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Understanding the Loss of Public Education A Critical Ecological Perspective on Systemic Challenges in School and Society

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Abstract

The decline of public education and the concomitant loss of the commons are increasingly recognized as significant and interwoven issues. Like other prevailing societal problems, such as the tenacity of institutionalized racism, classism, and patriarchy, these conditions are rooted in the ways growing numbers of people have come to think and act – socially, economically, politically, and intellectually. In a word, they are structural problems. As such, they require educators and others concerned with the health of society and well-being of the planet to address not only the observable symptoms but also the underlying factors that have spawned and perpetuated the systems in the first place. Critical scholars generally understand that problematic structural conditions are produced by prevailing systems of thought and action, that they evolve within particular social and historical contexts, and that they are maintained through oppressive mechanisms of persuasion and control. Less understood are the ways these intersecting systems, contexts, and mechanisms are perpetuated via largely “invisible” perceptual and temporal factors that obscure the processes at play. Understanding the relationships between these factors is essential to effectively addressing the challenges we face. This paper synthesizes the literature in critical theory, ecological philosophy, living systems theories, Indigenous studies, and the sociology of knowledge to examine these intersecting factors and to consider implications for theory and practice in education.



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Introduction

The decline of public education and the concomitant loss of the commons are increasingly recognized as significant and interwoven societal problems (Bookchin, 1990; Edwards & Means, 2019; Greene, 1988; Lewis, 2012; Mackie, 1998; Nxumalo, Nayak & Tuck, 2022; Ostrom & Hess, 2007; Palmer, 1998/2007; Slater, 2014). Like other social challenges, such as the tenacity of institutionalized racism, classism, and patriarchy, the decline of public education and loss of the commons are rooted in the ways growing numbers of people have come to think and act. In a word, they are *structural* problems. As such, they require attention not only to the observable symptoms but also the underlying factors that have generated and perpetuated the dominant systems in the first place.

Critical scholars recognize that structural problems are associated with dominant systems of thought and action evolving within particular social and historical contexts, and they understand that these systems rely on powerful mechanisms of persuasion and control to enforce compliance (Apple, 2001, 2004; Baldwin, 1963, 1988; Brayboy, 2005; Butler, 1990, 1997; Coulthard, 2014; Deloria, 1999; De Lissovoy, 2013; Foucault, 1977; Freire, 1970/1990; Gramsci, 1982; Greene, 1988; hooks, 1984/2000, 1994; Merchant, 1994; Mignolo & Walsh, 2018; Said, 1978; Spivak, 1987, 1995). Less understood are the ways these factors are obscured through largely “invisible” perceptual and temporal processes also at play (Berger & Luckmann, 1966; Capra, 1996; Haney-Lopez, 2003; Houser, 2009/2014; Lukacs, 1968/1994; Quinn, 1992, 1996).

The purpose of this paper is to illustrate the impact of these intersecting factors on the decline of public education and the loss of the commons. First, I discuss existing concerns regarding the state of public education. Next, I examine the importance of the commons – including public education – and the extent of their decline. Third, I acknowledge the impact of dominant social, political, and intellectual systems within their social and historical contexts, including their mechanisms of enforcement. Fourth, I examine largely unseen perceptual and temporal factors that have contributed both to the erosion of the commons and common education and to the loss of crucial (connected, communal, organic, horizontal, nonlinear, nonbinary) ways of thinking and being. Here, synthesizing the work in critical theory, ecological philosophy, Indigenous studies, living systems theories, and the sociology of knowledge, I outline a *critical ecological perspective* that can be used to assess systemic challenges in general. I conclude with a discussion of implications for theory and practice in education.

The Decline of Public Education

The plight of public education is a serious concern for the continuation of diverse and democratic societies. John Dewey envisioned public schools as communities with students functioning as “active participants in democratic processes rather than passive recipients of abstract information” (Rebell, 2018, p. 16). Within these communities, Dewey believed, democratic ideals could be learned and practiced, giving “individuals a personal interest in social relationships and control, and the habits of mind which secure social changes without introducing disorder” (Dewey, 1916, p. 111). So promising was this possibility that Dewey (1916, 1938/1965) perceived public schools as *laboratories of democracy* where participants from different backgrounds and with different experiences could learn to deliberate, negotiate, advocate, and compromise in the messy but essential processes of democratic decision-making.

Despite its potential value for diverse and democratic societies, there is deep concern about the decline of public education. Critical theorists have long noted the devastating impact of

unconstrained free-market capitalism on our social institutions, including public education (Apple, 2001, 2004; De Lissovoy, 2013; Edwards & Means, 2019; Lewis, 2012; Mignolo, 2011; Perkins, 2004; Pilger, 2002; Saltman, 2014; Slater, 2014; Zinn, 1995). Driven by the inexorable quest for profit, industrial and free-market capitalism and neoliberal political policies continue to exploit the masses, alienate laborers, stratify societies, thwart regulatory efforts intended to protect humans and the environment, and commodify not only material objects and natural resources but human labor, education, and even relationships and emotions such as “love” and “care.” Capitalism has fostered greed and acquisitiveness, cutthroat competition, and rugged individualism, fueled Westward Expansion and cultural assimilation, and reinforced compelling myths of meritocracy, American (and human) exceptionalism, the “self-made man,” and personal entitlement without social responsibility.

Recent capitalist influences on public education include the imposition of neoliberal principles and practices (which deemphasize centralized governance while supporting economic privatization and governmental deregulation), the bipartisan passage of No Child Left Behind (2001) (which tied federal funding to local performance on standardized tests), intense criticism and scapegoating of public schoolteachers, and heavy control over classroom decision-making. Since the 1980s, efforts to privatize public education, a calculated neoliberal objective, have precipitated school choice, educational vouchers, the development of publicly funded charter- and online-schools, and other loose alternatives to common education (Allen, 2015; Baines, 2019; De Lissovoy, 2013; Saltman, 2014; Scott, 2020).

State legislatures have simultaneously reduced funding and increased requirements for legitimate teacher certification programs, while opening the floodgates to barebones alternative and emergency pathways to become a “teacher.” This has led to significant withdrawals of support for public education (Apple, 2001; Campbell & Quirk, 2020), leaving teachers and administrators scrambling to meet students’ needs. Combined with legislation censoring history, science, teacher-selected materials, and substantive teaching in general, these factors have contributed to a virtual revolving door of educators entering and existing the classroom. According to a current survey, fifty-five percent of all U.S. teachers are considering leaving the profession, up from 37 % in August of 2021, and the percentages are even higher for Black (62%) and Latino (59%) teachers (Walker, 2022).

From a critical social perspective, the structure of the problem is not difficult to understand. Democratic countries generally acknowledge responsibility for educating their citizens. However, educating masses of students requires efficiency, especially since formal schooling is still strongly associated with memorizing volumes of facts (Au, 2007, 2011; Ross, Mathison & Vinson, 2014). To cover all the information that could potentially appear on the standardized tests (upon which federal funding now depends), educational leaders have imposed curricular standardization and pedagogical reductionism. Reductionistic teaching, because it is generally experienced as uninteresting and irrelevant, has necessitated external controls manifested (again) in high-stakes standardized testing, rigid vertical and horizontal curriculum alignment, teacher-leader evaluation systems, “teacher-proof” curricula, extrinsic rewards and punishments, and heavy surveillance and monitoring to keep teachers and students in line (Au, 2007, 2011; Haynes, 2014; Houser et al, 2017; Ohanian, 1999; Province, 2012).

