Chapter 1
Introduction: What We Call Knowledge Is Complicated and Harbors Profound Consequences

In the bizarre world of the twenty-first century where the U.S. and its Western allies wage wars of empire and transnational corporations pursue economic policies that transfer money from the poorest nations to the richest individuals in the wealthiest, the control of knowledge becomes a bigger and bigger issue. As smaller numbers of wealthy individuals and corporations control most of the "certified" information we can access, many people are exposed on a daily basis to counterfeit justifications for malicious military, economic, political, and cultural behaviors. While there are many troubling issues about George W. Bush's Iraqi War, one that is rarely discussed involves concerns about the production, transmission, and reception of knowledge in contemporary societies.

Supporters of the war used the imprimatur of expert science and rigorous research to spew a wide range of lies about Iraq's threat to the world and the necessity of immediate military action. Millions of people in the U.S. and even around the world swallowed such falsehoods in their totality. In retrospect the lies seem quite obvious to many, but nearly one-third of the U.S. population still believes such claims as Saddam Hussein possessed weapons of mass destruction, was responsible for 9/11, and was preparing to launch an attack on the U.S. and its allies. Such realities tell me that something is amiss. When the politics of knowledge surrounding the Iraqi War are combined with tens of thousands of other informational issues, we begin to realize the extent of the "knowledge problem" of our age.

This book looks at these issues from numerous perspectives, in the process taking the reader into a world of knowledge production that is rarely discussed on the public stage. Literally, there is no area of Western and increasingly international society that is free from the damage caused by a distorted politics of knowledge. This issue should be on the front burner of our consciousness, a central part of any curriculum, and a subject discussed and debated in the political process. Yet, it seems strange to many individuals to raise these issues, as the purpose of say, becoming educated, is to simply commit knowledge to our mental filing cabinets. The idea that a central purpose of a democratic curriculum might involve exploring where knowledge comes from, the rules of its production, and the ways we can assess its quality and the purposes of its production often doesn't resonate with individuals living in an era of standardized tests and student/school rankings. *Knowledge and Critical Pedagogy: An Introduction* explores the diverse and often

J.L. Kincheloe, *Knowledge and Critical Pedagogy: An Introduction*,

hidden locales where these knowledge issues operate. In the process we explore alternatives to the "knowledge status quo." It is a fascinating and complex story that must be understood if just social change is to take place in the coming years.

Of course, a key question raised by the book involves the role of education in a globalized, corporatized world grounded on a distorted politics of knowledge. A regressive politics of knowledge helps produce a technicist education that is more concerned with "how to" than "why" questions. In such a regressive education the distorted politics of knowledge produces a body of data that must be transferred to passive students. Thus, the most important question for teachers is how to best get this data into their heads. Why they might need to know this information as opposed to other information is simply not a relevant issue. These learners are not in technicist schools fueled by **neo-liberal**, free market, corporatized ideologies to become scholars who use their knowledge and skills to do good things in the world, to relieve the human suffering that plagues the planet. Far from such a goal, the purpose of schools in the dystopian world that confronts us is to *train*, well-regulated and passive students to accept *what is*.

Imagining *what could be*—a central goal of any critical pedagogy—has no place in such regressive schools. In these educational institutions no one questions the ways knowledge is produced or whose interests it serves. All that counts is how much of the "infallible" standardized content is memorized by students. In contemporary schools in the U.S., for example, the quality of schools is solely based on how much of this content is committed to memory. Of course, this is measured by the lifeblood, the *raison d'tre* of contemporary education—the high stakes test. Paulo Freire (1970) wrote of this transfer of certified knowledge 4 decades ago—he called it the banking model where knowledge is deposited in the minds of students. Still, the banker managers badger us with their insistence on unexamined deposits.

The concept of educating scholars who can answer more complex and compelling questions about knowledge is not important in the neo-liberal empire of the first decade of the twenty-first century.

- How knowledge is produced?
- Where does it come from—who produces it?
- How does it find its way into the curriculum?
- Who benefits from students parroting it back to the authorities?
- In what ways does it serve the needs of the neo-liberal empire?
- What is the role of interpretation in the confrontation with this knowledge, what does it mean, what does it tell us about the worldview of those who produced it?
- How does such knowledge relate to who we are now and who we might become?
- What are alternatives to such information that come from other places and ways of seeing the world?
- How do we produce better informed, more rigorous knowledge?

The important question posed by the imperial educational leaders and politicians of the contemporary dominant culture has nothing to do with such silly inquiries. It simply involves "how do we best get the knowledge that serves our interests into the heads of our young people?" Any educational or socio-cultural research that

fails to answer this question is thrown out like the smelly garbage at a Brooklyn restaurant.

Framing Knowledge in a Global Context: The Twenty-First Century Global Politics of Knowledge

Any book on knowledge and issues of justice written in the contemporary era must deal with the last 500 years of oppression and power differences between European colonizers and the colonized peoples around the world. One of the central dimensions of Western colonial domination has involved its production of "universally valid knowledge" that worked to invalidate the ways of knowing that had been developed by all peoples around the world. In the name of modernization, salvation, civilization, development, and democracy, colonial powers have made and continue to make the argument that they know better than colonized peoples themselves what serves their best interests—and they have the knowledge to prove it. Universalism, the idea that all scientifically produced knowledge is true in all places and for all times, is a key concept in our discussion of knowledge and its relation to critical pedagogy and its concern with power and justice. Many Westerners after the scientific revolution of the seventeenth and eighteenth centuries believed that because European science followed the proscribed rules of knowledge production its findings are indisputably universal.

This universality has also been "proven" by the "disinterestedness" of Western science. From the critical pedagogical perspective Euroscience's so-called neutral search for truth is better understood as an ethnocentric justification of self-interested and exploitative colonial actions. Indeed, such actions have consistently involved the creation of unjust social structures and cultural relationships grounded on scientifically produced hierarchies of human worth. In the same way slavery was rationalized by the scientific view of Africans as childlike and thus in need of paternalistic oversight, colonial expansion was justified by the view that Westerners were bringing the benefits of their superior culture to the inferior natives. One of the great failures of Western science from a critical perspective involves its reluctance and/or inability to engage in self-examination. When criticalists have raised the notion that Western science and its universal truth often lead to oppression, the scientific establishment has greeted them less than warmly. Such defensiveness and anger continues into the contemporary era.

With the development of corporate owned media in the last 30 years, the ability of power wielders to inculcate this Western **colonialism** and its colonial knowledge in every corner of the world has dramatically expanded. With the proliferation of Western owned entertainment and news into African, Asia, Latin America, and other geographical locations the universal truths of Western science are pounded into the consciousness of diverse peoples. Of course, the good news is that such peoples—like many peoples everywhere—don't accept the truth of such universal truths. Nevertheless, corporate power wielders know that a sufficient number of

people will buy into them to justify the expenditure of hundreds of billions of dollars a year on such promotion. It is not hard to discern the ways that Western science is used in these contexts to promote national interests and the objectives of particular corporations.

