the tolerance or acceptance if the student does not comply or if the accommodation is deemed too expensive.

Emily Eaton, who experiences cerebral palsy, was denied access to a regular school because accommodations for her were deemed too expensive. Her parents have sued for the right for her to continue to attend an "ordinary school." In her decision, appeal court Judge Arbour observed that in a segregated class Emily "would have fewer opportunities to learn how other children work and how they live. And they will not learn that she can live with them and they with her" (Claridge 1995, A2). Moreover, Judge Arbour argued that "forced exclusion is hardly ever considered an advantage. Indeed, as a society, we use it as a form of punishment" (1995, A2).

The Privileging of the Written Word and the Myth of Accommodation

Throughout my university life there has been an assumption that if any accommodation concerning my disability is granted then either I have an advantage or equality has been reached. I hope to dispel this myth. Applying accommodations is not a simple process because pedagogical discourses that underpin our educational system continue to privilege an able-bodied sensibility over a disabled sensibility. The following anecdote illustrates the problems with applying accommodations for disabled students. During my master's degree a compulsory sociology course required students to submit a weekly three-page single-spaced summary of articles. Due to my

cerebral palsy the writing of these assignments was prohibitive for me. I asked for and received permission to audiotape my reports.

For this course both the instructor and weekly guest lecturers graded weekly written assignments. Before tape-recording my assignments I felt I might be at a disadvantage because I had been trained in a written tradition rather than an oral tradition. Moreover, professors are indoctrinated in an educational system that disseminates information through a visually oriented medium of instruction (mainly textbooks) and testing (where success is measured through written essays and examinations). Keith Hoskins (1990, 46) contends that "written examination and arithmetical marks appear to develop, and then predominate, from around 1800." With the exception of those with visual impairments, professors have become accustomed to analyzing an essay visually, not aurally, because of a pedagogy that privileges the written word. For example, professors can refer back to previous pages to decide if a logical argument has been sustained. The oral tape requires re-winding and re-listening to the tape, which many of the guest professors found irritating. Moreover, the written academic text is supposed to be objective and flat, without emotion. No matter how hard I tried, the inflection of my voice betrayed the passion I felt for my views.

As the course progressed and as I became more comfortable with taping, my marks improved. Similarly, as the course instructor developed an "ear" for my oral reports my marks improved with him. However, with the lecturers I found an interesting pattern. Although those professors who concentrated on content and not pedagogical structure had difficulty in marking my aural tapes, their assigned grades and comments demonstrated that they understood my argument. On the other hand, the professors who gave me lower marks pointed to my deficiency in style and my lack of academic rigor. When I inquired about the sociological argument I had conveyed, they would or could not comment.

Consequently, most instructors had difficulty when they evaluated my taperecorded short essays. The instructors and I both had to adjust to an audio-oriented medium. My lower marks reflected our adjustments to working with audio-taped essays. In

spite of the lower marks, the conservation of my energy was a priority for me. Later in the year, while taking a different course, I switched from the audio tapes back to written assignments, which meant an increase in my energy consumption.

Frequently, the decision to accept or not accept an accommodation for my disability remains a choice between inconveniences. Still it is better to have a choice than to not have one. Throughout my life accommodations for my disability have not given me an advantage—often they just lessen the magnitude of the barriers I have to overcome. Thus, the superficial implementation of accommodation without considering the need for a required shift in pedagogical thinking can be harmful for all concerned, especially the disabled student.

The Facile Acceptance of Different Embodiments at Universities

Hennessy (1993, 11) maintains that the superficial acceptance of plurality within universities is a method of crisis control. Rather than examining the political and economic powers that exclude different cultures and peoples, the difference in cultures is celebrated. By honoring cultural difference, institutions such as the university are able to deflect criticism of their systemic, exclusionary practices.

Agreeing with Hennessy (1993), Erevelles (1996) argues that within the articulations of a plurality of difference "the assumption is that if only society learns to value difference and accept the fact that all difference has a role to play within this social system, all will be well" (Erevelles 1996, 522-23). Best and Kellner (1991, 213) along with Erevelles (1996, 522-23) warn that the politics of identity/difference can be orchestrated to marginalize people by redefining it as a harmless politics of style that leaves relations of domination unaltered and unchallenged.

Similarly, members of a minority group are often pressured by others who have a stereotypical view of the way a minority member should act or how he or she should look. I feel pressure from others to convey what they deem an appropriate stereotypical image of a disabled person. Writing about the issue of stereotyping, Code (1995, 76) comments, "Stereotyping cannot be contested or erased by personal refusals to comply. On the contrary, there is a peculiar elasticity

to stereotypical roles and options, which produces the result that their occupant is damned either way."

The following anecdotes illustrate Code's (1995) point. While completing my master's degree, I was confronted by a colleague who was the spokesperson for my fellow graduate students. She asked, "Why hadn't the department chosen a disabled woman if they were to accept a disabled student?" I mentioned that she and others were assuming the department knew about my disability prior to my acceptance. In fact, I had only informed the department about my disability after my acceptance. My explanation was satisfactory for her. However, I remained suspect in the eyes of some other graduate students who continued to question my legitimacy. Unfortunately, no matter what I said, no matter what I did, I remained a person who had achieved my entrance because of my minority status.

Another time I mentioned to a colleague that I was going swimming. He admonished me for trying to achieve the normative body of modernity. He reprimanded me for not allowing my body to deteriorate and become a better "role model" for a new "disabled" body of late modernity. His position illustrates Hevey's (1997) point that often, disabled people's bodies are invoked as a personification of the chaos which threatens order in our society. At other times, this same colleague would introduce me as someone who had "overcome" his disability (poster child for success in modernity) by becoming a university student. Thus, depending on his mood I am invoked as a personification for modernity or late modernity. In his eyes I remained a stereotypical trope or metaphor.

Consequently, Hennessy (1993) argues for a discourse that illuminates areas that have been repressed either within or subliminal to institutions such as the university. She argues against the facile categorization of minority groups and for a validation of their embodiments and lived experience. Yet this validation requires a shift in the thinking of those who implement pedagogical practices and ideologies.

Bogdan and Taylor (1988, 146) conclude that whether severely disabled people (people with severe and profound developmental handicaps or multiple disabilities who sometimes soil themselves, drool, and cannot walk or talk) are considered hu-

man is dependent upon their interaction with the non-disabled other. If the non-disabled other accepts the severely disabled person as human, communication is achieved. If the non-disabled other assumes that the severely disabled are less than human, then communication is impossible. In either situation one cannot definitively prove that one's perception is flawed because of a faulty belief system.

Reflecting the perspective of the non-disabled, Lorraine Code (1995, 51) argues:

Claims to know a person are open to negotiation between the knower and known, where the "subject" and object positions are always, in principle, interchangeable. In the process, it is important to watch for discrepancies between a person's sense of her own subjectivity, and a would-be knower's conception of how things are for her; yet neither the self-conception nor the knower-conception can claim absolute authority, for the limits of self-consciousness constrain the process as closely as does the interiority of mental processes and of experiential constructs, and their resulting unavailability to observation.

Because of the certainty of their able-bodied sensibility, the self-conception of the able-bodied, coupled with their knowing belief that many disabled people are irrational and illogical, constrains or even prohibits interaction with disabled people.

Sullivan (1997) argues that this overlap occurs when we impose our own familiar meanings upon them without considering the other person's uniqueness and specificity. When our embodiment and our subjectivity become the standard for our interpretation of others, the notion of intersubjectivity is problematic. Sullivan (1997, 13) writes, "When dialogue is only a covert form of ventriloquism, my intersubjective world turns out to be a solipsistic one in which I encounter only myself and my own meaning." Agreeing with Sullivan, I would argue that a disabled person's subjectivity is perceived as pathological and that this results in questionable and illegitimate interpretations of "what the world means," whereas a non-disabled person's subjectivity is normative, resulting in "certain" interpretations of "what the world means."