Since competent educators recognize low-level teaching is of little value, those who insist on its implementation have been compelled to use mechanisms of manipulation and control to keep teachers (and students) in line (Foucault, 1977; Freire, 1970/1990; Gramsci, 1982; Herman

4 *Critical Education*

& Chomsky, 1988; Houser et al, 2017). Essentially, educational policymakers have imposed a “curriculum of compliance” to contain classroom teaching (Leahey, 2014; p. 56), and independent thinkers have been pressured and chastised (Picower, 2011; Province, 2012; Queen, 2014), severely limiting opportunities for meaningful teaching and learning. Pressure to cover volumes of information requiring low-level cognition has limited opportunities to develop higher order capacities such as historical thinking, empathic sensitivity, critical consciousness, and democratic decision-making. These restrictions limit schools’ capacities to function as commons, and they are a primary reason teachers are leaving the field (Houser et al, 2017; Walker, 2022).

Critical scholars have connected the dots between neoliberalism, privatization, globalization, and the demise of public education (De Lissovoy, 2013; Edwards & Means, 2019; Lewis, 2012; Saltman, 2014; Slater, 2014). Kenneth Saltman (2012, 2014), for example, explores neoliberal privatization in education and its manifestations in culture, politics, and subjectivity. Analyzing the policies and practices of for-profit educational corporations and new educational technologies operating under the guise of philanthropy and democracy, he reveals the strategic deployment of innovative finance schemes, the militarization of schools, the politics of disaster, and the intersections of policy and popular culture designed to exploit caregivers in institutions such as public education while swindling well-meaning members of society at large.

Along similar lines, D. Brent Edwards and Alexander Means (2019) have identified vital connections between globalization, privatization, and the marginalization of vulnerable institutions and members of society, including public schools and schoolteachers, and Michelle Alexander (2020) and Noah De Lissovoy (2013) have noted the subtle ways neoliberalism and racism have colluded to substitute criminalization and punishment for more overtly racist practices. According to De Lissovoy (2013): “Neoliberalism aggressively privatizes public and collective spaces, relationships, and institutions. At the macro level, this means a terrific colonization of the world and life-world by capital, and the conversion of almost all moments of social life into occasions for surplus extraction” (p. 740).

During the last decade, critical educators have also explored connections between the decline of education and growing environmental challenges, including the closing of the commons and the decline of public education. Graham Slater (2014) asserts that: “Neoliberal reforms should be regarded as enclosures because they seek to privatize education for profit accumulation, foreclosing the possibility of education operating as a commons, or a collective process of sustainable, democratic, and ethical social production” (p. 537). Slater continues:

The extent of ecological degradation and capitalist domination requires a philosophical endeavor that focuses not only on *individual* reflection, but on an educational endeavor to constitute *collective* subjects who reject the normalization of ecological assault and produce healthy, sustainable, and non-dominative forms of social life....This necessitates a clear rethinking of mainstream educational approaches that call for innovations in education policy, curriculum, and pedagogy without questioning capitalist hegemony, ecological degradation, or the twin logics of human supremacy and technological progress. (pp. 538, 551)

Thus, critical educators have long identified the threats of capitalism to the health and viability of diverse and democratic societies, including the ways capitalist principles are reproduced in and through schools. More recently, they have analyzed problematic connections between capitalism and colonization and have begun to identify troubling relationships between

social, educational, and environmental conditions and practices. Yet, our problems persist, requiring us to ask what is still missing. How are our looming environmental challenges linked to the loss of the commons and the decline of public education, what can be done? To answer these questions, we must focus on the commons themselves.

The Importance of the Commons and the Extent of Their Decline

The “commons,” “community,” “public space,” “we the people,” the “greater good.” Such concepts reflect essential values associated with communal life, partnership, and the sharing of resources, material and ideal (Greene, 1988; Hardin, 1968; McLuhan, 1971; Merchant, 1994; Schlottmann, Jamieson, Jerolmack & Rademacher, 2017). For example, “public space” is traditionally considered open and available to all, and the “commons” indicates the totality of “natural resources” such as air, water, soil, trees, seeds, and wild animals often regarded as the inheritance of all. In the West, the term “commons” originated as a legal reference to common lands in Medieval England, such as shared agricultural fields, grazing lands, and forests. One who had joint rights in common with others was called a “commoner.” Much earlier, the Roman legal category “res communes” was used to indicate things that were common to all, as opposed to “res publica,” public property managed by the government.

In the broadest sense, the “commons” are both material and ideal. They are simultaneously physical, social, cultural, intellectual, spatial, temporal, and even informational (Haire, 2012; Harvey, 2012; Huberman, 2008; Ostrom, 1990; Ostrom & Hess, 2007). Throughout history, public squares, or agoras, and marketplaces have served as common gathering places in which both materials and ideas have been exchanged. In other traditions, grazing lands and hunting grounds have also been shared. In recent years, with radical changes in technology and communication, many common spaces have been expanded and reconceptualized. Today, references to the commons may include not only environmental spaces and but also shared sites of information and intellectual exchange such as the Internet, Wikipedia, and public educational institutions (Ostrom & Hess, 2007).

The commons – as the natural world of which humans are part, as open sites of shared cultural and intellectual exchange, and as matrices of social and biological diversity – are vital to people and the planet (Capra, 1996; Dewey, 1916; Greene, 1988; Houser, 2009/2014; Merchant, 1994; Miller, 1978; Naess, 1973; Quinn, 1992; Union of Concerned Scientists, 2021). Biological complexity is fundamental to environmental sustainability (consider the differences between fragile and robust ecosystems), just as the healthy interaction of different perspectives (e.g., the idea that two heads can be better than one) is vital to the functioning of diverse and democratic societies. Common spaces can be venues for exchange among people with different backgrounds and experiences. As Maxine Greene (1988) writes:

The aim is to find (or create) an authentic public space, that is, one in which diverse human beings can appear before one another as, to quote Hannah Arendt, “the best they know how to be.” Such a space requires the provision of opportunities for the articulation of multiple perspectives in multiple idioms, out of which something common can be brought into being. (xi)

Greene’s reference to the importance of “bringing something common into being” suggests another fundamental value of the commons. The very existence of the commons serves as a reminder that there is something of importance that is larger than the individual, larger even than humanity, and that not everything exists solely for human consumption (Bang, Marin,

Wemigwase, Nayak & Nxumalo, 2022; Capra, 1996; Deloria, 1999; McLuhan, 1971; Merchant, 1994; Mignolo & Walsh, 2018; Naess, 1973; Quinn, 1992; Simpson, 2004, 2017; Tuck, McKenzie & McCoy, 2014). The commons remind us that we, as humans, constitute neither the totality nor the pinnacle of existence (Capra, 1996; Ho, 2022; Houser, 2022; Naess, 1973; Quinn, 1992, 1996; Simpson, 2004, 2017; Wildcat, 2009). Given our current dominant egocentric, ethnocentric, and anthropocentric orientations, this may be one of the most vital functions of the commons.

Like the commons in general, common *education* can also remind us that something important exists that is larger than the individual. Learning naturally occurs in community (Dewey, 1916; Greene, 1988; Houser, 2006; Houser & Kuzmic, 2001; Palmer, 1998/2007; Vygotsky, 1978, 1986; Wertsch, 1991), and teaching and learning in community can affirm the value of diversity, complexity, interdependence, and reciprocity (Houser, 2006; Palmer, 1998/2007; Philips, 1972). Despite their troubling history of cultural assimilation (and worse), common schools, now generally referred to as public schools, have also provided a means by which members of pluralistic societies could learn with, from, and about each other and, in so doing, nurture democratic, egalitarian, and communal sensibilities.¹ Yet, as important as the commons have been to the health of society and the planet, the commons are rapidly being enclosed, diminished, and literally destroyed. Shared communal lands and resources, open interactive spaces and educative experiences, and even the once-familiar *concept* of the “commons” are fading from existence and memory (Greene, 1988; Nxumalo, Nayak & Tuck, 2022; Quinn, 1992, 1996; Simpson, 2004, 2017; Union of Concerned Scientists, 2021).