"We know what keeps you healthy," corporate produced messages based on Western science inform the world. The Nestle Corporation's promotion of its infant formula as a scientifically-validated more healthy baby food than breast milk, to give just one example, kills approximately one million babies per year. The company and the media know the consequences of such promotions but continue their "educational" efforts year after year (Bar-Yam, 1995). My point here is to shock readers into understanding that the politics of knowledge is not some arcane, academic dynamic, but is a phenomenon that means whether millions of people throughout the world live or die. Any understanding of knowledge production or of education/curriculum development that ignores these colonial and power related dimensions of these processes is bankrupt.

It may sound radical to those unfamiliar to critical modes of analyses, but those who fail to deal with these power-related issues in such domains simply devalue human life and the survival of the planet. It is so vitally important that those who work in spheres that deal with issues of knowledge and education listen carefully to the insights of colonized peoples—the victims of Western scientific universalism. What stories the African mothers who have lost children to diseases that the antibiotics present in breast milk could have prevented can relate. What stories the children of Aboriginal parents in the U.S. can tell us about the way their children were classified by psychological tests and the subsequent ways they were treated by the schools. What stories the relatives of victims of the gas (methyl isocyanate) leak from the Union Carbide plant in Bhopal, India in 1984 could tell us. So far, the leak has killed over 20,000 people and seriously sickened over 120,000. To this day Union Carbide has suffered no criminal penalties for the disaster. The fact that most Americans know nothing about such tragedies is testimony to the power-driven politics of knowledge that motivated me to write this book (Mignolo, 2001, 2005; Orlowski, 2006, The Bhopal Medical Appeal, 2007).

Getting Started: Studying Knowledge and Its Production

The stories of such mothers and relatives of victims of Western universal knowledge combined with descriptions of transnational corporate greed are not important in the education of educators. Indeed, in professional education during this frightening neocolonial era whether it is for teachers, nurses, social workers, or journalists, knowledge about practice is often recast in the form of guidelines or procedures. While guidelines and procedures may have their place, advocates of critical pedagogy and its critical appreciation of how data comes to be called knowledge understand that this proceduralization may simplify the educational activities in question by decontextualizing them. What is being addressed here is an epistemology of practice and how it

differs in the standardized, test-driven curriculum of the present and in critical pedagogy. I will use the term epistemology throughout this book. While I will go into more detail about what it means, think of it right now as a simple concept: the study of knowledge and its production. Critical pedagogy is a perspective toward education that is concerned with questions of justice, democracy, and ethical claims. My notion of critical pedagogy combines these concerns with the effort to produce the most mind expanding, life changing education possible.

In the standardized education that dominates North American and Western schools in general, the world is viewed as a mechanical entity that is governed by fixed and discernible laws. Teaching and the educational process are viewed in this epistemological context as relatively simple notions that can be described by universal generalizations—for example, no matter where you operate this teaching method will work. Traditional Western educational science reveals to practitioners the correct way to teach and the right way for students to learn. In the context of this traditional Western knowledge (epistemology) these ways of teaching and learning are true in all places and in all times. The standardized curriculum we teach is in the era of No Child Left Behind basically a celebration of Western knowledges and ways of being human. The role of the teacher is to learn "best practices" from the experts and to put their dictates into practice. In this knowledge context the idea of the teacher becoming a well educated, scholar-researcher, and thus highly respected professional is nonsense—why bother? The experts will pass the truth about education along to teachers in a step-by-step procedural form.

The simplified and decontextualized epistemology of practice (a view of professional knowledge, how it's produced and used) employed by proponents of No Child Left Behind-like standardized curricula undermines the professionality of teacher work. In this uncritical knowledge context teachers are reduced to rule-following information deliverers who have no need for scholarly abilities. In various top-down mandated centralized curricula from Calgary to Dallas we can clearly trace the influence of this deskilling epistemology of practice. The purpose of many of these standardized educational reforms is to take away as much professional discretion from teachers as possible.

Teachers are told what to do by experts in state/provincial departments/ministries of education without any evidence that such government mandates will improve the quality of education. Such a technical epistemology of practice has provided many educational policymakers the justification to take control of the curriculum and instructional practices of schools. The idea of teachers possessing the prerogative to build a curriculum around the neo-colonial activities of Nestle or Union Carbine is strictly forbidden in the standardized curriculum of such schools. The anti-democratic actions of such standardized education policies threaten the academic freedom of teachers around the world. This threat is not an unintended side effect of such strategies but a celebrated tactic of dominant power's goal of social regulation.

Such simple, politically charged mandates ignore the complexity of all curricular, instructional, and knowledge related decisions in education. When political and educational leaders mandate standardized content and teaching practices for all teachers

they again ignore the complexity of the profound diversity of school conditions and student backgrounds. As teachers ask me over and over again: how can we teach the same material in the same ways to students with different backgrounds and academic skills? These teachers understand what many advocates of standardized reforms do not: that the educational process is too complex to mandate standardized procedures and outcomes. Given the context in which they are operating, good teachers know that they must diagnose short- and long-term student needs and constantly adjust and modify their educational goals and pedagogical methods.

The complexity of teaching demands a teacher education, an epistemology of practice, and a critical view of knowledge in general that is worthy of such conditions. In critical pedagogy teachers must not only understand subject matter in a multidimensional and sophisticated manner but must also be able in diverse settings to view such content from the vantage points of culturally and psychologically different students. The ability to accomplish such a complicated task successfully cannot be mandated by top-down edicts. Pedagogical directives that do not recognize educational and epistemological complexity cannot help teachers in such situations, they cannot prescribe the ways that rigorous teachers monitor students' progress via an ongoing exchange of thoughts and concepts with them.

Lost in their epistemological fragmentation of the teaching act, top-down standardization mandates cannot facilitate teachers' efforts to produce students with the disposition to become scholars concerned with learning for their own development and the social good. They cannot help teachers understand the social, economic, and psychological factors that shape such dispositions. To achieve excellence in education teachers must know more and get more help in learning more. Here rests the purpose of this book: to explore the nature of knowledge production, its certification as worthy of being included in the curriculum, and the view of teachers, students, and the world in general such knowledge promotes. A critical understanding of the ways power shapes knowledge and the role such certified knowledge plays in constructing forms of consciousness that accede to the needs of dominant power is my central concern here. Before going any further a brief introduction to critical pedagogy is in order

What Is Critical Pedagogy?