Validating the Wisdom of a Disabled Embodiment Within Education

In the following sections I will explore how a disabled sensibility deriving from an embodied wisdom can expand the concept of education. Oliver (1996, 88-89) agrees with the new view of integrated education which postulates the notion of normality as false. Moreover, the concept of normality was developed to impose a commonality where there was only difference. Thus the education system must accept that the "difference" of disability does not detract from an educational experience but can enrich it for all involved (although the inclusion of the difference of disability is not dependent upon whether it is either beneficial or detrimental for others).

For me, the essence of education is communication. Booth and Booth (1996) have helpful insights in communicating with supposedly inarticulate subjects. They write, "Too often the problems of interviewing inarticulate subjects are seen in terms of their deficits rather than the limitations of our methods. Such a "deficit" model of informant response is rooted in a view of disability as a problem of the individual" (1996, 67). This exclusionary practice mirrors their exclusion from a wider society.

Booth and Booth (1996, 67) believe that conventional research methods often create obstacles for inarticulate subjects instead of overcoming other barriers that impede their involvement. Moreover, conventional research methods can create obstacles for inarticulate subjects in terms of the demands they make on their inclusion. According to Booth and Booth (1996, 67), researchers should attend more to their own deficiencies than to the limitations of their informant. In the same manner, I argue that educators must examine their own deficiencies in terms of their notions of intelligence and wisdom and be open to pupils who communicate their wisdom in other ways. For educators the process is not a matter of actively discovering embodied wisdom by following conventional methodologies or pedagogical practices. Rather it is a matter of educators being open to the possibilities that may arise from the acceptance of various embodied wisdoms.

Agreeing with Booth and Booth's (1996) hypothesis, as an educator of disabled adults in a rehabilitation center, I attempted to examine the deficiencies of

a rehabilitation system that, like most educational systems, privileges logic and rationality. As I taught some disabled people who were deemed lacking the ability to communicate or articulate, I remembered my experience of being tested many years ago.

Through my readings of Bogdan and Taylor (1988) I began to realize that a successful process of education for my inarticulate students is dependent upon my belief that they are communicating with me. From this perspective, any initial "lack" of communication can be reframed as an inability on my part to receive their communications. I must be open to my clients' worldviews and the expressions those views assume through language and communication. It is not enough for me to step out of the metaphorical "box" of rationality and logic because if my authority or knowledge base is challenged I can easily step back into this privileged space. Instead I must metaphorically consider my knowledge base as a porous box that can be permeated by other ways of knowing.

By allowing myself to be open to other means of communication and knowledge, I was able to gain the trust of my clients. Without the worry of being labeled inarticulate, my clients were able to "risk" communication on their terms. Often I was the one who had difficulty in making myself understood, as I was unfamiliar with their communication styles and embodied wisdoms. Working our way through our [mis]understanding and [mis]communication allowed for us to meander down different paths that may have remained hidden, which often led to us to experience different views of what intelligence and wisdom mean.

Creating a Space for Unrecognized Wisdom In the University Through Teaching

A broadening of the notion of intelligence would be beneficial to non-disabled as well as disabled students. The privileging of rationality and logic often leads to adversarial debates within academia. By demonstrating superior logic and rationality, one academic scores pugilistic points over another. Shotter (1997) argues there are two different ways in which we relate to one another. The first, the intellectual way, is characterized by abstraction, distance and observation that apply within the confines of a disciplinary space. The second, the conversational way, is

more relational with an exchange of lived experiences between individuals. This latter style of communication is "an open, unfinalized, and dialogical form of talk in which new spaces may be opened up and others closed down, freely moment by moment" (Shotter 1997, 21). Shotter (1997, 22) explains that what happens in this "interactive moment" is to be ascertained by a non-intellectual, embodied knowledge that eschews both predetermined means of communication and institutionalized formulations which confine discourse.

I would like to apply both my lecturing experience with "inarticulate" disabled people and Shotter's (1997) observations on overcoming textual violence to my experience of lecturing at the university. Usually the lecturer conveys knowledge to her or his students who in turn demonstrate their understandings by responding in a logical manner. Thus, the communication pattern is an endless loop of rational and logical discourse from encoder and decoder. The positions of encoder and decoder are fluid not fixed, but the logical and rational loop remains intact. Any interference with this feedback loop is considered "noise" to be eradicated or at least ignored.

Agreeing with Shotter (1997), I believe that the embodied interactions between, and among those who communicate primarily by making noise (the unrecognized wisdom), along with those who primarily communicate rationally and logically, would create a rich creative environment. Whether within the university or the rehabilitation center, my responsibility as a teacher is to facilitate a space for such interactive moments. In creating such spaces I am not interested in developing consensus because I feel that consensus too often falls back on familiar patterns of rhetoric and rationalization that stifle noise (the unrecognized wisdom). Instead, I am interested in nurturing desire and passion that may or may not result in conflict and contested claims. But, as the lecturer, my job is to ensure that such conflicts and contestations do not result in textual violence whereby communication is reduced to gamesmanship as students score pugilistic points on others by showing their prowess at following certain patterns of intellectualism.

Can the Desire to Validate Embodied Wisdom in The University Override the Risk Involved?

As my experience with supposedly inarticulate clients demonstrated, the noise stemming from embodied wisdom allowed us to experience interactive moments that continued successively and created differing paths of intelligence. As a disabled person I have a unique opportunity to facilitate these openings by my presence within the university. When I entered the academy I began my education as an outsider who lacked the control and embodiment usually associated with "rational" intelligence. Bauman (1993, 162) argues that the "outsiders" are ascribed traits that signify ambivalence, irrationality, uselessness. They epitomize the chaos that all social spacing, including academia, aims staunchly yet vainly to replace with order.

Now as a doctoral candidate who has credentials, I have moved beyond the position of outsider and have become what Bauman (1993) refers to as a "stranger." As a stranger I must continually reinforce my legitimacy at the university by proving that I have the "intellectual rigor" required to remain within academia (Bauman 1993, 179). If I choose to validate my embodied wisdom, my colleagues may question my legitimacy within the university.

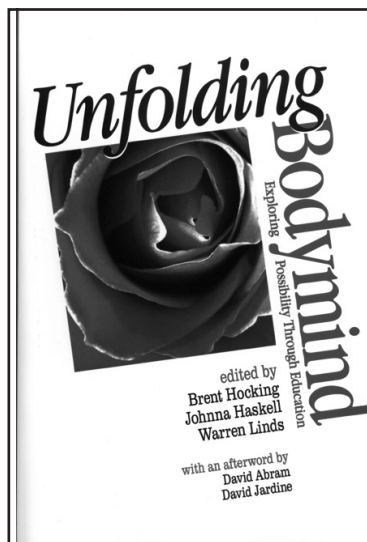
I have to constantly determine to what extent I can validate embodied wisdom without jeopardizing my position within academia. On the one hand, my presence gives validation to the unrecognized wisdom and might create a space for the articulation of this wisdom. But as an instructor I have moved from the position of an outsider to that of a stranger and to the extent that I allow other voices or communication may put my own presence at the university at risk. There is tremendous pressure on me to keep the noise down.

Yet the memory of that young boy who had to disguise his embodied wisdom and the memory of other disabled students whose embodied wisdom remained unrecognized by the non-disabled world linger in my body. Daily within my spasms the feelings of fear, shame, and ridicule are recalled. Since that day of testing I have had a perhaps unspoken desire to make the conditions possible for unrecognized wisdom to come to fruition, no matter what the risk.

Like Nietzsche (1984, 90), I stand on a footbridge stripped of preconceived notions of what is truth, wisdom, and intelligence and invite others to engage in a polylogue with me. In doing so I leave my porous body vulnerable to other notions of truth. The risk is well worth it as together we might rid ourselves, or at least loosen the holds, of the convictions that bind us. I invite you to join me.

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Parallels Between Dual Coding Theory and Quantum Physics

David Whitehead

Quantum theory and dual coding theory both accommodate the idea of uncertainty, both support the claim that everything is connected, and both explain how matter and meaning may be significantly connected.