In 1968, ecologist Garrett Hardin lamented what he called *The Tragedy of the Commons*, resulting from decades of abuse, overuse, and enclosure. The specific tragedies Hardin referenced involved situations in which individuals with open access to natural resources such as ocean fisheries and once-common grazing grounds in England and Ireland, acting contrary to the common good of all, depleted those resources through their uncoordinated, unprincipled, and unregulated personal actions. It is important to recognize this tragedy as a structural phenomenon rather than simply the result of individuals doing as they wished. Although selfish activity was (and remains) a significant factor, the larger point is that prevailing self-serving norms and perspectives, coupled with an insatiable desire to acquire, accumulate, and consume, are themselves nurtured by dominant systems of thought and action within particular social and historical contexts.

Therein is the tragedy. Each man is locked into a system that compels him to increase his herd without limit – in a world that is limited. Ruin is the destination toward which all men rush, each pursuing his own best interest in a society that believes in the freedom of the commons. (Hardin, 1968, p. 1244)

Over the centuries, losses of the commons have accelerated, increasing exponentially since Hardin’s time (Gore, 2006; Intergovernmental Panel on Climate Change, 2022; Levin, Boehm & Carter, 2022; Thompson, 2020; Union of Concerned Scientists, 2021). Today, in addition to the alarming facts popularized by Al Gore’s (2006) *An inconvenient truth*, the Amazonian rainforests – home to over a million Indigenous people and approximately three million plant and animal species, including over 2,500 species of trees – are rapidly being cut to provide wood for “first-world” countries, to expand grazing lands for cattle, and to grow crops

¹ The Common School Movement is not without critics, particularly in relation to the treatment of Native Americans and the physically and mentally “disabled” (hooks, 1994; Taylor, 2010; Warder, 2015).

such as soybeans for global food companies (Thompson, 2020). Containing much of the biodiversity upon which the planet depends, the Amazon is also a vital carbon store that slows global warming by absorbing massive amounts of greenhouse gasses (Thompson, 2020).

Satellite images document that deforestation in the Brazilian Amazon totaled 430 square kilometers (166 square miles) in January of 2022 alone, an area more than seven times the size of Manhattan, NY. This area was five times larger than the previous year, documented in January of 2021. Initiated five decades ago with new governmental policies encouraging settlement in the rainforests, Brazilian deforestation has increased substantially. Simultaneously, in other parts of the world, offshore and Arctic drilling are intensifying, rising sea levels are submerging inhabited islands, farmlands, and villages in low-lying countries such as Bangladesh, and large freshwater sources are shrinking precipitously. During the last five years, for example, the water level in Lake Victoria, the second-largest freshwater lake in the world (bordered by Tanzania, Uganda, and Kenya), has dropped more than six feet, and over the last four decades, its indigenous fish species have been reduced by approximately 80% while over 70% of the forest cover in its catchment area has been lost (Semyalo, 2021).

Significant losses have also occurred in common educational spaces as public schools have struggled to reconcile growing class sizes with diminishing resources. According to Hanson (2022), “In the United States, education spending falls short of benchmarks set forth by international organizations such as UNESCO, of which the U. S. is a member. The nation puts 11.6 % of public funding toward education, well below the international standard 15%.” Compounding these problems, many policymakers adhere to the antiquated notion that quality learning consists of the memorization of volumes of facts (Bloom, 1956; Whitehead, 1929). Self-serving politically- and economically-motivated policies based on faulty assumptions require time and energy while failing to yield educative results. As Ross, Mathison, and Vinson (2014) clearly demonstrate, “there are too many educational outcomes to be taught and learned in the time allocated” (p. 32). Further complicating the situation, beginning in the 1980s, public educational funds were increasingly diverted to school vouchers, charter schools, online schools, and even private schools, decreasing available resources for K-12 classrooms (Apple, 2001; Campbell & Quirk, 2020).²

Responses to the loss of the commons have varied. At minimum, Hardin insisted, we must recognize that natural resources *are* commons and acknowledge that they *do* require management. While proposed solutions have ranged from aggressive privatization to governmental regulation (Ostrom, 1990; Ostrom & Hess, 2007), few of these suggestions address the underlying problem – our prevailing misconceptions regarding the fundamental relationship between people and the earth. Today, there is growing recognition that what is needed, beyond purely technical or political solutions, is a shift in consciousness (Deloria, 1999; Ho, 2022; Houser, 2009/2014; Mackie, 1998; Nxumalo, Nayak & Tuck, 2022; Quinn, 1992, 1996; Simpson, 2004, 2017). We can no longer afford to view the earth and its plant and animal species as existing separate from and beneath humanity, as nothing more than “natural resources” designed for human consumption. However,

² See <http://www.onlineschools.com/college/oklahoma>;
http://www.huffingtonpost.com/2012/11/14/charter-schools-growth_n_2125286.html;
<http://watchdog.org/107016/oklahoma-charter-schools-poised-for-growth/>; <http://okpolicy.org/rising-inequality-in-oklahoma-as-lower-and-middle-class-incomes-stagnate>

such as shift requires a new understanding of our dominant social and intellectual systems and the factors that keep them in place.

Dominant Systems and Their Mechanisms of Control

Many factors contributing to our persistent structural challenges (such as institutionalized racism, classism, and patriarchy, as well as the loss of the commons and the erosion of public education) are already known. For example, we know that much damage has been caused by dominant political and economic systems evolving throughout history, along with the mechanisms of persuasion and control that have been used to enforce them. We understand that ancient imperial regimes consolidated power and authority while repressing diversity and democracy. We also know that settler colonialism sponsored by imperial authorities, emerging nation states, and powerful trading companies, sought to replace indigenous populations while extracting nonhuman “resources” to enrich themselves (Deloria, 1999; Edwards & Means, 2019; Lewis, 2012; Mignolo, 2011; Mignolo & Walsh, 2018; Nayak & Tuck, 2022; Perkins, 2004; Pilger, 2002; Simpson, 2004, 2017; Slater, 2014; Stannard, 1992; Zinn, 1995).

Today, ongoing settler colonialism is accompanied by equally problematic neocolonial activity. Unlike classic colonialism, neocolonialism is instituted by multinational corporations (with the tacit endorsement of their stockholders and other beneficiaries) rather than being centralized within, and therefore traceable to, the primary decisionmakers and political apparatuses of specific companies or nations (Kincaid, 1988; Perkins, 2004; Pilger, 2002). Neocolonialism retains the basic colonial outcome of extracting others’ “resources” for the colonizer’s benefit; however, rather utilizing physical force (although this persists, Pilger, 2002), much of the control is exercised obliquely, through political and communicative devices (Perkins, 2004; Pilger, 2004).

In addition to the effects of dominant political and economic systems such as classic imperialism, settler colonialism, industrial and free-market capitalism, and neo-coloniality, we also know that various mechanisms of persuasion and control have been used to enforce compliance with these systems. Throughout history, dominant regimes have deployed blunt force and military might to achieve their ends, as well as more subtle mechanisms such as cultural invasion, division and conquest, anti-dialogue, ideological hegemony, surveillance, and disciplinary activity (Freire, 1970/1990; Gramsci, 1982; Foucault, 1977). A primary function of these mechanisms is that they have been used to enforce adherence to intolerable conditions long enough for those conditions to take hold, to take root in the consciousness of people and the fabric of society. As Freire (1970/1990) observed, oppression is domesticating.