No matter how long I teach and write about critical pedagogy, I always find it difficult to define the term in a brief and compelling manner. The reason for this difficulty involves the fact that critical pedagogy is a complex notion that asks much of the educators and students who embrace it. Teaching a critical pedagogy involves more than learning a few pedagogical techniques and the knowledge required by the curriculum, the standards, or the textbook. Critical practitioners find it necessary to appreciate not only many bodies of knowledge but also the political structure of the school, wider forms of education in the culture—for example, TV, radio, popular music, movies, Internet, youth subcultures, etc., alternative bodies of knowledge

produced by marginalized or low-status groups, the ways power operates to construct identities and oppress particular groups, the modus operendi (MO) of the ways social regulation operates, the complex processes of racism, gender bias, class bias, cultural bias, heterosexism, religious intolerance, etc., the cultural experiences of students, diverse teaching styles, the forces that shape the curriculum, the often conflicting purposes of education, and much more. Advocates of critical pedagogy issue a challenge to teachers, to educational leaders, and to students to dive into this complex domain of knowledge and knowing and social action it requires.

Critical pedagogy believes that nothing is impossible when we work in solidarity and with love, respect, and justice as our guiding lights. Indeed, the great Brazilian critical educator, Paulo Freire always maintained that education has as much to do with the teachable heart as it does with the mind. Love is the basis of an education that seeks justice, equality, and genius. If critical pedagogy is not injected with a healthy dose of what Freire called "radical love," then it will operate only as a shadow of what it could be. Such a love is compassionate, erotic, creative, sensual, and informed. Critical pedagogy uses it to increase our capacity to love, to bring the power of love to our everyday lives and social institutions, to rethink reason in a humane and interconnected manner. It is important to note in this particular book, knowledge in this critical context takes on a form quite different than its more accepted and mainstream versions. A critical knowledge seeks to connect with the corporeal and the emotional in a way that understands at multiple levels and seeks to assuage human suffering.

Thus, critical pedagogy works to help teacher educators and teachers reconstruct their work so it facilitates the empowerment to all students. In this context critical educators understand that such an effort takes place in an increasingly power-inscribed world where dominant modes of exclusion are continuously "naturalized" by power wielders' control of information. What does this have to do with teacher education, critics may ask? We live in a democracy, they assert. Why do we have to spend all this time with such political issues? Isn't our focus teaching and learning? But democracy is fragile, critical educators maintain, and embedded in education are the very issues that make or break it. Are teachers merely managers of the predetermined knowledge of dominant cultural power? Is teacher education merely the process of developing the most efficient ways for educators to perform this task? Do teachers operate as functionaries who simply do what they are told? Contrary to the views of many, these questions of democracy and justice are not separate from the most fundamental features of teaching and learning.

The following chapters of *Knowledge and Critical Pedagogy: An Introduction* pick up on and expand these themes of critical pedagogy in relation to issues of knowledge. Attempting to answer questions of democracy, justice, and scholarly quality in a critical pedagogical context will shape this book. Obviously, there is nothing neutral about these issues, and, of course, I hold particular perspectives on the purpose of schooling, the nature of a just society, and the quality of different knowledges. These viewpoints shape what follows. Please be aware of my biases, but also remember that all texts are biased—the trouble is that many authors don't admit to their biases. All texts should be read suspiciously—especially the ones that

claim an objective and neutral truth. As I tell my students, whenever individuals tell me they are providing me with the objective truth I guard my wallet. As critical pedagogy maintains, little in the world and certainly little in the world of education is neutral.

For the purposes of introduction the following are the basic concepts that constitute critical pedagogy. Critical pedagogy is

- Grounded on a social and educational vision of justice and equality
- Constructed on the belief that education is inherently political
- Dedicated to the alleviation of human suffering
- Concerned that schools don't hurt students—good schools don't blame students for their failures or strip students of the knowledges they bring to the classroom
- Enacted through the use of generative themes to read the word and the world and the process of problem posing—generative themes involve the educational use of issues that are central to students' lives as a grounding for the curriculum
- Centered on the notion that teachers should be researchers—here teachers learn to produce and teach students to produce their own knowledges
- Grounded on the notion that teachers become researchers of their students—as researchers, teachers study their students, their backgrounds, and the forces that shape them
- Interested in maintaining a delicate balance between social change and cultivating the intellect—this requires a rigorous pedagogy that accomplishes both goals
- Concerned with "the margins" of society, the experiences and needs of individuals faced with oppression and subjugation
- Constructed on the awareness that science can be used as a force to regulate and control
- Dedicated to understanding the context in which educational activity takes place
- Committed to resisting the harmful effects of dominant power
- Attuned to the importance of complexity—understands complexity theory—in constructing a rigorous and transformative education
- Focused on understanding the profound impact of neo-colonial structures in shaping education and knowledge

Thus, a central dimension of critical pedagogy involves its understanding and use of knowledge. Here rests a key intersection around which this book is constructed: any critical pedagogy has to appreciate a variety of perspectives on the way knowledge is produced and deployed. Contrary to the comfortable assumptions of mainstream education, knowledge is always a site of contestation and conflict. What does it mean to produce rigorous knowledge for the social good? This is a complex, multidimensional, value laden question. Advocates of critical pedagogy maintain that a compelling answer to such a question demands that critical scholars work hard to gain insight from various cultures and knowledge producers. There is much to learn and think about in this context, but the task is certainly doable. Thus, critical pedagogy issues a challenge to scholars and social activists to push the boundaries of knowledge, to go to new epistemological places, and to employ the insights gained for the larger social good.

What Does This Mean for Education and Classrooms?

Getting beyond the mechanistic view of knowledge to a critical pedagogy holds profound implications for not merely those who think of education in the broadest sense but also for those who face students in elementary, secondary, and university classrooms on an everyday basis. Indeed, the point of this book is to make the argument that epistemological understandings are ultimately practical and can help teachers and individuals in a variety of domains with new and better ways of conceptualizing and implementing their professional activities. Scholarly, empowered, and well-organized teachers can overcome the aforementioned mandated mechanistic perspectives and the colonizing pedagogies they support. Critical teachers informed by a critical epistemology refuse to accept standardized, externally developed, scripted curricula that appeal to the lowest common denominator of teacher and student ability.

Critical teachers maintain that students should study the world around them, in the process learning who they are and what has shaped them. In this context students as odd as it might sound become epistemologically informed scholars. As such, they are challenged to analyze and interpret data, conduct research, and develop a love for scholarship that studies things that matter to the well being of the people of the world. Critical middle school math teachers in this counter-hegemonic context see their goals as cultivating a love for math, developing student interest in discovering more and more uses for math in their lives, finding applications for math that improve the lives of oppressed peoples, and producing a passion for students to know more about the subject.