There is a double irony in drawing parallels between psychological theory and quantum theory. Imagery and imagination have played a key role in the evolution of anti-scientific attitudes and ideologies, but simultaneously the vital role in scientific progress of visual imagery, which dual coding theory explains, has been argued repeatedly and convincingly (Miller 1984; Kuhn 1970; Van't Hoff 1967). It would appear that we cannot do without a scientific theory of imagination (Thomas 1999).

This paper is not a scientific justification of a psychological process. It does, however, draw parallels between events in quantum physics and cognitive psychology.

Quantum physics is a branch of science that researches discrete, indivisible units of energy called quanta. From this research has emerged quantum theory. Cognitive science is a branch of psychology that researches brain behavior. Visual imagery research is a branch of cognitive science that deals with discrete units of information called imagens (neurological representations for images and other modality specific encoding) and logogens (neurological representations for units of verbal language) (Paivio 1986; 1991). From this research has emerged dual coding theory.

Quantum Theory

Unlike quantum physics, the science of classical physics describes the familiar physical world. For example, in a classical sense there would appear to be no problem measuring the coordinates and velocity of a car parked in the street. To be exact you might say the car is 80 centimeters from the curb and has a velocity of zero kilometers per hour. This pure state

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is defined with respect to a physically observable system, and repeated measures should yield the same result.

However, quantum physicists might claim no measurement is perfect, that all come with a certain degree of error. For example, if we measured the position of the car to a billionth of a billionth of a centimeter, we would measure the position of individual atoms. This is a problem, because atoms jiggle around (the car is not at a temperature of absolute zero). We could never be certain about the exact velocity and coordinates of the car.

When a system, or in this example a car, is in a state where repeated measurements take on various values the state of the system somehow contains, in a special quantum mechanical sense, the pure states corresponding to the alternative values of the car. Classical and quantum physics provide different views of the world, and quantum physics provides multiple views of the atomic world.

Dual Coding Theory

Psychological events explained by dual coding theory have parallels in classical and quantum physics. Dual coding theory assumes two cognitive subsystems; one is specialized for verbal language and the other specialized for the representation and processing of nonverbal representation. Of these, visual imagery is perhaps best understood (Sadoski and Paivio 2000; Kosslyn 1994).

It is argued below that events in the verbal system are consistent with the principles of classical physics, while events that occur in the non-verbal system have parallels with quantum theory.

Basic Units in Quantum and Dual Coding Theory

Both quantum theory and dual coding theory posit the existence of basic units, the former physical, and the latter neurological. Quanta, basic units in quantum theory, are discrete units of energy in electromagnetic radiation or within nuclei. This energy is not discharged continuously but in discrete amounts or quanta.

According to Sadoski and Paivio (2000) imagens (nonverbal units) and logogens (verbal units) are the basic units of dual coding theory. Imagens are organized in terms of part-whole relationships, while

logogens are organized in terms of sequential associations and hierarchies.

There are several similarities between the characteristics of basic units described by quantum and dual coding models. Both quanta and units of information (logogens and imagens) occur as dualities. Quanta, the building blocks of matter, have both wave-like and particulate characteristics. Similarly, according to dual coding theory, the building blocks of meaning have verbal and imaginal characteristics.

Both quanta and basic units of information have discrete form. Quanta have physical form as light, while logogens and imagens are neurologically differentiated structures that work in concert (Farah 1984; 1988; Kieras 1978; Kosslyn, Holtzman, Farah and Gazzaniga 1985). Quanta and basic units of information vary in size. The size of subatomic particles and waves vary in weight and amplitude.

When combined, logogens function as language generators and imagens as image generators. Logogens can represent letters, or combinations of letters (words), while auditory logogens can represent phonemes or combinations of phonemes (diphthongs and syllables). The size of imagens also varies. For example, an imagen may represent a part of a face or a whole face.

Processing Features

There are several similarities between processes described by quantum and dual coding theory. Sequential, cause-and-effect processes are implicated in the combination of logogens and these verbal processes parallel those described by classical mechanical physics. In contrast, the processes associated with the combination of imagens (nonverbal units) reflect the dynamics of matter at the subatomic level. At this level matter seems to interact. Similarly, imagens have synchronously interactive and connected characteristics. All the information in an image is available at once, as suggested by the use of imagery in problem solving which often produces a gestalt outcome—you suddenly see it all.

The holistic and connected characteristics of imagery seems to explain how images can help us understand things such as emotion that are not provable through linear computation.

The types of representational, associative and referential processing described by models of dual coding further illustrate these processing differences. Representational processing, the direct activation of verbal or nonverbal representations, takes the form of stimulus-response processing consistent with classical explanations of the physical world. Likewise, the sequential and hierarchical associative processing among logogens within the verbal system seems to parallel the principles of classical physics.

In contrast, the associative processing of imagens within the nonverbal system seems to parallel events explained by quantum theory. This processing appears to have holistic, simultaneous characteristics.

Referential processing occurs between systems. A word may evoke an image, and an image may evoke a word. Referential processing occurs when imagens are represented by logogens, that is when images are articulated as words. This type of processing parallels reduction processes in quantum theory. For example, the process of constructing a sequentially organized verbal (logogen) representation (sentences) based on a holistically organized mental image (imagen), parallels the reduction of state vectors to classical states explained by quantum theory.

Conversely, the representation of a logogen as an imagen would involve the opposite process: a classical pure state represented, simultaneously, as multiple pure states in holistic form.

Connected Systems

Quantum and dual coding theories both assume basic units can be connected. This is the notion that the separability of particles in the universe and meanings in written discourse does not exist, that somehow all is interconnected. Research by quantum physicists Aspect, Grangier, and Gerard (1982), Bell (1987), and Bohm and Hiley (1994) supports the assumption that all things are connected. Bell suggests that when two subatomic particles connect briefly and then separate, they never actually come apart. He noted a "stickiness" that connects particles although they are not connected in any physical sense.

Bohm and Hiley (1994) describe these sticky interactions as non-local connections—connections that involve interactions among particles that in all other

respects are not connected. The assumption of non-local connections raises the possibility that changes in one location instantly affect particles in distant locations. Aspect, Grangier, and Gerard (1982) suggest that every particle "knows" what every other particle it has ever interacted with is doing. Indeed, for these researchers, everything is non-local; interconnection is everything. These are mysterious interactions, and their existence is debated.

These quantum concepts are paralleled within the nonverbal systems of dual coding theory, and are consistent with contemporary understanding of discourse comprehension (Kintsch 1998; Sadoski 1983). Within nonverbal systems imagens are characterized as holistic, nested, and connected. A visual image is connected in the sense that it is simultaneously available and connected in that changes to one part of an image (through the manipulation of that image) seem to instantly affect other parts of the image.

Likewise, logogens and imagens that together represent the meaning of written discourse are referentially connected and interconnected through associations within text, and within a context that includes an author and society.

The Uncertainty Principle

These connections within matter at the sub-atomic level and within meaning at the discourse level may be sources of uncertainty. This uncertainty stems from research that indicates people and measures are somehow connected (Bohm and Hiley 1994) and that this connection disturbs cognitive and quantum systems.

Measures of discourse comprehension conceived in non-interactive, system apart terms are inconsistent with a belief in the connectedness of meaning. Instrumentation used to measure comprehension has the potential to disturb verbal and nonverbal systems implicated in the construction of meaning. Indeed, it is extraordinary to assume we can reduce the measurement of comprehension to computational interactions consistent with Newtonian physics (Churchland and Sejnowski 1992).

Likewise, it is impossible to ignore the fact that instrumentation used by quantum physicists disturbs the measurement of events. People and measures are connected to and become part of systems, and this

interaction introduces a degree of uncertainty into the measure of matter or meaning.

Two fundamental principles emerge from claims about the connectedness and uncertainty associated with quantum and dual coding systems. These principles relate to the effect of context and the predictability of outcomes. First, observations/measurements are only valid in the context of the experiment in which they are performed. In a physical context if you say that something has particular characteristics, or even exists, you must give the context of these characteristics or existence since in another context it may behave differently or not exist at all. Similarly, in a psychological context, if you say something means something you must give the context of that meaning, since in another context *imagens* or *logogens* may mean something different. We can't conclude an electron is a particle, just as we can't conclude comprehension is exclusively verbal (Damasio and Damasio 1992). What we can say is that when we made the measurement the electron acted like a particle or that when we measured comprehension using a written test it seemed to have verbal form.