Collectively, these systems and mechanisms have had a powerful effect. Within the U.S. alone, dominant political and economic perspectives, practices, and policies (such as African slavery; Westward Expansion; Manifest Destiny; the Indian Removal and Dawes Acts of 1830 and 1887; Indian Boarding Schools; the Intercontinental Railroad; Jim Crow; the deliberate slaughtering of the bison, the primary food source of resisting Plains Indians; the destruction of North American predators; and continuing fossil fuels extraction and dependency) have destroyed countless lives and jeopardized the environment upon which all depend. As we have segmented the Great Plains, destroyed old growth forests, diverted natural waterways, and extracted from the earth via drilling and fracking, we have literally transformed the natural world. Parallel situations exist in “advanced” societies around the globe.

Moreover, since structural problems are both material and ideal, changing material conditions and relationships inevitably impact our personal and collective thoughts and

perceptions which, in turn, further influence our material conditions. And the effects are cumulative. Within the U.S., ideological shifts resulting from material changes include increased individualism (Bellah et al, 1985; Greene, 1988; Houser & Kuzmic, 2001), growing nationalism (Perry & Whitehead, 2021; Whitehead, 2021; Zinn, 1995), and resurging patriarchy (Butler, 1997; Ensler, 2021; hooks, 1984/2000), accompanied by diminishing awareness of the meanings and importance of community, the commons, and the public itself (Greene, 1988).

Among the greatest casualties of our dominant systems and mechanisms of control have been the lives and the perspectives of countless people who have lived in the world without destroying the world. For the vast majority of human history, people have perceived themselves as part of the world, as deeply connected to the earth rather than existing above, beyond, or outside it (Ho, 2022; Houser, 2006; McLuhan, 1971; Quinn, 1992, 1996; Tsu, 1972). Critical work in Indigenous epistemology focuses on the deep, interdependent, mutually defining relationships that exist between humans and the earth, coupled with an interrogation of past and continuing connections between colonization, education, and the demise of the environment (Bang, Marin, Wemigwase, Nayak & Nxumalo, 2022; Brayboy, 2005, 2014; Deloria, 1999; McLuhan, 1971; Nxumalo, Nayak & Tuck, 2022; Tuck, McKenzie & McCoy, 2014; Simpson, 2004, 2017; Wildcat, 2009). Much of this scholarship stresses the need to shift away from dominant mechanistic, hierarchical, and anthropocentric ways of thinking and being toward an awareness that humans exist within rather than outside, above, or beyond the land, the earth, and the larger community of life. Significantly, this shift is not viewed as a call for something new; rather, it is understood as a recovery of that which has always existed but that has been lost, stolen, or obscured.

For example, Eswatini (African Canadian) scholar Fikile Nxumalo and Unangâ (Aleut) scholar Eve Tuck address the importance of “centering nature-culture relations” when teaching, particularly when teaching about climate change. Included in their analyses are the fundamental relationships between colonization, environmental domination, and environmental degradation. Nxumalo, working in the areas of early childhood-, anti-colonial-, place-based-, and environmental education, examines connections between white supremacy and human supremacy, insisting that both must be undone to transform our relationships for the good of people and the planet (Bang, Marin, Wemigwase, Nayak & Nxumalo, 2022). Tuck, working in critical race theory, urban education, and Indigenous studies, explores issues of land education, emphasizing Indigenous, post-colonial, and decolonizing perspectives on place and environmental educational research. An article by Tuck, McKenzie & McCoy (2014) examining the “role of Indigenous cosmologies in practices of land education, as well as the necessity of centering historical and current contexts of colonization in education on and in relation to land” (p. 1), demonstrates that colonization is an ongoing process and is still perpetuated in schools today. It emphasizes the value of land education as a means of discussing these processes and combatting their continuing harm both to the environment and to Indigenous communities.

Together, Nxumalo and Tuck explore connections between education and ecological precarity. Nxumalo, Nayak & Tuck (2022) examine themes such as “centering nature-culture relations and witnessing relational stories, disrupting colonialism, attending to Black ecologies, and engaging with interdisciplinary pedagogies” (p. 97). They argue that “dominant ways of responding to ecological precarity remain tethered to human exceptionalism and to individualized discourses of ‘saving the planet’ that do little to shift underlying settler colonial and racial capitalist relations that drive climate crisis” (p. 98). The authors insist that “centering relationality requires

undoing extractive relationships to more-than-human beings including land, animals, plants, and more” (p. 98).

Michi Saagiig scholar Leanne Simpson (2004, 2017) also examines fundamental relationships between the land, destruction of the environment, education, and colonization. Much of her work focuses specifically on the value, the destruction, and the importance of recovering and preserving Indigenous knowledge. Among other things, Simpson identifies: (1) deep connections between environmental destruction and colonial intentions and practices; (2) relationships between loss of the land and losses of Indigenous knowledge; (3) tribal documentation as a colonial strategy for containing or “caging” Indigenous knowledge; and (4) anticolonial strategies for the recovery and maintenance of Indigenous knowledge. Interweaving politics, story, and song, Simpson (2004) critiques Western academic environmentalists’ appropriations of Indigenous knowledge:

Those aspects of TEK (Traditional Ecological Knowledge) that are most similar to data generated by the scientific method are seen as a potential resource, holding answers to the environmental problems afflicting modern colonizing societies, while the spiritual foundations of IK [Indigenous Knowledge] and the Indigenous values and worldviews that support it are of less interest often because they exist in opposition to the worldview and values of the dominating societies. (p. 373-374)

According to Simpson (2004):

Traditional Ecological Knowledge was presented in this context as an untapped resource for the world’s ecologists to tap into in their search for solutions to modern environmental and ecological problems, the vast majority of these problems stemming from the worldview of the dominant society, a worldview that exists in direct opposition to many of the foundations of Indigenous Knowledge. (pp. 375-376)

Thus, Simpson identifies problematic ways in which western academia selectively utilizes some Indigenous knowledge (e.g., to help address immediate environmental challenges) while neglecting other Indigenous knowledge (e.g., that a fundamental change of worldview also needs to occur). These practices perpetuate the ongoing history of exploitation as desired knowledge is selectively extracted much as natural material and cultural resources were extracted in the past.

Finally, critical race theorist Bryan Brayboy (2005, 2014) demonstrates that these policies and practices continue to exist in schools. Noting that “Governmental policies and educational policies toward Indigenous peoples are intimately linked around the problematic goal of assimilation” (2005, p. 5), Brayboy points out that *tribal* critical race theory sees *colonization* as endemic to society in the same way critical race theory sees *racism* as endemic to society (2012). He demonstrates that processes of colonialism and goals of cultural assimilation are still evident in classrooms throughout the American continents, where students are expected to adopt the idea of a shared or unified culture (e.g., the “United” States of America). Such expectations require relinquishing home languages and histories in exchange for single, unified, externally developed and prescribed ways of thinking and being (Brayboy, 2005, 2014).

Thus, beyond the destruction of countless lives, dominant social, political, economic, and intellectual systems, maintained by powerful mechanisms of persuasion and control, have also contributed to the loss of the commons, obscuring and erasing competing perspectives and

accelerating the decline of public education. In addition to limiting social, biological, and intellectual complexity, disappearance of the commons has also destroyed compelling evidence that things of importance exist beyond personal wellbeing and that not everything is intended for human consumption (Apple, 2001, 2004; Greene, 1988; McLuhan, 1971; Nxumalo, Nayak & Tuck, 2022; Simpson, 2004, 2017; Tuck, McKenzie & McCoy, 2014). Ironically, many of these losses have occurred in and through public education, one of our social institutions most heavily affected by, yet also best poised, to help transform our oppressive intellectual system.