No discussion of an epistemologically informed, counter-hegemonic classroom teaching would be complete without the insights of Paulo Freire the great Brazilian educator. Freire (1970, 1985) and Ira Shor (1992) have studied curriculum development in this context, employing the concept of "generative theme." The generative theme is topic taken from students' knowledge of their own lived experiences that is compelling and controversial enough to elicit their excitement and commitment. Such themes are saturated with affect, emotion, and meaning because they engage the fears, anxieties, hopes and dreams of both students and their teachers. Generative themes arise at the point where the personal lives of students intersect with the larger society and the globalized world.

One can observe similarity between Freire's generative themes and John Dewey's progressive education. In the early decades of the twentieth century Dewey advised teachers to build their classroom lessons around the life experiences of students. Only by starting with information based on such experiences, Dewey maintained, can we ever reach higher forms of knowledge and cognition. Starting with student life experiences and devising generative themes that connect to them, critical teachers can help students to question their experiences and to ponder the important points where those experiences intersect with larger social, political, scientific, aesthetic, and literary concerns. In an epistemological framework Freire and Dewey were both moving beyond schooling as a form of transference of previously

validated data from the curriculum guide to the teacher and then to the student. Knowledge, both scholars understood, was far too complex to treat it in such a degraded manner.

For example, beginning with a generative theme taken from students' fears of terrorism in the U.S., a critical teacher and her students could construct a semester's curriculum around the reasons for terrorism against America in the first decade of the twenty-first century. In this context students could explore the origins of the Muslim rage toward the United States fermenting in many areas of the world (see Kincheloe & Steinberg, 2004, for an expansion of this theme). Is the reason for such anger as simple as George W. Bush explained it after 9/11? "They [the terrorists] hate our freedom." Are Islamic terrorists motivated by simply an irrational religious fanaticism that has nothing to do with a larger historical context? What do we find when we study the colonial histories of many Muslim countries? What is the American relationship to these colonial histories? Is it anti-American, as many claim, to study American imperialism in the Islamic world and the actions that fan the flames of Islamic anger? Such studies begin to open a new world to teachers and students about the complex and power-saturated ways that knowledge is constructed in the contemporary era.

In light of this generative theme and these questions, students and teachers could develop historical curricula that explore the relationships between Islamic countries and the U.S. They could develop lessons that explore the human, physical, political, and economic geography of particular areas. In this context they could explore literature, novels and short stories that depict particular elements of life in these settings. They could develop political science lessons that study the different political positions of government officials in relation to responding to terrorist threats. Activities within these lessons are limited only by the imaginations of teachers and students. Not only would such lessons engage student interest, but students would also gain valuable research and analytical skills.

In addition students would learn not only about the topic at hand but the value, uses, and complexities of knowledge production in disciplines such as history, geography, literature, political science, anthropology, cultural studies, etc. In the epistemologically mechanistic, test-driven, standardized, and scripted classrooms of the present era students learn that school is not connected to the world around them. They learn that there is nothing complex or problematic about knowledge—it is produced by faceless experts and it is our job as students to learn it. Why, many students "reared" in such mechanistic educational contexts have asked me, would we want to question it. As they endure such indoctrinating classrooms, students sense the absurdity of the process and relegate their enthusiasm and passion to other non-academic dimensions of their lives.

Such generative themes and the lessons they support help students not only acquire and question knowledge but also learn about who they are, where they stand on the issues of the day, and how one-dimensional dominant cultural knowledge shapes these dynamics. A counter-hegemonic classroom frees students from the indignity of being told who they are and what they should know. It gives them the right to direct the flow of such inquiries on their own terms. This doesn't mean that students make

all the decisions about what they should learn and simply teach themselves. Instead, it means that students make some of these decisions in negotiation with an expert teacher who constantly works to help them develop their analytical and interpretive abilities, their research skills, their epistemological consciousness, and their sense of identity as empowered democratic citizens. In this context students gain the capacity to distinguish between oppressive and liberatory ways of seeing the world and themselves. In this way students are able to identify forms of faux-neutrality that permeate the epistemology of mainstream schooling. Here they are empowered to pick out the distortions, unexamined assumptions, and hidden philosophical beliefs that shape the official standardized curriculum of the contemporary epoch.

These are the core skills of the epistemologically conscious critical pedagogy classroom. Students with such skills are able to identify the fingerprints of dominant power on the pages of particular textbooks and in the requirements of mandated curricula. They deploy their literacy of power. With such skills they unmask the ways that ostensibly commonsense modes of seeing undermine their own and other people's best interests. Teachers and students operating with these counter-hegemonic skills are undoubtedly dangerous—threats to the status quo. Indeed, we are the types of scholars who question the problematic ways that students are categorized, differences between students are represented, educational purposes are defined, schools are organized, and relationships between communities and schools are developed.

In the counter-hegemonic classrooms of a critical pedagogy, teachers reframe the ways that school looks at students, in the process discovering student talents invisible to most everyone at school. Here teachers use such talents as bases of opportunity to which they can connect academic skills and affective dynamics. As a middle school and high school teacher I did this numerous times, making use of students' interests and talents in everything from motorcycles to rock music. In these situations I would have the student develop a reading/resource list and devise a curriculum that could be used to teach other students and teachers about the topics in question. Such students learned so much, developed better reading and writing skills, and often gained a new relationship with both learning and schooling. For once they were the experts with the valued knowledge, teaching those around them about something they understood better than anyone else.

Danger Ahead: Teachers and Students Beware

What we label knowledge, the ways it is arranged and presented, the ways it is taught and learned, and what is considered an appropriate display of having learned it is inseparable from the way we view the world, the purposes of education, the nature of good society, and the workings of the human mind. Such issues are connected to issues of power and questions of who is entitled to promote his or her view of the world. Thus, the contemporary effort to hold educators accountable—a key feature of current discourse on educational reform—is not some simple process

where experts simply decree the proper instrument to measure the quality of teaching. Instead, it is part of a larger struggle between proponents of various worldviews, social visions, and conceptions of what it means to be human. A critical pedagogy maintains that in order to contribute to the effort to improve education, teachers, students, parents, politicians, and community members must gain a more textured understanding of the momentous issues being discussed here.

The worldview and epistemology that support standardization reforms assume that absolute forms of measurement can be applied to human endeavors such as education. The teaching and learning processes, advocates of standardization believe, are sufficiently consistent and stable to allow for precise measurability. The strategies that educators use and the factors that produce good and bad student performance can be isolated and even expressed in mathematical terms. Therefore, because questions based on students' acquisition of selected bits of knowledge can be easily devised and we can determine a student's and a teacher's competence with little difficulty because such measurements can be accurately made, advocates of reductionist standardization see little complexity in the effort to hold teachers accountable. Critical educators want to move beyond this simplified model, to help all parties understand the multiple contexts that shape in diverse and sometimes conflicting ways what is going on in such a process. Despite the pronouncements of many experts, the evaluation process is more complicated than simply designating the mastery of a fragment of content as an objective and then determining if it has been achieved.