These explanations are consistent with the Copenhagen Interpretation described by Bohr (1958). Bohr concluded that quanta are what you measure them to be; when they look like particles they are particles, and when they look like waves they are waves. Likewise, meaning is what we measure it to be; when it is represented by *imagens* as a visual image, it is an image, and when it is represented by *logogens* as a word it is a word. Consequently, it would be meaningless to ascribe one "correct" reading to a text when other multiple readings have not been measured. Multiplicity of pure states, wave functions, and meanings (as critical literacy theorists tell us) are the norm rather than the exception.

Second, associated with the interactive nature and uncertain characteristics of meaning and matter are problems associated with probable outcomes. For example, it is possible to interpret results obtained from psychometric tests, and the interactions between the subject and the text, as complementary information. This interpretation challenges the mechanistic analysis associated with psychometric measure of comprehension. Neither quantum nor psychological systems are that predictable. Both quantum and dual

coding systems appropriately speak of probabilities rather than certainties. In the subatomic world, particles have a probable location. They can, however, appear in places they have no right to be (from a classical physics perspective). For example, from a quantum perspective there is probability associated with measuring the momentum (p) and position (x) of a neutron, because whenever a measurement is made the system is disturbed. The size of these probabilities is related and can be expressed as Planck's constant / $(2 \times \pi)$.

The characteristics of *imagens* and nonverbal systems seem able to explain the improbable results of research claimed to support schema theory (Sadoski, Paivio, and Goetz 1991). Schema theorists claim a degree of certainty associated with their computational-based theories of cognition. Like artificial intelligence models of information processing, schema theories have classically predictable and certain outcomes. Like classical theories of physics they depend on notions of probable association and predictable output. For example, a stimulus, such as a printed letter, encountered repeatedly, evokes a predictable schema-based response as a name or a sound. The activation of particular schema should enable one to accurately predict comprehension outcomes.

However, schema theory seems unable to explain the interactions between *imagens* and *logogens* that result in the appearance of idiosyncratic, unpredictable, and improbable meanings. Schema theory fails to account for the rich and accurate detail of complex events and episodes frequently observed in memory research, and especially in perspective studies (Alba and Hasher 1983). Consistent with computational explanations of cognition, schema should govern what readers encode, but perspective studies indicate that readers recall previously unreported information not salient to their assigned schema. Sadoski, Paivio, and Goetz (1991) suggest that dual coding theory can explain these results. They suggest that verbal instructions and the passage together activate different patterns of verbal and imaginal encoding, and that imagery, being more holistic in nature, allows for the encoding of text information not salient to an assigned perspective.

Just as quantum theory accommodates the unpredictable appearance of neutrons in places they

should not be (from a classical perspective), so too dual coding theory explains the appearance of unpredicted (from a schema theoretic perspective) meanings associated with the comprehension of written text.

Superimposition

Dual coding as the name suggests does not assume that the multiple representations of imagens and logogens are mutually exclusive. Indeed, coexistent representations are consistent with the superposition of matter described by quantum theory. The idea that "branches" of meaning can co-exist aligns with Schrodinger's Equation (1958) that suggests branches of a wave function can be superposed on each other and occupy different parts of space.

However, there is a problem with Schrodinger's Equation because, consistent with Heisenberg's Uncertainty Principle (Heisenberg 1958), it involves a statistical probability, that is, a prediction couched in the form of "Either/Or." Using Schrodinger's well-known example, the cat is either alive or dead. But predictions are rarely "Either/Or." They are more often "And." The cat might be alive and dead in some form of simultaneous interaction.

The potential for meaningful superposition is also implicit in dual coding theory. There is potential for words to be represented in two or more simultaneous, interacting "And" states (Sadoski 2000). For example, research with concrete nouns suggests they have verbal and nonverbal meaning states. If I read the concrete word "whale," the logogen is referentially connected to a nested set of imagens representing whales. The word and the images exist simultaneously—similar to branches of a single wave function. There is an "And" type probability associated with the activation of referential and associative connections between and among logogens and imagens. This probability relates to the strength of connections among neural structures.

It is likely that at any point in time, the meaning of superpositioned imagens and logogens is not isomorphic, that each state possesses different meanings just as waves and particles possess different "information." Further, it is likely that, over time, these meanings diverge to the point that imagens and logogens no longer represent synonymous mean-

ings. In short, their representations become localized, they are no longer meaningfully superpositioned.

For example, the image associated with the modern colloquial term "babe" seems to change in line with the whims of magazine editorial policy and movie titles to the point that the original meaning of the word and the image evoked by that original meaning are no longer consistent with the image of a "babe." Language is a dynamic social construct just as quanta are dynamic physical constructs.

In summary, the superimposed representation of an imagen as a logogen may involve processes parallel to the quantum reduction of state vectors, and further reduction may occur as the meanings of logogens and imagens diverge.

Conclusion

There seem to be parallels between quantum theory and dual coding theory. Both theories seem to accommodate the idea of uncertainty in the physical or psychological world. Both theories support the claim that everything is connected, matter in the universe and meaning represented by written text. And, unlike classical physics and models of schemata, both theories explain how matter and meaning may be simultaneously connected. Together this may point to either an understanding of cognition based on quantum theory, or to the metaphoric utility of dual coding theory for quantum physics, or perhaps to both, simultaneously.

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Essay Review

Changing the Educational Diet

Jeff Edmundson

Let Them Eat Data by C. A. Bowers
(Athens: University of Georgia Press, 2000)

Technology addiction is rampant among educators. A recent article in an educators' publication (Cooley and Reitz 1997) reveals the nature of this disease. The authors offer "lessons" for implementing technology in schools. With an utter lack of awareness of the addictive behavior they are encouraging, they suggest that "once you enter the technology race, you never finish," noting the feverish demands for the latest software from newly indoctrinated teachers. "Some people are afraid of change," they add, repeating a favorite bromide of tech salespeople everywhere.

Worship of technology is hardly limited to schools. According to a minister friend, mainline Protestant churches in search of young parishioners have jumped into technology, even to the point of using Powerpoint presentation software for sermons.

What is the source of this affliction among people who should know better? The bright flashing lights of technology signify the compelling lure of the new, and the faith in the new is an indicator of a way of thinking we call modernity. That computers carry this way of thinking is one of the central insights of C. A. Bowers's latest book, *Let Them Eat Data* (2000).

Data is hardly a simple critique of technology in schools, or of technology's questionable educational value. In essence, it is a book-length expansion of

ideas Bowers has offered in his previous work (1993; 1995; 1997). Bowers's central point across this work is that the complex of cultural ideas he calls modernity is a key underlying cause of both the ecological crisis and the decline of communities. *Data* focuses on computers as both a product of modernity and a vanguard leading its attack on non-modern, sustainable cultures. The book frames these issues within two overall themes. The first half of the book examines the ideology and culture underlying computers and their encouragement of ecologically destructive patterns. In the second half, Bowers critiques the unquestioning attitude of many educators toward computers, and the changes that need to be made in schools, from grade schools to colleges of education.

This essay, however, is concerned with more than a review of Bowers's book. As a teacher educator, I am particularly concerned that reading Bowers's work not be simply an academic exercise. Recently a student of mine, a high school teacher, having read much of *Data*, wrote that the ideas made a lot of sense, but "wished he would give some advice to teachers" regarding how to implement his ideas in the classroom. This echoed a common response to Bowers's writing: What does it look like in real classrooms?

As both a high school and college teacher, I have endeavored to offer ways to help teachers apply the issues Bowers raises. There is little point in having people agree that "sure, that's all true," and then teaching as they did before. Similarly, a simple review of *Data* offers scant hope that teachers will see a new path. Thus, in this essay review I take on the companion task of describing some approaches to introducing pre- and post-service teachers to Bowers's analysis of modernity and the role of computers as electronic shock troops.