In sum, despite their vital importance, the commons are rapidly being lost due to our dominant systems and the mechanisms used to enforce them. Among these losses are the histories and perspectives of many people who have understood how to live on the planet without destroying it. Critical Indigenous scholarship provides important insights regarding the fundamental relationships between people and the earth while detailing powerful connections between education, colonization, and environmental destruction. Indigenous scholars have also noted the ways Western academics selectively extract their knowledge, appropriating those ideas that fit their (our) own agendas while dismissing views that challenge dominant intellectual traditions, that decenter humanity, or that draw reciprocal connections between humans and the nonhuman world. To the extent that Western European and European American academics continue to extract and appropriate select information, particularly without acknowledging their (our) sources, we help perpetuate the long and troubling history of exploiting Indigenous people and populations.

Unseen Perceptual and Historical Factors: Toward a Critical Ecological Perspective

If we understand the damage that has been caused by our dominant social, political, economic, and intellectual systems, and if we recognize the mechanisms of control and persuasion that have been used to enforce them, why have we not been able to resist and transform these systems? Part of the answer involves the sheer magnitude of the systems and efficiency of the mechanisms. However, something else is also occurring. In addition to the influence of our dominant systems and the mechanisms used to enforce them, our structural problems have also been impacted by changing human perceptions evolving over vast expanses of time (Berger & Luckmann, 1966; Capra, 1996; Houser, 2009/2014; Lukacs, 1968/1994; Lyotard, 1984; Quinn, 1992, 1996).

Concerns with perception are certainly not new. Perceptual factors figured prominently in early critical analyses of race-, class-, and gender- power relations (Du Bois, 1903; Baldwin, 1963; de Beauvoir, 1949/2009) as well as the sociology of knowledge (Berger & Luckmann, 1966). They are also at the heart of the postmodern critique of modernist grand theorizing (Lyotard, 1984), post-structural investigations of the binary relations inherent in Western structures and language systems (Derrida, 1978, 1997), feminist critiques of the paternalism in dominant social norms and gender constructions (Butler, 1990, 1997), and postcolonial analyses of the consciousness encoded in classic colonization and neocolonial relationships (Bang, Marin, Wemigwase, Nayak & Nxumalo, 2022; Brayboy, 2005, 2014; Deloria, 1999; Kincaid, 1988; McLuhan, 1971; Nxumalo, Nayak & Tuck, 2022; Tuck, McKenzie & McCoy, 2014; Simpson, 2004, 2017; Said, 1978; Spivak, 1995; Wildcat, 2009).

Although many perceptual changes have resulted from intentional erasures involving cultural assimilation, classic colonization, and outright genocide (Deloria, 1999; Simpson, 2004, 2017; Stannard, 1992; Zinn, 1995), not all perceptual changes have been intentional. Other losses

have resulted from subtle processes unfolding over vast periods of time. These shifts are often difficult to see because they occur slowly and, if noticed at all, appear to be completely natural. Yet, for precisely these reasons, such changes are difficult to detect and to recognize as problematic. As such, they can be exceedingly difficult to address.

In whatever ways they may have occurred, Fritjof Capra (1996) notes that there are profound inconsistencies between our *perceptions* of the world and the *nature* of the world:

The more we study the major problems of our time, the more we come to realize that they cannot be understood in isolation. They are systemic problems, which means that they are interconnected and interdependent. For example, stabilizing world population will be possible only when poverty is reduced worldwide. The extinction of animal and plant species on a massive scale will continue as long as the Southern Hemisphere is burdened by massive debts. Scarcities of resources and environmental degradation combine with rapidly expanding populations to lead to the breakdown of local communities...that has become the main characteristic of the post-cold war era. Ultimately these problems must be seen as just different facets of one single crisis, which is largely a *crisis of perception*. It derives from the fact that most of us, and especially our large social institutions, subscribe to the concepts of an outdated worldview, a perception of reality inadequate for dealing with our overpopulated, globally interconnected world. (pp. 3-4, emphasis added)

Capra, a “living systems” theorist, asserts that modern reductionistic, dualistic, and hierarchical ways of perceiving reality are misconstrued. He insists that the world can more accurately be understood as a vast web of organic systems based on horizontal rather than hierarchical interconnections and interdependencies. For Capra, the prevailing mechanistic view of an integrated world constitutes a “crisis of perception”:

In the sixteenth and seventeenth centuries...the notion of an organic, living, and spiritual universe was replaced by that of the world as a machine, and the world machine became the dominant metaphor of the modern era...Galileo banned quality from science, restricting it to the study of phenomena that could be measured and quantified... Descartes created the method of analytic thinking, which consists in breaking up complex phenomena into pieces to understand the behavior of the whole from the properties of its parts... The conceptual framework...was completed triumphantly by Isaac Newton, whose grand synthesis, Newtonian mechanics, was the crowning achievement of seventeenth-century science. (pp. 19, 20)³

Although modern mechanistic perceptions of an organic world are highly problematic, the roots of our difficulties may extend even farther back than many have imagined, which is part of the reason they remain so difficult to identify and address. Novelist Daniel Quinn (1992, 1996) examines these challenges from a fascinating angle. Among other things, Quinn explores the processes by which ancient agriculturists, once a tiny fraction of the human community, gradually expanded and imposed their ways of life upon their neighbors. Initial attempts to accommodate a

³ Of course, the mere existence of hierarchical and analytical thinking is not the problem. The difficulty is not with their presence but their prevalence. Overreliance on reductionistic thinking has emphasized separation and hierarchy at the expense of connectedness and community, providing an intellectual foundation for domination and control.

growing population – the inevitable consequence of an expanding food supply – led to increasingly aggressive efforts to acquire additional land and resources. In turn, these resources supported the growing population. The inexorable need for additional resources eventually led to the development of totalitarian agricultural practices (Diamond, 1987, 2012; Quinn, 1996). Like other totalitarian entities, this growing “culture” utilized specialized mechanisms based on its unique perceptions to eliminate its competition, including the annihilation of competing perspectives and lifestyles. What began as a novel way of life gradually evolved into a dominant worldview based on principles of acquisition, expansion, consumption, and control.⁴

After thousands of years of expansion, this acquisitive worldview finally prevailed on every continent – north, south, east, and west. While other cultural distinctions may persist, few remaining members of the human community have resisted adopting the premises and reaping the material rewards of totalitarian agriculture (Diamond, 1987, 2012; Quinn, 1992, 1996). With time and repetition, a perceptual orientation anathema to human sustainability became not merely the prevalent way of life but the *only* way of life acceptable to its followers. Totalitarian agriculture continues to expand, passing unconsciously from generation to generation through processes of habit, cultural transmission and invasion, and historical amnesia. The supreme irony, for Quinn, is that the destruction of alternative social and cultural perspectives has left us with the belief that there is only “one right way to live” – and such uniformity is the single greatest threat to the community of life (1992, p. 167).

Changes in perception and the ways these changes are obscured by time have been studied by scholars in areas as diverse as the sociology of knowledge, the history of thought, ecological philosophy, paleoanthropology, systems theorizing, and the new sciences. Ecological philosophers, for example, have traced the foundations of modern analytical and hierarchical thinking to changing social relationships such as new divisions of labor and differential allocations of resources that occurred as growing numbers of people shifted first from hunting and gathering to farming and herding, and eventually to large-scale agriculture. New horizontally and vertically separated living and working arrangements, coupled with new social roles related to the storage, protection, and distribution of burgeoning food supplies, provided the bases for increasingly prevalent dualistic, hierarchical, and acquisitive thought. Today, most humans see themselves as separate from and superior to the rest of the community of life. Within our contemporary paternalistic, ethnocentric, and anthropocentric contexts, humans are invariably placed at the pinnacle, with men located above women, European and European American men and women placed above other men and women, and all other life arranged farther down the scale (Bookchin, 1990; Devall & Sessions, 1985; Naess, 1973; Mackie, 1998; Merchant, 1994; Warren, 1997).