Regardless of critical pedagogy's recognition of the complexity and loaded assumptions of this evaluation process standardized reform movements continue to hold sway in the public conversation about education. One reason for this may involve the simplification process referenced here—they are easy for everyone to understand. Simplicity sells, complexity doesn't. "We can keep close tabs on student performance at the school level," the proponents of educational standardization tell the public. Using our mathematical measurement of student acquisition of content, they continue, we can compare the performance of schools, school districts, states/provinces, and nations regardless of the contextual differences that make them unique. All of these measurements and comparisons are guided by a *faith* in the value of standardized, content-based tests and the knowledge they produce. The faith in the meaning of what is measured by such tests is not grounded on some form of rigorous empirical evaluation.

The idea that such tests measure student achievement or ability and teacher effectiveness is an interpretation—nothing more, nothing less. Obviously, advocates of those of us who embrace a critical pedagogy have no trouble with interpretations—all knowledge is produced by an interpretive process. The problem here is that advocates of standardization do not reveal the interpretive aspects of the testing process; they present the data and its meaning as scientifically validated truth. A rigorous analysis of how such truth is produced reveals many interpretive (subjective) steps in the process. A critical understanding of knowledge induces us to ask that the reasons for particular ascriptions of test meaning be provided. Concurrently, such a critical stance moves us to abandon claims of objectivity in such an accountability process.

Guided by a leap of faith in what tests tell us about the educational process—Is the district wealthy? Are there many formally educated parents? Does every child come from a family whose first language is English? ad infinitum—advocates of

standardized reforms have unleashed a process where students and teachers will be ranked and ordered to an unprecedented degree. Once students are placed in the low rankings, it becomes extremely difficult to get them out. Thus, reductionist educational reforms along with the testing, and the ranking that accompany them are willing to construct an entire educational system including its purposes, rewards, and punishment structures on a faith in the worthiness of an unexamined mode of knowledge production and standardized testing process. In the norm-referenced measurements used in this context there must be winners and losers.

The fact that there are losers "proves" the system's rigor. Students are pitted against one another in a fierce competition for restricted rewards. As teaching and learning are reduced to knowing what, meaning is lost. Tragically, particular patterns begin to emerge involving which demographic groups tend to succeed when schools are arranged in this manner. Often students who come from lower socio-economic and non-white homes do not have the benefit of a parent who has a college degree. In homes where parents perform low-skill jobs, families may not see schoolwork as important as upper-middle class, white, English speaking students. Studies of the social context of schooling point out that poor and racially marginalized students have learned to view academic work and the testing of technical standards as unreal, as a series of short-term tasks rather than activities with long-term significance for their lives.

Without such compensation or long-term justifications, such students may display little interest in academic work. Their poor performance on the tests and subsequent low ranking is viewed in the context of standardization as a lack of ability and academic failure. Their faith in the testing process moves them to issue a scientifically validated assessment of cognitive inferiority to such students. Such a decontextualized, reductionistic view of the complex process of schooling and students performance in unacceptable—indeed, it is socially dangerous as it contributes to an unfair, unjustifiable sorting of the haves and the have-nots. Teaching is simplified, teachers are deskilled, and students who fall outside particular "mainstream" demographics are severely punished. Even students from the mainstream are subjected to an inferior, simplified education. Even despite the fact that many of them may succeed in the system of rewards, their scholarly abilities are undermined and their view of themselves and the world obstructed. A critical pedagogy that understands these epistemological dynamics takes on an urgent importance in this social context, as it attempts to rectify the human damage caused by an uncritical view of knowledge.

Three Licks: Critical Knowledge and the Definition of Epistemology

Just to make sure that we understand the meaning of epistemology, I'll periodically expand the definition. Epistemology constitutes the branch of philosophy that analyzes the nature of knowledge and what we believe to be true. Epistemology asks how do we analyze knowledge? How do we know it's true? How do we produce knowledge

and what is the status of that knowledge in the world? In other words, how do various individuals react to the knowledge we produce? An educational epistemological question that emerges in this context involves what do we consider valid and important knowledge and which parts of it should become part of a curriculum? How do we figure out what to teach and is the knowledge we choose of any worth?

Thus, we're dealing in this book with questions of knowledge/epistemology and the ways we might evaluate knowledge and its role in schools and the larger society. Many people view academic writing as a pain in the ass and I profoundly understand why—the effort to speak to only a small, informed group who speaks the same language, the frequent pomposity that promotes the retreat to disciplinary jargon in lieu of compelling explanation, and the lack of respect for those not properly initiated into the community of the learned. Thankfully, not all academic writing is like this but too much of it is. With that said I want to make *Knowledge and Critical Pedagogy: An Introduction* as widely accessible as possible without simplifying the complex ideas to a point that their meaning and relevance is lost. Please cut me some slack as a writer as I try to make a complex and very important topic as readable as possible.

Just how does one make power and knowledge production in an educational context accessible to a wide audience? I want to push the boundaries of our understanding of knowledge, challenge the prevailing (and unstated) assumptions about knowledge, and illustrate how this all relates to schooling, what we think we know about ourselves and world, and ultimately who we are as human beings. Thus, I believe that the issues addressed in *Knowledge and Critical Pedagogy: An Introduction* not only provide us with a new understanding of education but also can actually change the world—speaking of pomposity, yikes! I understand the danger of such an assertion, but I'm glad to take my punishment if I fail to convince my readers.

For those of you who haven't read my work before, I'm a hillbilly from the mountains of East Tennessee. I was reared in a tiny community in the mountains so fundamentalist Protestant and so poor that as a child I found it difficult to imagine any other way of being. When I was eleven my parents sensing the possible negative effects of my environment—with its serial murderers and prevailing illiteracy—moved into the small company town of Kingsport, Tennessee. Every aspect of Kingsport was run by the Eastman Kodak company which had built a huge plant in Tennessee in the second decade of the twentieth century to gain the benefits of the area's cheap, non-union labor. Management was much easier, Eastman executives learned, in Kingsport, Tennessee than in Rochester, New York. Without labor distractions it was much easier to show larger quarterly profits.

I quickly knew that I didn't want to be a fundamentalist Protestant. The condemnation of the Jews, Muslims, Hindus, Buddhists, and even the Catholics to the eternal fires of hell just didn't make sense to me. But when we moved into Kingsport, I realized after having met the aspiring middle/upper middle classes for the first time, that I didn't want to be one of them either. By 1963, a year of town living had moved me to seek some different way to *be* along with different things to know.

School provided little help with my concerns with being and knowing; indeed, it was the bastion of the upper middle class values I found so empty, unchallenging, oppressive and, to be frank, boring. I saved pennies to buy myself an eight transistor radio—I realized that at night I could pick up stations from points north, some of which were playing rock music. Being agrarian people my parents were in bed by 10:00 at the latest—usually 9:30. Their early bedtimes gave me an opportunity to listen to my transistor through my lone earphone deep into the night. I listened to several stations, picking up the trends in rock in the early 1960s.