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No Easy Path to Change

Helping teachers change their thinking is, of course, no simple matter. Indeed, the general lack of impact on teaching of much university preservice education is widely recognized in the literature. There are a variety of reasons for this lack, including the stored images of teaching Lortie calls the "apprenticeship of observation" (Lortie 1965); the incoherence of teacher education programs (Tom 1997); and particularly, the lack of exemplars. If student teachers learn one approach in the university but see their cooperating or mentor teacher using a more conventional approach, the student will generally use the latter. Further, if a preservice or inservice teacher simply learns theory, without models of classroom practice, there is even less likelihood that the theory will find its way into the student's classroom teaching (Tabachnick and Zeichner 1991; Liston and Zeichner 1990).

Given such powerful pressures towards maintaining the status quo, an essential component of teaching teachers to incorporate Bowers's cultural-ecological insights into the classroom lies in challenging teachers' assumptions and then showing them what it looks like in the classroom. In this essay, a number of general approaches will be illustrated: helping teachers bring to awareness and examine their tacit beliefs and assumptions; offering cultural-ecological concepts in concrete form (and it's not just a matter of providing verbal examples, but of interactive examples with emotional impact); providing teachers the opportunity to practice seeing in cultural-ecological ways and to talk about their experiences with others; and finally, giving teachers models of how Bowers's ideas can really be taught in the classroom. These principles, hardly original ones, are drawn from several years of experience teaching Bowers's ideas to pre- and inservice teachers as well as a research project with a group of preservice teachers.

Bowers's Concept of Taken-for-Granted Modernity

First, to understand *Data*, one needs to understand Bowers's larger analysis of modernity. Among the major principles of modernity are the assumptions of individualism and the concomitant separation of people from community, of progress as inevitable and generally positive, of anthropocentrism, and of

commodification. As Bowers points out, both capitalism and socialism are products of the culture of modernity, and thus his critique argues that the issues are deeper than can be dealt with by a critique of capitalism. He shows that these ideas are widely shared in Western society and that they tend to structure our thinking because they are taken-for-granted, or assumed non-consciously. They are built into our language and culture, and are thus acquired as we are socialized into society. A key way that language carries ideas is through the vehicle of metaphor. As Lakoff and Johnson (1980) demonstrate, much of our thinking is structured by metaphorical concepts.

Bowers (1993) extends Lakoff and Johnson's argument in two ways. First, he shows that metaphors are much more than "the sun is a ball of fire," but include any terms that tacitly encode cultural history, such as "freedom," "natural resources," and "civilization." Second, he highlights root metaphors such as individualism, anthropocentrism, and mechanism, that generally underlie and structure most of Western thinking at an unconscious or tacit level.

Language, Culture, Thought

Fundamental to teachers implementing Bowers's work is understanding how cultural ideas are buried or encoded in the language we use everyday. If teachers do not see hidden ideas in their usual practice, they will not grasp Bowers's argument that computers carry forward certain ways of thinking. To begin to look at culture, I start with examining language, which carries culture.

How do we learn to see what is usually invisible? My answer lies in concrete practice. A key tool in this practice is to look for the ways that any metaphor highlights or emphasizes certain aspects of a situation and hides others. For example, the metaphor "classroom management" emphasizes the teacher as boss, and the students as underlings in need of control, while it hides or de-emphasizes moral and emotional relationships between students and teachers.

I ask teachers to examine the textbooks and language in their classrooms and bring in examples of metaphors to analyze. Given the new lens, they see plenty. They find examples of metaphors that commodify education, as when teachers tell kids that ed-

ucation is an “investment in the future.” They find examples of metaphors that open doors for kids, such as the physics teacher who shows how fluid dynamics—or flowing water—helps kids understand electricity. They find examples of metaphors creating cultural barriers, as when a teacher discussed the Roaring Twenties with ESL students, who, misunderstanding “roar,” wondered why the people spent so much time at the beach hearing the ocean roar. We continue this practice in every class. I call it “metaphor drill,” with the goal of making awareness of language a habit for teachers. Then, when I offer the metaphor “computerphobia”—a computer textbook’s disease metaphor for those who have resisted the computer addicts—it is clear how it carries an embedded bias.

Thinking Culturally

Next, if teachers are to understand the cultural role of computers, I find it essential that they learn to “think culturally,” to see culture not just at the level of food and clothing, but at the level at which people think and understand the world. Following Geertz (1973), I define culture as a socially constructed web of meanings within which humans suspend themselves. Meanings are created and supported by a social process, and culture occurs any time a group of people creates a set of meanings that are unique to them. It highlights the ways people can fail to communicate if they have different meanings attached to actions in the world.

To illuminate this definition of culture, I provide an actual example of a teacher in a rural grade school who believed that animals had rights, and discouraged students from killing spiders and flies in the room. Parents complained, and following a rather simplistic tradition of balance, the superintendent and school board decided to hold a forum to present both sides of the animal rights issue. Students filled out surveys and participated in the forum. Some came home crying, not understanding why their world was being questioned. Parents erupted and the forum was called off.

Teachers quickly see that hunting is a key part of rural culture. Going on a first hunt with Dad is a male rite-of-passage, and thus fraught with emotional baggage. Questioning hunting was tantamount to

telling young boys that Dad was a bad person. Further, hunting in that region is not primarily for sport, but for food for the winter. Without understanding these cultural attitudes, it is easy for urban teachers, educated in the Western academic tradition to see the townspeople as reactionary in their resistance to the discussion.

I ask teachers what might have been done differently if the teacher, superintendent, and school board were more aware of culture. They suggest that the educators might have asked students to explore what hunting meant to them; that the board might have asked the teacher not to impose his beliefs on the community; or that the board might have instituted a quieter dialogue with the adults, not including the children who were not prepared to handle an emotionally charged issue.

Thinking about culture this way requires teachers to realize their meanings are partial, makes them constantly question what meanings they are imposing on students, and means they must think in terms of bridging a cultural gap not just with students who are ethnically different but different on the basis of class, age, peer group, region and a host of other characteristics. Seeing cultural meanings is one step in learning to see the cultural ideas carried by computers.

Learning to See Modernity

Once teachers begin to understand the way language structures thought through metaphor and carries cultural ideas, we can look at Bowers’s illustrations of the specific ideas of modernity (or Western ideas) that schools tend to reproduce. Anthropocentrism is perhaps the easiest to spot. When I ask what is hidden within the metaphor of “natural resources,” teachers see the implication that nature is here for humans.

The effects of the assumption of progress are most vividly exhibited in the video and book *Ancient Futures*, (Norberg-Hodge, 1991), about the people of Ladakh (in northern India), whose sustainable society has been rapidly disrupted by modernity. So-called “progress” has lured Ladakhis from a cooperative and prosperous, but low-tech society to one based on individual consumption. Many are not only physically worse off, but addicted to modern

commodities. As teachers view the video or read the book, we examine how different aspects of modern culture, including Western-style education, pull at the threads of Ladakhi culture.

As we talk about the modern assumption that progress is inevitable, I ask teachers to write about a tradition they still carry on, but one that is based primarily on non-commodified activities. It is an indication of the dominance of commodified relations in society that some have trouble coming up with even one example to share. Sitting in circles, the entire class is invited to read their stories. Teachers read of religious traditions such as the Jewish Sabbath, of family gatherings, of learning skills from elders: fishing, cooking, sewing, vegetable farming. This read-around draws a moving verbal collage. Some teachers recall it as the most powerful experience of the class. They vividly see patterns they value deeply yet have often ignored or thrown away, such as the emotional connections to ancestors, the meaningfulness of face-to-face relations, relations to other humans and to nature that are rooted in respect rather than transaction. Having collectively created this picture, teachers understand what is lost to progress far better than a stack of readings.

Teachers point out that few if any of the skills based in these traditions are recognized, let alone taught, in schools. When teachers see how modernity is reproduced in their own lives, they are far more ready to understand Bowers's argument that computers encourage a particular way of thinking.