The sheer historical expanse of the evolution of perception offers insight as to how our challenges can be so prevalent yet so difficult to comprehend. In their classic analysis, *The social construction of reality*, Berger and Luckmann (1966) describe reification as the process of human construction of explanations of reality that legitimize human perspectives. With the passage of time, these explanations come to be seen as objective facts rather than being recognized as social constructions. As the authors state, reification “implies that man is capable of forgetting his own authorship of the human world” (p. 89). One problem with reification is that it supports *commonsense*, which consists of beliefs assumed to be true based on the presumption that they are “what everyone knows.” Another consequence of reification is that it contributes to social, cultural,

⁴ Portions of this section of the paper are adapted from my previous publications (e.g., Houser, 2009/2014).

and historical amnesia, wherein entire human communities forget their pasts (Lukacs, 1968/1994; Quinn, 1992, 1996).

The Spanish philosopher Jorge Santayana famously stated, “Those who cannot remember the past are condemned to repeat it.” While this may be true, it is incomplete. Santayana’s assertion, in the dominant Western tradition, adheres to linear and mechanistic rather than cyclical and organic nature-based conceptions of time and history (Capra, 1996; Gaarder, 1991). It reflects modernist assumptions that the direction of human improvement is necessarily forward in time and inevitably oriented toward change. It could equally be argued that those who cannot remember the past are condemned *not* to repeat it, having forgotten the virtues of the past. Returning to Quinn (1992), our cultural amnesia includes loss of memory that countless Indigenous (and other, early and continuing) human communities have functioned successfully on the planet without eradicating their neighbors or destroying the environment of which they are part.

The innumerable successes of early (and continuing) human communities support the assertion that there is no one right way to live (Quinn, 1992), providing a compelling argument not merely for tolerating diversity, but for acknowledging its absolute necessity.⁵ Yet, these countless successes may also help explain why national histories taught in most Western European and North American schools begin with European colonization rather than serious consideration of the diverse societies that thrived prior to colonization. For similar reasons, these innumerable successes also help explain why world history classes typically begin with agricultural (e.g., Bronze Age) civilizations in Sumer, Egypt, the Indus Valley, China, Greece, and Rome rather than the myriad successful cultures that existed *prior* to the beginning of large-scale agriculture. After all, it would be exceedingly difficult to compel hundreds of millions of humans living in squalor to adhere to a single way of life not in their best interest if they knew there were viable and preferable alternatives.

Even paradigms and worldviews shared by entire civilizations can acquire commonsense status, as indicated by the fact that modern mechanistic, dualistic (binary), individualistic, ethnocentric, and anthropocentric perceptual lenses are taken on faith in most contemporary societies. Moreover, since even our prevalent epistemologies are social constructions, they too can acquire commonsense status and come to be seen as unworthy of contemplation. This is an important point because reified Western assumptions remain a major obstacle to valuing, much less embracing, earlier (Indigenous, connected, communal, organic, place-based) ontologies, epistemologies, and pedagogies that challenge now-dominant intellectual traditions. Acknowledging the existence of viable social and intellectual alternatives would render it virtually impossible to proceed with business as usual.

In sum, our structural problems are rooted in dominant social, political, economic, and intellectual systems that are grounded in specific social and historical contexts. These oppressive and alienating systems are enforced and maintained by powerful mechanisms of persuasion and control. Although much of this information is already understood, lesser-known factors are also at play, including now-dominant modernist perceptions and epistemologies rendered all but invisible by the obscuring functions of history and time. Since this is the case, honest attempts to undo the damage that has been wrought often unwittingly utilize, and thereby validate and reinforce, ways of thinking and perceiving that perpetuate the very conditions they oppose. Thus, we lament the loss of the commons while clinging to unexamined anthropocentric assumptions, insisting that

⁵ Asserting that there is no one right way to live is not to suggest there are no wrong ways to live.

humans are the pinnacle of existence, and we decry the erosion of public education while redoubling our mechanistic efforts to preserve it.

Implications for Theory and Practice

In this article, I have argued that structural problems, including the concomitant loss of the commons and common education, are maintained by dominant systems of thought and action evolving within particular social and historical contexts, and that understanding these systems and contexts is essential to effectively addressing the problems. I have demonstrated that in addition to these systems and the various mechanisms of persuasion and control used to enforce them – factors already well known to critical educators – lesser-known perceptual and historical influences are also at play. The primary purpose of the paper has been to demonstrate how these lesser-known factors contribute to the intersection. Synthesizing the work in critical theory, ecological philosophy, Indigenous studies, living systems theories, and the sociology of knowledge, I have sought to provide a critical ecological perspective through which to examine structural challenges such as the loss of the commons and the erosion of public education.

Where does this leave us? What are the implications of this work for education? First and foremost, I think we must continue to learn and teach about why the commons and public education are essential to the health and wellbeing of people and the planet. This necessitates an understanding of the material and ideal conditions involved and the dialectic therein, including additional perceptual and historical factors that continue to obscure our awareness. At every level of education and society, there is a need to foster critical ecological consciousness (Houser, 2022). However, as we utilize the wisdom of other people and traditions in our efforts to create more just and sustainable conditions, we must resist replicating past and continuing violations, selectively extracting and appropriating information that supports our objectives while dismissing ontological and epistemological orientations that do not fit comfortably with our views of ourselves and the world (Deloria, 1999; Quinn, 1992, 1996; Simpson, 2004, 2017).

Second, as we continue to address our systemic challenges, we need to provide more complete explanations of what has gone wrong, explicitly naming aspects of the problems omitted from prior explanations, and we must demonstrate how the various factors intersect. The primary focus of this paper has been on the impact of largely invisible perceptual and temporal/historical factors on the loss of the commons and public education; however, these factors also contribute to the perpetuation of other structural problems, including systemic racism, classism, and patriarchy. Work in these areas could also benefit from critical ecological assessments of the impact of obscured perceptual and historical factors on their primary structural concerns.

Third, at all levels of education, the history of humanity needs to be recognized and taught as originating much earlier in time and as including far greater social and cultural diversity than has generally been acknowledged. Current histories of humanity, especially those taught in K-12 classrooms, are essentially histories of totalitarian agriculturalists. While these stories are significant, they do not constitute the history of *humanity*. A more comprehensive and robust history is needed that begins with the countless diverse yet highly successful cultures (in terms of living on the planet without destroying the planet) that existed prior to totalitarian agriculture and that, in some cases, continue to survive against all odds. This will require continuing efforts to preserve and to recover lost, stolen, erased, and marginalized histories, perspectives, and epistemologies (Baldwin, 1963/1988; Brayboy, 2005, 2014; Butler, 1997; Deloria, 1999; Ho, 2022; Hopson Malone, 2017; Kincaid, 1988; Lukacs, 1968/1994; Nxumalo, Nayak & Tuck, 2022;

Quinn, 1992, 1996; Simpson, 2004, 2017; Spivak, 1995; Tuck, McKenzie & McCoy, 2014; Wildcat, 2009). And again, as we draw on the vital insights of Indigenous scholars, we must resist selecting only those aspects that coincide with our pre-existing perceptions and interests.

Finally, in our efforts to withstand, resist, and transform current social, environmental, and educational conditions, we must recognize and *teach* that the seemingly inexorable desire to acquire, consume, territorialize, and expand has achieved commonsense status throughout most of the world. Since this is the case, our efforts must be both educative and transformative. We cannot assume others will understand why we are concerned with these matters, why we consider them worthy of consideration. Thus, educating about the importance of resisting and transforming dominant impulses and practices must be accompanied by thoughtful scaffolding and compelling illustrations as to why these factors are problematic in the first place.