One station that intrigued me, however, was a powerful Tennessee broadcaster, coming out of Nashville. WLAC at 1510 on the AM dial was a "black radio station" that catered to the African American community in Nashville and beyond, playing the Rhythm and Blues (R and B) of the era and featuring the black artists that had shaped and were shaping rock music. In between wonderfully produced commercials for Randy's Record Shop and Royal Crown Hair Dressing ("the light, bright modern way to keep your hair in style"), I listened to James Brown, Howlin' Wolf, Muddy Waters, Chuck Berry, Billy Holliday, Etta James, Johnny Lee Hooker, Ruth Brown, ad infinitum. Sometimes I would get so entranced in the music that I would look at my night-glow radium, carcinogenic watch to find that it was 2:15 in the morning. Some nights I couldn't make myself go to sleep and would turn the radio back on and listen for another hour.

I had to learn to play this music. But where did a white boy go to learn the blues? I tried two-dollar-a-week piano lessons, but when I told my teacher that I wanted to play rock and the blues, she laughed out loud. I don't think you want to learn that kind of trash she told me, as she directed me once again to play "Country Gardens" from my piano workbook. My heart sank. Where could you learn something viewed as so debased and worthless as rock and the "nigger music" it appropriated? Lucky for me as I was asking these questions, I discovered a local African American blues band playing many of the same songs as I was listening to on WLAC. I was entranced by the Baddaddies and went by myself to see them wherever they played around Kingsport.

I watched the keyboard player intently as he made the sounds, the blue notes that were so central to rock and blues piano. To my adolescent mind the sounds were sacred mysteries—I had no idea how to produce them. Desperate to learn I realized I had but one choice: I would have to go and watch the Baddaddies practice. While in the contemporary era that might not sound like too difficult a feat, for a 12 or 13-year-old hillbilly kid in a racially segregated place and time it was quite transgressive. Finding out where the band practiced, I walked a couple of miles one Saturday afternoon to in the racist language of Tennessee in the early 1960s "nigger town." I knocked on the door and finally one of the band's friends let me in. "Can I watch the band practice?" I asked. Suspicious and surprised by the presence of a white kid in this circumstance, the young man nodded for me to come back to the practice room. I felt like I was in the inner sanctum of some forbidden temple. I spotted the piano player and sat on a box as close to him as possible.

Everyone looked at me with the same apprehensive gaze of the guy at the door. The room smelled like stale cigarettes, beer, and pot. I watched for hours as the

band added new songs to their playlist. No one spoke to me and I spoke to no one. I was simply thankful that my presence was tolerated. When the band decided to end the practice I thanked each of the musicians for letting me watch and listen. For the next couple of Saturdays I followed the same ritual, trying to observe everything that the keyboardist did during the songs and its relation to what the rest of the band was playing. At the end of the third practice, the piano player turned and looked me in the eye for the first time since my curious appearance. Though no words had been spoken about the music or me, he had discerned that I was interested in playing the piano. "You wanna play the blues piano?" he asked me with a laugh—a snicker that said to me "you seem kind of serious about this, white boy." Realizing that this was the chance I had been hoping for, I stood up and mimicked his manner and look at me. "Yes," I said with all the gravitas filtered through a cool irreverence that I could project.

The next 10 minutes changed my life. He showed me the basic "theoretical" structure of the blues. Then he paraded a few blues piano "licks" (a short combination of notes, a musical phrase) that involved sliding off one note to another and making discordant sounds by concurrently playing notes that were only one-half step apart. In a matter of moments the hidden structures of the blues and rock were revealed to me like the Apostle Paul on Highway 61. I mustered all my powers of concentration to remember every spoken word and every played note of the hallowed insights—the subjugated musical knowledge—granted to me. The lesson ended when the piano player's "woman" came into the practice room. "Well, well," she said looking at me with her dark brown eyes, "who do we have here?" The pianist diverted her attention away from me, pulling her to him and kissing her passionately. There was another lesson to be learned here, I remember thinking, but it was best taught sans my alien presence. I ran all the way home, going over in my mind everything I had learned. I rushed through the door and sat down at my mother's ancient piano and practiced the licks for hours.

The three licks formed the grounding for everything I have subsequently done on the piano in 42 years of playing rock and blues. More importantly, this experience of becoming a researcher of knowledges not necessarily respected at a particular historical moment by dominant culture helped shape my understanding of both epistemology and pedagogy. Though, it took me years to find the language to articulate what I had learned that spring day with the Baddaddies, I tacitly understood that it was about the intellectual power and libidinal energy of subjugated knowledges. I found myself applying the lesson to all aspects of my life, as I struggled to learn from difference, to gain what I would label years later as multilogical perspectives on the world. I would also find that there—especially in formal education—was a price to be paid for such a quest. What I came up with was generally not valued or even remotely respected in most schools.

Spiritually, I became very interested in diverse religious traditions; intellectually, I wanted a curriculum that transcended the fragments of "safe" and "conformity producing" knowledge of school; ideologically, I sought insights from "dangerous" sources such as the Frankfurt School of Critical Theory and the writings of colonized and indigenous peoples around the world; ontologically, I wanted examples of

being that transcended what I considered then and consider now the self-serving, low-affect, libidinally impoverished disingenuousness of many of those from the white upper-middle class. Obviously, there are people from this background who amazingly overcome this sweeping characterization and do glorious things in and for the world. From such great people I have learned so much. But, generally speaking, I wanted to become someone who didn't simply reflect the dominant behaviors of such a group. While I was pursuing these subjugated knowledges, I was obsessed with developing a humility that accompanied the search. Having been around intellectuals, artists and professionals from a variety of fields whose arrogance and race, class, and gender biases were impossible for me to abide, my goal was to carve out a learned, unique identity that was modest in respect to the brilliant (and often unrewarded) achievements of so many other humans in diverse locales.

Thus, *Knowledge and Critical Pedagogy: An Introduction* is about the efforts of humans to move beyond the truncated insights of the present, to find new (and old) knowledges that inspire us and change the nature of our being, and to produce new wisdom in light of our understandings of the failures of the past and present. I passionately believe that such an effort is not merely desirable at this historical moment but is necessary to human survival. Indeed, the prevailing Western globalizing epistemology and the education, religion, and politics that grow out of its phosphate soaked soil are destroying the world. Whether it is the globalized free market economic policies or the geo-political military actions of the "American Empire," the people of the world—especially the poorest among us—are not well served by our ways of seeing and being. Something has to change. Epistemology is a central dimension of that alteration as it lays a foundation for the human carnage, environmental destruction, ethical insensitivity to those harmed by macro-political economic policies, educational institutions that stupidify more than edify, and ethnocentric world views that undermine the growth of our consciousness.