Challenging the Myth of Neutrality

Many people assume that computers are just tools and what matters is how you use them. Bowers explains that no technology is neutral. Instead a technology always amplifies certain cultural patterns and hides others. Specifically, "computers reinforce or marginalize culturally specific patterns of thought and communication in how the technology encodes the cultural assumptions of those who design them" (Bowers 2000, p. 22). But neutrality is a hard myth to break. "Garbage in, garbage out" is a deeply engrained mantra. To challenge its power, teachers need to see that any technology is deeply rooted in a particular culture, and that different cultural goals

create different technologies. So I have teachers make paper airplanes.

The airplanes come from a simulation in a labor history curriculum (Bigelow and Diamond 1988). Teachers become craftworkers making paper airplanes. As the factory owner, I proceed to steal their craft knowledge and reorganize the work, first standardizing it, and then bringing in assembly lines. This not only makes planes faster, it enables me to hire unskilled workers for much lower wages.

We debrief and discuss the results. After discussing the impacts of the imposed technology, I ask, "Could this particular technology be anything other than harmful to workers?" Teachers understand that the technology I instituted was specifically designed to enhance my interests. I point out that the consequences were not a natural result of technology and ask them to imagine different technologies, designed with different interests in mind. They imagine such things as tools that would enhance the individual craftworkers' productivity or that eliminate tedious steps in the process.

Many assume that technology is unstoppable, often framing the assumption as, "it's human nature to use what's new." A key method for challenging such beliefs is offering examples of cultures that do not necessarily adopt technology. So I have teachers imagine they are members of a culture that tries to maintain its community by evaluating each new technology in terms of its impact on the culture. Each group gets a set of imaginary technologies, such as "a medical treatment that doubles life span," and is asked to imagine the consequences, positive and negative, for the community. Then they can decide whether to adopt or reject it. After their discussions, teachers are surprised to hear that the Amish, among

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others, practice the same careful evaluation. Rather than simply "living in the past," the Amish test out each technology and decide whether to "put it away" or adopt it after a long period of discussion. For example, the Amish allow telephones down at the street, but not in their homes, because they found that people would spend too long talking on them in the home.

Computers and Thinking

Speaking the language of metaphor, and understanding that technologies are never neutral, teachers can move on to Bowers's argument that computers encourage a way of thinking that is uniquely modern:

Computer-mediated thought and communication promote the following culturally specific patterns: explicit and decontextualized knowledge; subjective judgment and individual autonomy; language as a conduit...; instrumental and subjective morality; and human-nature relationships dominated by anthropocentrism. (Bowers 2000, 158)

Concretizing the theory, I start with the promotion of explicit knowledge, and I ask what kinds of knowledge cannot be usefully digitized. Teachers generate lists such as tacit knowledge, modeled rather than spoken knowledge, and emotional connections between teacher and student. To eliminate such forms of knowledge would be to dramatically alter education. Then I ask teachers to describe the actual effects of computers in their classrooms. Contrary to claims of computers enhancing community, teachers tell stories that illustrate the individualistic bias Bowers describes, such as stories of students fighting over computer use, devising ways to use them to compete, e-mailing someone who is sitting right next to them, and going glassy-eyed as they click from web page to web page.

Realizing the negative effects of computers, we can discuss how to counter them in the classroom. To begin, teachers suggest that they make these effects explicit, helping students see the built-in individualism. They consider how to implement groupwork with computers, discuss guidelines for choosing software and ways to structure student use of the Internet. With this base, teachers can respond to the

question: "What about the positive uses of computers?" They answer, "let's figure out what we want to do first, then decide whether computers can assist without doing more harm than good."

Practicing Thoughtful Conversations

It is valuable for teachers to practice having conversations that question and challenge the effects of technology. To enable those conversations, I use improvisations. In small groups, teachers get short scenarios drawn from real school situations. For example, one might be "The principal wants all assignments put on the school web-page. Teachers explain why the things they are doing in class cannot be digitized," or "A group of teachers is discussing whether to use a new 'edutainment' computer game in which 'next-century teenagers working with a time machine are sent to various places in the US during the 1800s and have to work their way back to the present through reading and vocabulary exercises'."

I ask the teachers to brainstorm multiple points of view they can take in each scenario. After a few minutes of preparation, members of the group act out the scene, improvising from their study of Bowers as well as their own experience. The resulting skits are both funny and revealing, as teachers hear themselves voice the clichés of computer propaganda and creatively respond to the clichés. During debriefing, teachers often reveal that they have wanted to challenge computer worship, but have been unable to find the words. Improvisation give them a chance to discover those words.

In carrying a hidden way of thinking with them, computers become

a culture-transforming technology. When computers are introduced into cultures with different root metaphors..., they further reinforce the form of subjectivity..., human centeredness ... and other forms of Western modernity. (Bowers 2000, 93)

By pushing computers and their cultural baggage on non-modern cultures, computer advocates become cultural imperialists. The resulting hastening of the decline of cultural diversity is another manifestation of what Vandana Shiva (1993) has referred to as the development of a global monoculture.

Education for Responsibility

Many "progressive" educators wanting to challenge the economic as well as cultural dominance of Western capitalism use the approach of critical pedagogy, as defined by Paulo Freire and others (e.g., Freire 1973; Giroux 1996; Lankshear 1996). Bowers, however, has shown that Freirean ideas tend to reproduce key aspects of modern thinking and thus enhance cultural imperialism (Bowers 1993; 1995; 1997). Critical pedagogy's

emphasis on critical reflection as the basis of determining the authority of ideas and values ... foregrounds the authority of the autonomous individual and the modern idea that decisions should be made on the basis of the individual's immediate experience. (Bowers 1997, 244)

Further, he points out that critical pedagogy's emphasis on emancipation tends to encourage the undermining not only of oppressive traditions, but also "traditions that represent hard-won achievements essential to sustaining self-reliant and just relationships within communities" (Bowers 1997, 244).

I have found, however, that critical methods can be a powerful source of change. When teachers examine their own lives through different lenses, such as Bowers's, they can begin to rewrite their story of themselves as teachers. Therefore, in addition to Freire's "education as the practice of freedom", I offer a concept of "education as the practice of responsibility." A pedagogy of responsibility neither reproduces repression as does conventional education, nor encourages unquestioned liberation, but considers limits and searches for connections to the accumulated wisdom of human communities and the larger biotic community within which we exist.

A pedagogy of responsibility finds value in the Freirean practices of teachers' examining their own lives and of challenging oppressive social structures, but refuses to stop there. Rather than leaving the source of authority in the student's (or teacher's) limited experience, a pedagogy of responsibility moves individuals to look for sources of moral judgment in tradition and in their community of experience. What traditions exist in the community that are non-oppressive and support a community's responsibility to its members? Cornel West (1989, 230), in discussing the traditions of civil rights struggle, points out that

tradition is to be associated not solely with ignorance and intolerance, prejudice and parochialism, dogmatism and docility. Rather, tradition is also to be identified with insight and intelligence, rationality and resistance, critique and contestation.

In a 1998 speech, West illustrated this idea in a reference to Martin Luther King as "a wave on the ocean" of the long tradition of prophetic resistance in the black church. Consider how much that conception differs from one that sees Dr. King as a person who critically examined his situation and then individually decided to fight for civil rights, which is the logical consequence of a critical pedagogy tradition that emphasizes subjectivity and the enhancement of the autonomous individual through decentering identity and authority structures (Giroux 1996; McLaren 1995). Within a pedagogy of responsibility, we look to traditions that offer ways to resist oppression and to live decently.

Rebuilding Constructivism

The concept of a pedagogy of responsibility offers insight into one of my few differences with Bowers's work. In examining and reconstructing their own stories of teaching, teachers are engaging in a form of constructivism. Bowers, however, is harshly critical of Piagetian constructivism, which he argues tends to reproduce assumptions that individuals construct ideas from data. We tell students to "think for themselves" without realizing that they are really thinking in ways shaped by their cultural ideas.