The commons are essential to the health and sustainability of people, society, and the planet. The commons include physical and material spaces, such as the land, oceans, and atmosphere, open and shared by all. However, the commons are also more than this. Simultaneously material and ideal, informational and educational, historical and ongoing, continuation of the commons holds promise of a future for people and the planet. Preserving the commons must be recognized not merely as a means of sustaining *human* life, but as a way of recognizing and valuing the interconnections between *all* forms of life, as well as recovering, preserving, and perpetuating diverse, connected, communal, and egalitarian ways of thinking and being. At their best, as part of the commons, public schools can continue to function as vital spaces in which people can “appear before one another as...the best they know how to be.”

References

- Alexander, M. (2020). *The new Jim Crow: Mass incarceration in the age of colorblindness*. The New Press.
- Allen, S. (2015). Death of a diploma mill: University of Phoenix going down in flames? *The Daily Beast* (updated April 14, 2017). <https://www.thedailybeast.com/death-of-a-diploma-mill-university-of-phoenix-going-down-in-flames>
- Apple, M. W. (2001). *Educating the “right” way*. Routledge.
- Apple, M. W. (2004). *Ideology and curriculum*. Routledge and Kegan Paul. <http://dx.doi.org/10.4324/9780203241219>
- Au, W. (2007). High-stakes testing and curricular control: A qualitative metasynthesis. *Educational Researcher*, 36(5), 258-267. <http://dx.doi.org/10.3102/0013189X07306523>
- Au, W. (2011). Teaching under the new Taylorism: High-stakes testing and the standardization of the 21st century curriculum. *Journal of Curriculum Studies*, 43(1), 25-45. <http://dx.doi.org/10.1080/00220272.2010.521261>
- Baines, L. (2019). *Privatization of America’s public institutions: The story of the American sellout*. Peter Lang.
- Baldwin, J. (1963). *The fire next time*. The Dial Press.
- Baldwin, J. (1988). A talk to teachers. In R. Simonson & S. Walker (Eds.), *The Graywolf annual five: Multicultural literacy* (pp. 3–12). Graywolf. <http://dx.doi.org/10.1111/j.1744-7984.2008.00154.x>

- Bang, M., Marin, A., Wemigwase, S., Nayak, P., & Nxumalo, F. (2022). Undoing human supremacy and white supremacy to transform relationships: An interview with Megan Bang and Ananda Marin. *Curriculum Inquiry*, 52(2), 150-161.
- Bellah, R., Madsen, R., Sullivan, W. M., Swidler, A., & Tipton, S. M. (1985). *Habits of the heart: Individualism and commitment in American life*. Harper & Row.
- Berger, P. L. & Luckmann, T. (1966). *The social construction of reality*. Anchor Books.
- Bloom, B. S. (1956). *Taxonomy of cognitive activity*. Allyn and Bacon.
- Bookchin, M. (1990). *Remaking society*. South End.
- Brayboy, B. McK. J. (2005). Toward a tribal critical race theory in education. *The Urban Review*, 37(5), 425-446.
- Brayboy, B. McK. J. (2014). Culture, place, and power: Engaging the histories and possibilities of American Indian education. *History of Education Quarterly*, 54(3), 395-402.
- Butler, J. (1990). *Gender trouble: Feminism and the subversion of identity*. Routledge.
- Butler, J. (1997). *The psychic life of power: Theories of subjection*. Stanford University Press.
- Campbell, N. & Quirk, A. (2020). K-12 education budget: Cuts for public schools, billions for private school vouchers. *Center for American Progress*.
<https://www.americanprogress.org/article/trumps-k-12-education-budget/>
- Capra, F. (1996). *The web of life: A new scientific understanding of living systems*. Anchor.
- Coulthard, G. S. (2014). *Red skin, white masks: Rejecting the colonial politics of recognition*. University of Minnesota Press.
- de Beauvoir, S. (1949/2009). *The second sex*. Random House.
- De Lissovoy, N. (2013). Conceptualizing the carceral turn: Neoliberalism, racism, and violation. *Critical Sociology*, 39(5), 739-755.
- Deloria, V. (1999). *Spirit and reason: The Vine Deloria, Jr. reader*. Fulcrum.
- Derrida, J. (1978) *Writing and difference*. University of Chicago Press.
- Derrida, J. (1997). *Deconstruction in a nutshell: A conversation with Jacques Derrida*. Fordham University Press.
- Devall, B. & Sessions, G. (1985). *Deep ecology*. Peregrine Smith.
- Dewey, J. (1916). *Democracy and education*. Macmillan.
- Dewey, J. (1938/1965). *Experience and education*. Collier Books.
- Diamond, J. (1987, May). The worst mistake in the history of the human race. *Discover*, 64-66.
- Diamond, J. (2012). *The world until yesterday: What can we learn from traditional societies?* Penguin.
- Du Bois, W. E. B. (1903). *The souls of Black folk*. Bantam Classic.

- Edwards Jr., D. & Means, A. (2019). Globalization, privatization, marginalization: Mapping and assessing connections and consequences in/through education. *Education Policy Analysis Archives*, 27, 123.
- Enslar, E. (2021). Disaster patriarchy: How the pandemic has unleashed a war on women. *The Guardian*. <https://www.theguardian.com/lifeandstyle/2021/jun/01/disaster-patriarchy-how-the-pandemic-has-unleashed-a-war-on-women>
- Foucault, M. (1977). *Discipline and punish: The birth of the prison*. Vintage.
- Freire, P. (1970/1990). *The pedagogy of the oppressed*. Continuum.
- Gaarder, J. (1991). *Sophie's world*. Penguin.
- Gore, A. (2006). *An inconvenient truth*. Paramount Home Entertainment.
- Gramsci, A. (1982). *Selections from the prison books*. Lawrence & Wishart.
- Greene, M. (1988). *The dialectic of freedom*. Teachers College Press.
- Haire, S. (2012). What can SourceForge.net data alone tell us about Open-Source software commons? In *Internet Success* (pp. 143-178). The MIT Press.
- Haney-Lopez, I. F. (2003). *Racism on trial: The Chicano fight for justice*. Belknap Press.
- Hanson, M. (2022, March 15). U. S. Public education spending statistics. <https://educationdata.org/public-education-spending-statistics>
- Hardin, G. (1968). The tragedy of the commons. *Science*, 162 (3859), 1243–1248.
- Harvey, D. (2012). *Rebel cities: From the right to the city to the urban revolution*. Verso.
- Haynes, M. (2014, July 17). On the path to equity: Improving the effectiveness of beginning teachers. *Alliance for Excellent Education*. Retrieved from <http://all4ed.org/reports-factsheets/path-to-equity/>
- hooks, b. (1984/2000). *Feminist theory: From margin to center*. South End.
- hooks, b. (1994). *Teaching to transgress: Education as the practice of freedom*. Routledge.
- Hopson Malone, Anita A. (2017). *Speaking ourselves into being: Cultural identity development among African American artists/educators*. Unpublished Doctoral Dissertation. University of Oklahoma, Norman, OK.
- Houser, N. O. (2022). The value of a personal philosophy of citizenship education. *The Social Studies*, 114(2), 59-66.
- Houser, N. O. (2009/2014). Ecological democracy: An environmental approach to citizenship education. In E. W. Ross (Ed.), *The social studies curriculum: Purposes, problems, and possibilities* (pp. 139-160). State University of New York Press.
- Houser, N. O. (2006). Worldviews and learning theories: A transactional reconsideration of teaching and learning. *Curriculum and Teaching*, 21(1), 5-32.
- Houser, N. O., Krutka, D. G., Roberts, R. D., Pennington, K., & Coerver, N. A. (2017). Navigating the reform-accountability culture in Oklahoma social studies. *Theory and Research in Social Education*. 45(1), 7-42.