Assumptions About Knowledge Insidiously Shape and Limit Our Realities: On the Road

To become a seeker of new knowledges and new ways of being we must be willing to sometimes be seen as the fools of the gods. In a Western culture that moves many of us to become obsessed with popularity and the approval of others, this becomes a lot to ask of a twenty-first century student or teacher. But a critical pedagogy must, nevertheless, ask it of such individuals. One must also be willing to take to the road, in much the same way Jack Kerouac did in the 1950s. Taking to the epistemological road in this critical pedagogical context may certainly take the form of geographical travel. It might not mean spending the night in a Mexican whorehouse as did Kerouac's characters—although I wouldn't want to rule it out. But it also might mean traveling the path laid out by subjugated knowledge, exploring a wide variety of data sources excluded by the standardized elementary and secondary school curriculum and the corporatized university course of study.

I have always been blessed to be profoundly excited by the mere fact that I'm alive, and like Kerouac's youthful protagonists Sal Paradise and Dean Moriarty to find as much enlightenment and jouissance in the process of living as humanly possible. When Jim Morrison of the Doors in 1967 screamed "We want the world and we want it now," I understood so clearly what he was referencing. Take us to another hidden dimension of this planet, allow us to engage with the world in ways no one in our time and place deems appropriate. Hell, "when the music's over, turn out the lights." There's no reason to go on without that pounding aesthetic to push us on down the road. For some reason I always loved the title of the old soap, "Search for Tomorrow." That's what *Knowledge and Critical Pedagogy: An Introduction* and its epistemological road trip are about—acting on the belief that the future will be different, more just, less violent, more respectful of the panoply of inspired knowledges that people from diverse cultures have produced.

But to get there we have to find a way to engage the attention of diverse individuals languishing in the trance of Western imperial epistemology. How do we get the attention of teachers and students anesthetized by consumerism and hyperreality's saturation of information and marketing iconography. I want to write for this audience in the style of a detective writer (epistemology noir?), a boy's adventure writer, an author of girls' romance novels, a beat poet, Lame Deer's memoirs, or Stephen King penning a horror story all rolled into one. Anything to get them to think about these issues of knowledge and the ways they shape our lives and the everyday existence of people around the world. Western regimes of epistemology are in the twenty-first century so taken for granted that even the most accessible researcher/writer sounds like she is sending communiqués from the Planet Womp in the Spiral Galaxy.

The persuasiveness and pervasiveness of contemporary Western ways of producing knowledge and consciousness in some ways constitute nothing more than usual Western practice. People in every epoch of Western history have believed that their knowledges were unequivocably and ubiquitously true. This has been the case even though what they believed to be fact in one era had completely changed 50 years into the future. In other ways, however, this belief in the West's extant truths is unusual. Indeed, the power to promote such epistemological perspectives and use them for imperialistic purposes has never been greater with the help of the technological innovations that sparked the globalization process and it's enhanced process of social and political economic exploitation. Thus, in the long course of Western epistemological history, we find ourselves in an unenviable Sisyphean position. Our new regime of truth merely replaces—not improves—the one that preceded it (Foucault, 2002).

The deficit laden and disempowering views of mainstream psychology and education push us to become mere onlookers to the lived world. The idea that knowledge production and learning can be on-the-road kinds of libidinal adventures has long retreated from Western thought. Those who have only experienced an adventureless standardized education often ask me how it is possible to get so excited about the possibilities of pedagogy. The implication is—and I understand why such an inference would be drawn—that I'm weird. The young must feel the

passion of connecting with the world and not only learning but also producing new knowledges about it. There is no reason that early elementary students cannot produce unprecedented knowledge about the world. As we critique the epistemological foundations of certified Western knowledges, we begin to search for new ways of constructing knowledge that help us develop new ways of living together synergistically on this orb (Goswami, 1993; Smith, 1999; G. Jardine, 2005; D. Jardine, 2006).

Knowledge and Critical Pedagogy: An Introduction is obsessed with getting beyond the multilevel limitations of traditional Western epistemologies and subsequently moving to new multilogical regimes of knowledge production. Such a process demands that we become rigorous scholars who learn the often invisible rules that certify particular bodies of information and delegitimate others. With this insight we can better resist the disinformation produced by dominant power wielders that operate to subvert our quest for justice, freedom, happiness, creativity, and connectedness. Our encounter with critical knowledges induces us to ask: How did I get stuck with this body of knowledge and these lenses through which to see the world? How did I find myself ensnared in an epistemology that tends to ignore the concepts that connect the physical world, other people, and myself?

As we ask these questions we begin to develop ways of escaping these distorted and fragmented ways of comprehending world and self. In the critical context in which I operate, one of the key reasons—although there are as many justifications as our imagination allows—we ask these epistemological questions is because they help us address the reality of human suffering in the world. As the great Brazilian educator Paulo Freire always reminded us, central to our work in critical pedagogy is the effort to end the grotesque reality of human suffering. There is nothing I can do as an epistemologist or an educator that is not informed by Freire's reminder. As we stand at the edge of a socio-political abyss, we look at real life scenes of a contemporary forgery of Hieronymus Bosch's hell. Monitoring the broadcast of images from Iraq, Darfur, the Congo, Uganda, Angola and other Ground Zeroes, I wretch at the smell of the European colonial deficit-laden epistemology infiltrating each horrific scene. Every war-ravaged place previously mentioned has been led to the abyss by the multidimensional forces of both old and new forms of colonialism.

Playing With the Queen of Hearts: The Joker Ain't the Only Fool in FIDUROD

As we approach the end of the first decade of the twenty-first century, more and more people around the world are beginning to understand that Western civilization and the epistemology that supports it constitute nothing more than a house of cards. The Western world at this historical point in time is like a man leaning back in his chair as it slips out from under him. Please, give the man another Prozac to help dull that panicky feeling in his guts. The old order is now at the beginning of its end. This may not seem the case as the U.S. wallows in a neo-conservative fundamentalist militaristic haze, but we all understand the cliché about the darkest hour. Rethinking

the way we produce knowledge and understanding the process by which such informational distortion deforms our perception of self and world may be the most practical ways to hasten the crack of that new dawn. As we teeter on the cusp of a cognitive, cultural, and epistemological catastrophe, we understand better than ever before the consequences of the irrationality of what we have called reason.

The catastrophic processes that Western reason has set in motion from global warming to the transformations of humans from cooperative, community centered people to "fiscal entities" with their profit-based, consumption-oriented consciousness threaten the very structure of our being. Our collective intuition about the calamities awaiting us is discredited by corporate-driven education including both the formal schooling wing of the pedagogy and its media driven phalanx. The epistemology that supports the production and dispersion of such knowledge is a contemporary version of what has been historically labeled as **positivism**. As I have written elsewhere positivism is an epistemological position that promotes what it calls objective scientific knowledge produced in rigorous adherence to the scientific method.