But perhaps constructivism is not fatally flawed. Within a social constructivist perspective (Vygotsky 1978), the conceptual tools with which people construct ideas are viewed as socially derived rather than chosen individually. Following the discussion above of education as the practice of responsibility, the goal then becomes to help students find conceptual tools rooted in connections to community, to tradition, to the environment. For example, rather than asking students to simply critique a use of computers based on their "own" judgment or on a language of oppression versus freedom, they might look at the effects of computers on their own traditions, on their relations with family members. They can take the understanding of tools a step further and experience

the ways in which they construct different ideas when they are given different conceptual tools. For example, in a unit on world hunger, students could move beyond the context of the Green Revolution in constructing solutions; they could consider solutions within the context of, for example, a world socialist revolution or greater local control of food production.

Chet Bowers's work deserves a much wider reading in teacher education programs. My contention, however, is that to overcome the powerful inertia of the status quo, it is far from sufficient to read a book or two. Instead, the concepts of cultural-ecological thinking should be offered to teachers in a manner that provides them with the time to wrestle with the concepts of cultural-ecological thinking and practice related pedagogical strategies. I am currently working with a group of preservice teachers in a yearlong program designed to help them think carefully about language and culture and their effects on technology and the environment. My experience with previous groups is that when teachers experience practical applications of Bowers's work, they are excited about using the ideas in their classrooms. We can encourage this excitement with well-designed instruction that invites teachers to help chart what is still a largely unexplored path of education.

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Book Review

Reading, Writing, and Rising Up: Teaching about Social Justice And the Power of the Written Word

by Linda Christensen

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Reviewed by Julie Andrzejewski

*We have been taught to see the
world through corporate eyes.*
(Ralph Nader 2001)

Instead of reading the newspaper in the evenings, I read the independent media publications scattered throughout my house. These are mostly non-profit grassroots publications spawned from one or more social and environmental justice issues. Most importantly, they are *not* owned by the eight or nine giant media conglomerates that attempt to shape our reality every moment they can intrude upon our consciousness (McChesney 1997). Like the stories identified each year by Project Censored of Sonoma State University (2001), few of the compelling issues found in these publications will be seen in the corporate-owned newspapers and magazines. Or, if they are, a reader might recognize few similarities in the presentation. Yet these articles cover matters of profound significance to all earthly beings. They raise our awareness about planetary destruction, repression and injustice, corporate and government crimes, but also about ordinary people practicing democracy, about courage, resistance, organizing, and transformation. They present information necessary for non-rich citizens who are working to make our lives and communities congruent with our values and consciences. In short, these publications inspire us to "rise up" and take action.

This information discrepancy didn't come to my attention until I was in college. At that time I became involved in various social movements that chal-

lenged the view of the world I had been taught in school. Upon further investigation, I was shocked, devastated, and angry to discover that much of my school learning was false or distorted. I decided then that I would introduce my own students to information and tools to view the world through other realities than the dominant paradigms. Thirty years later, I am excited to be part of a social justice movement in education that is doing just that. In pockets of progressive programs sprinkled throughout the nation, we teach students how to critically investigate issues that affect their everyday lives. Students lucky enough to encounter one of these teachers receive an opportunity to learn perspectives and skills still not available to most. These students might learn to reach across cultural and gender borders, to seek non-profit and non-dominant viewpoints, to juxtapose common assumptions with oppositional information, to question sources for conflicts of interest, to challenge conventional wisdom, and to take action to make the world a better place (Andrzejewski and Alessio 1999). Linda Christensen is one such teacher. Amidst the rich cacophony of student voices she has nurtured, Christensen shares her own struggles to become the teacher she never had in *Reading, Writing, and Rising Up: Teaching about Social Justice and the Power of the Written Word*.

A Liberatory Approach

In another powerful publication for educators from Rethinking Schools (Bigelow et al., 1994), Christensen vibrantly illustrates how to bring social justice education and action right into high school English classes. Written in the accessible language Christensen advocates, *Reading, Writing, and Rising Up* transforms her English classroom into a Freirean liberatory experience. In a dialectical process of developing literacy skills, students develop critical consciousness of the forces that shape their lives and learn that, in concert with others, they can act upon the world to make positive changes. In this forceful and practical book, Christensen draws upon all the best practice teaching methods, combines them with love and the study of social justice issues to offer us a

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gift of her own passions—writing, teaching, and acting for justice.

Christensen creates a comprehensive learning experience that challenges students to look and write critically about the world they live in—locally and globally. She teaches them to critique the politics of the media, language, government, corporate policies, and their own educational system (i.e., tracking, testing, etc.). Beginning with childhood cartoons, Christensen involves students in media criticism by asking students to consider whether a “secret education” outside of the school has influenced their lives. She gives them a chart to critique the hidden messages to which they were exposed about women, men, people of color, and poor people in cartoons. In another analytical activity, students read a modern version of Cinderella about a “purty young Black sister” which challenges stereotypes about race. Christensen points out that it “celebrates the beauty, culture, and language of African Americans ... (and) puts forth the possibility of cross-race alliances for social change.” She notes that two myths are still reinforced by the story: that “happiness means getting a man, and transformation from wretched conditions can be achieved through consumption—in [this] case, through new clothes and a new hairstyle” (p. 44). It is inferred that she discusses these issues with her students as well. Not mentioned, but hopefully included in this discussion, are stereotypes about mean, uncaring stepmothers.

Her classes build on a foundation of much discussed and little used teaching methods, like praising students, validating their home and community lives, getting students to learn from each other, inspiring students to envision and reach for more meaningful lives. She weaves living, writing, reading, thinking, analyzing, and critiquing into a fabric that the students try on and like the feel. Christensen’s goal is to create a learning community in her classroom. In order to do that, she introduces what she calls the “centerpiece” of her teaching—the *read-around*, where students share examples of their own work. Right from the start, she focuses on the positive, getting students to identify what they like about each piece. She “emphasize[s] that by listening and ‘stealing’ what works in their classmates’ writing, they will improve their own” (p. 16). In this way, she

begins to establish a pattern of learning from each other rather than fostering the closed loop two-way interaction between teacher and student.

The Power of Praise

Praise and positive attention are scarce “commodities” for almost everyone but the elites of any system. In Christensen’s school, where most students don’t originate from elite families, it is even more important as societal blaming the victim has already taken a toll on students’ visions of themselves, each other, and as a collective group. To counteract this prevailing environment, Christensen doesn’t just encourage praise, she requires it. She models it herself, spreading it around lavishly and demonstrating to students how to do it. In the read-around she teaches students to support their praise with documentation, “a line, ideas, word, or phrase” that is especially appreciated (p. 17). She asks listeners to share a personal connection with the writer’s piece. She wants the praiser to get credit as well, to encourage connections between the praiser and the praised, and to do it publicly—looking at the writer directly. This is part of her effort to develop community among the students. It’s harder to criticize or ridicule someone who praises you. So, in the process of teaching writing, Christensen teaches students positive ways to socialize with each other, a rare activity in a milieu that too often is characterized by ridicule, name-calling, stereotypical “jokes,” verbal insults, antagonism, threats, and even physical violence (Minnesota Attorney General 2000).

She requires them to praise themselves too—a difficult assignment for many students. Part of creating community means sharing moments of joy. One example of this is to use “praise poems” to “praise ourselves ... our homes and communities ... our language ... and our school or neighborhood” (p. 53). She also demonstrates that powerful essays or poems don’t just magically appear, nor are they usually written in one sitting. She displays her own writing and all of the numerous drafts she went through to get to the final piece. The students then see possibilities for themselves. They aren’t so judgmental about their own first drafts. They don’t see rewriting as a sign of failure but as part of a normal process of writing that everyone goes through—even great writers.