- Houser, N. O. & Kuzmic, J. J. (2001). Ethical citizenship in a postmodern world: Toward a more connected approach to social education for the twenty-first century. *Theory and Research in Social Education*, 29(3), 431-461. <http://dx.doi.org/10.1080/00933104.2001.10505950>
- Huberman, B. A., Romero, D. M., & Wu, F. (2008). *Crowdsourcing, attention, and productivity*. <https://doi.org/10.1177/0165551509346786>
- Intergovernmental Panel on Climate Change. (2022). *Climate change 2022: Impacts, adaptation and vulnerability*. <https://www.ipcc.ch/report/ar6/wg2/>
- Kincaid, J. (1988). *A small place*. Penguin.
- Leahey, C. (2014). Creating authentic spaces for democratic social studies education. In Ross, E. W. (Ed.), *Social studies curriculum: Purposes, problems, and possibilities*. State University of New York Press.
- Lewis, T. (2012). Exopedagogy: On pirates, shorelines, and the educational commonwealth. *Educational Philosophy and Theory*, 44(8), 845-861.
- Levin, K., Boehm, S. & Carter, R. (2022). *Six big findings from the IPCC 2022 report on climate impacts, adaptation and vulnerability*. World Resources Institute. <https://www.wri.org/insights/ipcc-report-2022-climate-impacts-adaptation-vulnerability>. Retrieved February 27, 2022
- Lukacs, J. (1968/1994). *Historical consciousness: The remembered past*. Transaction Publishers.
- Liotard, J-F. (1984). *The postmodern condition*. Manchester University Press.
- Mackie, S. (1998). A school teacher walks about with “green” colored glasses: Three radical ecophilosophies for public educators. Unpublished Master’s Thesis. University of Oklahoma, Norman, OK.
- McLuhan, T. C. (1971). *Touch the earth: A self-portrait of Indian existence*. Promontory Press.
- Merchant, C. (1994). *Ecology*. Humanities Press.
- Mignolo, W. (2011). *The darker side of western modernity: Global futures, decolonial options*. Duke University Press.
- Mignolo, W. & K. Walsh. (2018). *On decoloniality: Concept, analytics, praxis*. Duke University Press.
- Miller, J. G. (1978). *Living systems*. McGraw-Hill.
- Naess, A. (1973). The shallow and the deep, long-range ecology movements: *Inquiry* 16.
- No Child Left Behind Act of 2001, Pub. L. No. 107-110, 20 U.S.C. 6301 et seq. (2002).
- Nxumalo, F., Nayak, P., & Tuck, E. (2022). Education and ecological precarity: Pedagogical, curricular, and conceptual provocations. *Curriculum Inquiry*, 52(2), 97-107.
- Ohanian, S (1999). One size fits few: The folly of educational standards. Heinnemann.
- Ostrom, E. (1990). *Governing the commons: The evolution of institutions for collective action*. Cambridge University Press.
- Ostrom, E & Hess, C. (2007). *Understanding knowledge as a commons: From theory to practice*. MIT Press.

- Palmer, P. J. (1998/2007). *The courage to teach*. Jossey-Bass.
- Perkins, J. (2004). *Confessions of an economic hit man*. Plume.
- Perry, S. L. & Whitehead, A. L. (2020). *Taking America back for God: Christian Nationalism in the United States*. Oxford University Press.
- Philips, S. U. (1972). Participation Structures and Communicative Competence: Warm Springs Children in Community and Classroom. In C.B. Cazden & D. Hymes (Eds.), *Functions of Language in the Classroom*. Teachers College Press.
- Picower, B. (2011). Resisting compliance: Learning to teach for social justice in a neoliberal context. *Teachers College Record*, 113(5), 1105-1134.
- Pilger, J. (2002). *The new rulers of the world*. Verso.
- Province, R. (2012). *A community of congruence among social studies teachers: A case study*. Department of Instructional Leadership and Academic Curriculum, College of Education, University of Oklahoma, Norman, OK, 73019-2060.
- Queen, G. (2014). Class struggle in the classroom. In E. W. Ross (Ed.), *Social studies curriculum: Purposes, problems, and possibilities*. State University of New York Press.
- Quinn, D. (1992). *Ishmael*. Bantam.
- Quinn, D. (1996). *The story of B*. Bantam.
- Rebell, M. A. (2018). *Flunking democracy: Schools, courts, and civic participation*. The University of Chicago Press.
- Ross, E. W., Mathison, S., and Vinson, K. D. (2014). Social studies curriculum and teaching in the era of standardization. In Ross, E. W. (Ed.), *Social studies curriculum: Purposes, problems, and possibilities*. State University of New York Press.
- Said, E. W. (1978). *Orientalism*. Pantheon.
- Saltman, K. (2012). Democratic education requires rejecting the new corporate two-tiered school system. *American Journal of Education*, 118(3), 389-393.
- Saltman, K. (2014). The austerity school: Grit, character, and the privatization of public education. *Symploke (Bloomington, Ind.)*, 22(1), 41-57.
- Schlottmann, C., Jamieson, D., Jerolmack, C. & Rademacher, A. (2017). *Environment and society: A reader*. NYU Press.
- Scott, R. A. (2020). Leadership threats to shared governance in higher education. *AAUP Journal of Academic Freedom*, 11, 1-17.
- Semyalo, R. (2021). *Deterioration of Lake Victoria: The price of inaction*. ID4D Sustainable Development News.
- Simpson, L. (2004). Anticolonial strategies for the recovery and maintenance of indigenous knowledge. *American Indian Quarterly*, 28(3/4), 373-384.
- Simpson, L. (2017). *As we have always done*. University of Minnesota Press.
- Slater, G. (2014). Constituting common subjects: Toward an education against enclosure. *Educational Studies (Ames)*, 50(6), 537-553.

- Spivak, G. C. (1987). *In other worlds: Essays in cultural politics*. Methuen.
- Spivak, G. C. (1995). Can the subaltern speak? In B. Ashcroft, B. Griffiths, & H. Tiffin (Eds.), *The postcolonial studies reader*. Routledge.
- Stannard, D. (1992). *American holocaust*. Oxford University Press.
- Taylor, B. P. (2010). *Horace Mann's troubling legacy: The education of democratic citizens*. University Press of Kansas.
- Thompson, A. (2020). *Biodiversity and the Amazon rainforest*.
<https://www.greenpeace.org/usa/biodiversity-and-the-amazon-rainforest/>
- Tsu, L. (1972). *Tao te Ching*. Vintage Books.
- Tuck, E., McKenzie, M., & McCoy, K. (2014). Land education: Indigenous, post-colonial, and decolonizing perspectives on place and environmental education research. *Environmental Education Research*, 20(1), 1-23.
- Union of Concerned Scientists. (2021). <https://www.ucsusa.org/climate>
- Vygotsky, L. S. (1978). *Mind in society*. Harvard University Press.
- Vygotsky, L. S. (1986). *Thought and language*. MIT Press.
- Walker, T. (2022). Survey: Alarming number of educators may soon leave the profession. *National Education Association Today*. <https://www.nea.org/advocating-for-change/new-from-nea/survey-alarming-number-educators-may-soon-leave-profession>
- Warder, G. (2015). *Horace Mann and the creation of the Common School*.
<http://www.disabilitymuseum.org/dhm/edu/essay.html?id=42>
- Warren, K. J. (Ed.) (1997). *Ecofeminism: Women, culture, nature*. Indiana University Press.
- Wertsch, J. V. (1991). *Voices of the mind: A sociocultural approach to mediated action*. Harvard University Press.
- Whitehead, A. (2021). The growing anti-democratic threat of Christian nationalism in the U. S. *Time Magazine*. <https://time.com/6052051/anti-democratic-threat-christian-nationalism/>
- Whitehead, A. N. (1929). *The aims of education and other essays*. Macmillan.
- Wildcat, D. R. (2009). *Red alert! Saving the planet with Indigenous knowledge*. Fulcrum.
- Zinn, H. (1995). *A people's history of the United States*. Harper Collins.

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