Positivism identifies knowledge as worthwhile to the degree that it describes objective information that corresponds to or reflects the world. The trouble with using the word positivism is that many scholars claim that the positivist epistemological position has been thoroughly discredited and is no longer a force in the twenty-first century. While it is true that many philosophers of science have dismissed positivism, important aspects of the epistemology continue to exert their influence in the way we produce knowledge and value knowledge in various institutions from the military, the economic, to the educational. Almost every dimension, for example, of the No Child Left Behind reforms in the U.S. rely upon positivist epistemological assumptions: the way data is chosen for inclusion in the curriculum to modes of evaluation on standardized tests. Thus, to avoid the arguments and misunderstandings that emerge from my use of positivism, I have created another term, FIDUROD—an acronym for the basic features of a contemporary mechanistic epistemology that is used sometimes unconsciously to shape the knowledge that permeates Western and Western-influenced cultures. We will come back to this definition of FIDUROD throughout the book.

FIDUROD is an epistemology that stands for knowledge that is

- *Formal*—produced by rigid adherence to a particular research methodology that never changes no matter what new circumstances are encountered, no matter how much these new circumstances might lend themselves to rethinking the mode of inquiry one is using.
- *Intractable*—grounded on the assumption that the world is basically an inert, static entity. What we find today about, say, childhood will be true in all circumstances and will remain true indefinitely. Here childhood (in the same manner as limestone or the chemical composition of salt) is assumed to be a fixed, never changing concept. Of course, such an epistemological stance doesn't account for the ever-changing nature of the world and the observers who study it.
- *Decontextualized*—constructed by researchers who have removed a phenomenon from the diverse contexts of which it is a part and that grant it meaning.

Without these contexts—e.g., the lived world of a student who takes an I.Q. test—the knowledge produced is distorted as it gives a misleading partial picture. The I.Q. tested student may come from a home where her parents were not first English language speakers and had no formal education, characterized by dire poverty where most energies are directed toward survival not school performance. Might these contextual factors make a difference in the girl's I.Q. test scores? Do they have anything to do with some genetic, inherited notion of intelligence?

- *Universalistic*—what inquirers discover when strictly following the correct epistemology and the research methods it supports applies to all domains of the world and the universe. In pre-Einsteinian physics, for example, gravity was assumed to remain constant in all domains of the cosmos. Einstein's work in the General Theory of Relativity undermines the universality of gravity as it delineates special circumstances where Sir Issac Newton's notion of gravity does not work as he postulated—black holes, for example, where nothing can escape the depression in space caused by the concentrated mass of the black hole. There are countless examples one could provide in the social, psychological, and educational sciences to illustrate this same concept. Going back to our I.Q. example, how valid is an I.Q. test in a culture that operates on socio-epistemological assumptions that are profoundly different from Western culture. Another central dimension here is the decontextualization that comes from colonialism—both traditionally and in its new, reconfigured format—that decontextualizes knowledge produced in colonial centers of power by dominant power blocs that dismiss and degrade the knowledges and well being of marginalized, colonized groups.
- *Reductionistic*—focusing on those factors that lend themselves most easily to measurement, research/knowledge produced in this context fail to account for the multitude of factors that shape the nature of knowledge produced: the belief and value structure of the researcher, the structural forces that create particular ideological and cultural climates in which the research process operates, the discursive practices of the research community involved in the process, the perspective of numerous individuals from other cultural settings about the phenomenon in question, to name only a few. Such reductionism provides a parochial, limited, and deceptive body of knowledge.
- *One Dimensional*—shaped by the belief that there is one true reality that can be discovered and completely described by following correct research methods. Such an epistemological orientation posits that the waking dimension of human consciousness is the only state worthy of study and use in our daily existence. Thus, the reality that Westerners have depicted via their knowledge production over the last 350 years is a certified reflection of the way the world really is. Anyone that would suggest differently has been labeled as crazy, deranged, anti-American, an enemy of Western civilization, or at least a bad scholar.

In Part 2 of the book, I will provide a detailed understanding of the epistemology of FIDUROD and its effects on the world in general and education and the production of consciousness in particular. In the last section of the book I will focus on

rigorous and liberating alternatives to the one-dimensionality and reductionism of FIDUROD.

Glossary

Colonialism in its simplest articulation occurs when a stronger nation or group of nations exploit a weaker one. Such exploitation usually involves the appropriation of the weaker nation's assets and natural resources for the enrichment of the colonizers.

Neo-liberalism is both an orientation to economic policy and a philosophy that has become widespread in the U.S. and other Western societies over the last 3 decades. We can see neo-liberal philosophical orientations in the way neo-liberals view the market as a mode of social organization. Market imperatives, not ethical or humane considerations, drive social, political, economic, and educational policy in neo-liberalism. Advocates of the position tend to see the world in relation to market metaphors, imposing "market solutions" on national economies around the world via the International Monetary Fund, the World Bank, and the World Trade Organization. From a critical perspective the result of these actions is to make the rich richer and the poor poorer. The "neo" in neo-liberalism comes from proponents' efforts to reintroduce the "discipline" of the market on global economies.

Positivism an epistemological position that values objective, scientific knowledge produced in rigorous adherence to the scientific method. In this context knowledge is worthwhile to the extent that it describes objective data that reflect the world. The term "positivism" began to be used widely in the nineteenth century. French philosopher August Comte popularized the concept, maintaining that human thought had evolved through three states: the theological stage, where truth rested on God's revelation; the metaphysical stage, where truth derived from abstract reasoning and argument; and the positivistic stage, where truth arises from scientifically produced knowledge. Comte sought to discredit the legitimacy of nonscientific thinking that failed to take "sense knowledge" (knowledge obtained through the senses and empirically verifiable) into account. He saw no difference between the *ways* knowledge should be produced in the physical sciences and in the human sciences, and he believed one should study sociology just like biology. This had a dramatic impact on the way we would approach the social, educational, and psychological research. Social knowledge and information about

humans would be subjected to the same decontextualizing forces as the study of rocks.

Social and behavioral scientists would pull people out of their cultural setting and study them in laboratory-like conditions. Society, like nature, Comte argued, is nothing more than a body of facts governed by immutable laws. Therefore, social actions should proceed with lawlike predictability. In a context such as Comte's, education would also be governed by unchanging laws; the role of the educator would be to uncover these laws and then act in accordance with them. For example, educational laws would include universal statements regarding how students learn and how they should be taught. The positivist educator, in other words, sees only one correct way to teach, and scientific study can reveal these methods if we search for them diligently.