Validation of Students' Lives and Experiences

Young people are exposed to enough negative messages to drown a whale. Besides praise for their variations of home and community experiences, Christensen invites students to analyze where these negative messages come from. Her chapter on the Politics of Language connects across race, class, and national borders to explore how gatekeeping and power relations are enforced through language. She raises questions that allow students to become bilingual, or as she says, "learning the 'standard' without humiliation,"

Asking my students to memorize the rules without asking who makes the rules, who enforces the rules, who uses the rules to keep some in and keep others out, legitimates a social system that devalues my students' knowledge and language. Teaching the rules without reflection also underscores that it's OK for others—"authorities"—to dictate something as fundamental and as personal as the way they speak. Further, the study of Standard English without critique encourages students to believe that if they fail, it is because they are not smart enough or didn't work hard enough. They learn to blame themselves. (p. 103)

Students are encouraged to write in their "home language" to affirm the validity of their voices and the possibilities of expression it provides. Authors like Zora Neale Hurston, who "blend" home language with Standard English, are read to demonstrate the power of this tool. Students "learn how to switch in and out of the language of the powerful" (p. 102).

In Christensen's class, students are given permission to write about positive or negative experiences in their own lives. As they share joy and pain with each other through their writing, they discover they aren't alone with fear, shame, or despair, and that these experiences can be conduits of powerful expression and new feelings of community. Through assignments like the interior monologue, they also find that writing can become an outlet to process difficult experiences like divorce in the family or harassment of immigrant parents. Sometimes the writing assignments move them toward resolution (forgiveness poems), or toward action (essay with an attitude).

Integrating Writing Skills With Critical Consciousness

Determined to draw upon literature that resonates with her students' lives, Christensen responds to her own questions, "Whose voices are left out of our curriculum? Whose stories are buried?" by including writers outside of the traditional canon (p. 145). While some of the writers from the traditional canon are read as well as interrogated, she draws from contemporary and historical authors representing non-dominant perspectives like Isabel Allende, Maya Angelou, Gloria Anzaldúa, Frederick Douglass, Malcolm X, Ruthanne McCunn, John Okada, Marge Piercy, and Monica Sone. Similarly, poetry from many standpoints opens windows for students to understand differing viewpoints and challenges them to think of themselves as poets. These authors act not only as cultural role models, but as activist role models. Their activism informs their writing and vice versa.

In Christensen's classes, students are taught all the traditional skills: knowing the elements of fiction (pp. 29-30); learning the components of an essay (pp. 79-80), researching evidence upon which to base their conclusions, etc. Conducting "real" research, however, includes asking critical questions and examining the social context of the "experts." Dialogue journals (pp. 48-49) give students an opportunity to "talk back" to authors or characters, challenging or supporting ideas, theories, behaviors and conclusions. Having permission to "talk back" to experts is a significant departure from traditional schooling. Fearing the undermining of their own authority and possible disruption of class and institutional rules, teachers and school officials usually take the safe route and teach students to "respect" and "obey" authority in general, regardless of the efficacy of the justification for it. Christensen's "authority" is based not on her role as teacher, but rather out of her respect and relationships with the students and their awareness that she is providing them with skills of personal and political empowerment, a rare experience in schools.

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Moving Students Toward Action

In several places, Christensen stresses the need to go beyond analysis and critical consciousness. She expresses her own frustration,

Now all of this sounds great, but a problem remains. While kids learned to question, while they broke down their senses of isolation and alienation, while they pushed toward a greater knowledge of how this society functions, they were moved less often to hope and action and more often to awareness and despair than I felt comfortable with. (p. 62)

While she hopes that students will spontaneously seize opportunities for action, she acknowledges that students have been strenuously taught to remain passive. To get students to see how this is part of their secret education, she introduces students to Ariel Dorfman:

Industrially produced fiction has become one of the primary shapers of our emotions and our intellect in the twentieth century. Although these stories are supposed to merely entertain us, they constantly give us a secret education. We are not only taught certain styles of violence, the latest fashions, and sex roles by TV, movies, magazines, and comic strips; we are also taught how to succeed, how to love, how to buy, how to conquer, how to forget the past and suppress the future. We are taught more than anything else, how not to rebel. (p. 41)

With this in mind, Christensen tries to "create the possibility for action" (p. 46). Publishing the critical works of students is one action students are encouraged to take. One of her students, Mary Blaloch asked that the "Bill of Rights for Girls" she wrote be distributed in classes. Students are also encouraged to act as *allies*, "a person who stands up for someone when they face injustice" (p. 82). While Christensen stresses that students learn to go beyond individual actions to address issues of discrimination and systemic injustices, examples of such actions seem limited to students writing about them. This is not surprising. Given all the forces teaching people "not to rebel," moving students to collective action may take some opportunities for structured practice before spontaneity occurs.

One of the most practical "actions" she gets students to take is writing their college essays. For many of her students, college is not a part of their plans. She tries to change this by taking students to colleges, arranging for them to *teach* pre-service teachers, and getting them to envision themselves going to college. Given the complexity of the applications for college, helping students write strong college essays is no small contribution. This activity allows students to see themselves with agency, as people who can act to change the world rather than passively waiting for the world to act upon them.

Conclusion

Linda Christensen shares her passion to give progressive educators an inspiring text. It's interesting to read and illustrated with many examples of student work (which serves the dual purpose of students seeing themselves as published persons, as authors whose work others want to read). The teaching and learning process she describes is so three dimensional, it is difficult to describe in a linear manner. The combination of her commitment to teaching social justice and her determination to living it in the classroom allows us to see how all parts connect and reinforce one another.

The main concern I wish she would have addressed is the possibility that students might be enticed to reveal too much about their personal lives. She enthusiastically reports that, "students will share amazing stories ... students have written about rape, sexual abuse, and divorce, as well as drug and alcohol abuse" (p. 8). While this may be safe within the classroom Christensen has established, personal revelations may make students vulnerable to ridicule, manipulation, stalking, or worse in other contexts. I wanted to ask questions about the ethical responsibilities teachers have in these situations to prepare students to consider possible consequences of self-revelations. While one does not want to discourage students from opening up in a society that creates enormous barriers to community, it would still seem incumbent upon teachers to be cognizant of possible hazards that could be created.

Along this same vein, no mention is made of mandatory reporting laws about any of these issues and how that might be addressed. Further, the availabil-

ity of counseling or more targeted support systems (i. e., suicide prevention services, sexual assault centers, drug treatment programs, gay/lesbian/bisexual/transgender resources) for emergency circumstances is similarly not mentioned.

I was pleased that Christensen addressed looksism (size oppression) since one of the groups experiencing a great deal of harassment and violence in schools are "fat" students (Minnesota Attorney General 2000). Following up on the politics of language, a never-ending learning process in my own experience, I think the term "overweight" should be interrogated. The term itself implies that there is a "normal" or "ideal" weight by which everyone can be measured and determined to be "under" or "over" or on target. Size activists speak of size oppression and, in some cases, reclaim the term "fat," as in *Fat Liberation* or Camryn Manheim's (1999) book, "Wake Up! I'm Fat!" While I don't have "the answer" for the best terminology in this area as I believe it is still evolving, I think it is important for us to integrate this issue more thoroughly into social justice education.

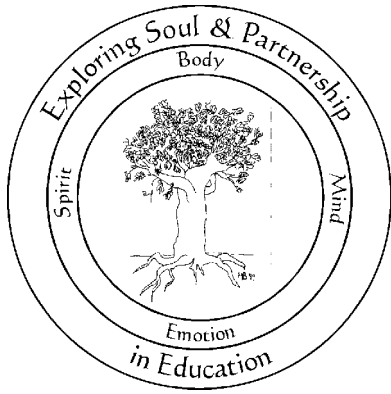
Overall, Christensen has provided social justice educators with a model of intense passionate and

loving teaching that nourishes the hearts, minds, and souls of young people. This artwork she illustrates so powerfully with student essays and poetry gives us a glimpse of new possibilities for our own classrooms. *Reading, Writing, and Rising Up* shows the potential for students to see the world, not through corporate eyes, but through activist eyes.

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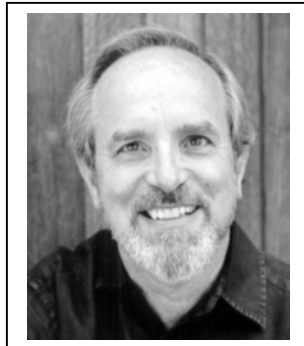
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