

Manufacturing (*il*)literacy in Alberta's classrooms: The case of an oil-dependent state¹

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¹ Two sources influence this title: *Manufacturing consent* by Chomsky and Hess (1988), and *Barriers to changing Alberta's oil and gas tenure system: Lessons learned from an oil-dependent state* by Krogman and Fluett (2008).

Abstract

This paper examines involvement of education-business “partnerships” presently occurring in the province of Alberta, Canada. Specific attention is paid to the promotion and sponsorship by oil multinational corporations (MNCs) of corporate propaganda masquerading as energy and environmental literacy programs targeted for the K-12 school system. The rhetoric of partnerships is explored as a central policy of the provincial government to support big business, while simultaneously retrenching from education funding. These characteristics of neoliberal reforms to education are understood as being symptomatic of structural peculiarities characterizing the political economy of oil-dependent states like Alberta. Using a case study analysis of an educational service provider, I show how oil MNCs and the provincial government are actively involved in curriculum and teacher professional development activities as part of a wider strategy of promoting corporate social responsibility. These partnerships are occurring at a time when energy policy is facing an international legitimacy crisis exacerbated by production of dirty oil from Alberta’s immense tar sands reserves. The analysis illustrates how education-business partnerships contribute towards a democratic deficit and undermine basic tenets of education by obstructing access to information. In closing I present alternative energy and environmental literacy programs currently being incorporated into classrooms as examples of practical and effective counter-hegemonic programs that help promote global citizenship through the development of a critical consciousness.

Key Words: environmental education; education-business partnerships; corporate propaganda; neoliberal globalisation; oil-dependency; tar sands; Indigenous rights

State actors go to great lengths to elicit consent in an attempt to maintain legitimacy. Moments of ambiguity in the social contract can thus be useful opportunities to observe how state elites defend their legitimacy. (Davidson, Gismondi, & Isaac, 2009, p. 6)

Introduction

Recent international recognition of Canada's enormous Athabasca tar sands² reserves located in northeastern Alberta has catapulted the country to a position of strategic priority for the United States. Considered second only to Saudi Arabia in terms of reserve potential, Canada is now the number one exporter of energy to the United States. However, this dubious distinction comes with a catch as mounting concern over "dirty oil" and climate change, combined with the present worldwide economic recession, has placed the legitimacy of Canada's energy policy into a state of crisis. The Obama administration represents a dramatic ideological shift from its republican predecessor with respect to energy policy, and is beginning to implement climate change legislation geared towards weaning the United States off dirty oil in preference to alternative energy sources (Alberts, 2009), thus marking a potentially significant turning point in trade between the two nations. Contributing towards this policy shift has been the unrelenting press coverage by both national and international media casting aspersions over Canada's environmental record. For instance, a month after Obama's visit to Canada in February 2009, *National Geographic* magazine carried an article entitled, "The Canadian oil boom: Scraping bottom" (Kunzig, 2009), which describes in graphic detail the environmental and social devastation caused by tar sands mining. More recently, the World Wildlife Fund (WWF) stated, "Canada is doing the least of any of the world's wealthiest countries to fight climate change," with the blame being placed on the "expanding exploitation of the tar sands" in Alberta (Crawford, 2009). Considering that Alberta's prosperity hinges on developing the tar sands – now considered the world's largest energy, capital, and construction project (Nikiforuk, 2008) – it is inevitable that a development of this magnitude will have ripple effects for the wider society, including the state provision for public education.

This paper critically explores an example of corporate involvement occurring in Alberta's K-12 school system. Following the work of Taylor (2001), the paper connects the "empirical detail and the theoretical bigger picture," by linking analysis of change in Alberta to those in other sites while keeping sight of the province's unique historical social, political, and

² While proponents of development use the term "oil sands," the term "tar sands" more accurately describes the bituminous deposits located in the region.

economic features” (p. 10). Analysis at the sub-national level is also warranted considering the nature by which devolution of authority and responsibility over resources and education to provinces occurs in Canada. As Davidson, Gismondi, and Isaac (2009) note, a “focus on a sub-national state context may be considered unorthodox, but sustainability issues inevitably encompass decision-making at scales both beneath and beyond the nation state, the former of which deserves far more attention than it has received” (p. 6).

I begin by presenting an overview of recent responses by both provincial (GOA) and federal governments to the energy legitimacy crisis as a context to introduce the concept of *petro-state* to explain Alberta’s oil-dependent political economy. Within an educational context I show how responses to the present legitimacy crisis include the hegemony of corporate sponsorship practices in schools. An examination of curriculum and professional development activities currently being developed and promoted by oil MNCs provides an empirical case study to illustrate the nature and manner by which corporate propaganda is able to infiltrate schools. While masquerading under the benign and altruistic banner of “corporate social responsibility,” energy and environmental literacy programs are problematized as instilling technocratic market values in schools while concomitantly blocking access to information and undermining the transformative potential of education. In closing, I consider alternative *critical* pedagogical approaches to environmental and energy literacy programs being used as part of a wider strategy towards fostering the development of active global citizenship.

Maintaining Legitimacy

Evidence of government responses to improve Alberta’s tarred image and restore public trust can be seen in a variety of reports promoting greater responsibility and accountability through the formation of partnerships, community consultations, and green technologies (Finch & Varella, 2009; GOA, 2008a; GOA, 2008b; GOA, 2009). These reports recognize the province has reached a “tipping point” with respect to resource development and is promising “extensive stakeholder consultations” in order to address the cumulative environmental effects. It has also begun to promote its new education strategy. Entitled “Inspiring Education: A Dialogue with Albertans,” the strategy “will engage Albertans in a

dialogue about how education in our province can help tomorrow's children and youth find their passions and prepare for success" (Sarich, 2009).

Coinciding with the plethora of recent government reports has been a global economic downturn resulting in a drastic decline in the price of oil in May, 2008 (National Energy Board, n.d.). Non-renewable resource revenues for 2009-10 are projected to be half of the \$12.5 billion brought in for 2008-09 (GOA, n.d.). Despite recording a multi-billion deficit this year – the first in 16 years for the province – the provincial government will spend \$25-million over three years on a re-branding initiative aimed at off-setting bad publicity as a producer of dirty oil. As Premier Ed Stelmach notes in defending the expenditure, "it's worth more than \$25-million, protecting a \$40-billion revenue stream" (Audette & Henton, 2009).

Meanwhile, the federal government has also gone into damage control, by agreeing to hold parliamentary hearings into tar sands production – a responsibility it has neglected up until now, despite its federal jurisdiction over water in the province (O'Neill, 2009). In the aftermath of Obama's visit to Canada, the federal government has agreed to enter into a Clean Energy Dialogue with the United States in an effort to combat climate change. However, the appointment of a former tar sands executive as the Canadian head of the dialogue raises questions as to the credibility of the effort, and whether in fact the dialogue will end up promoting and protecting tar sands development instead (McGregor, 2009).

Petro-states and Educational Policy

Alberta has one of the least stable economies in the country owing to the volatility of oil prices. As such, Alberta's petroleum based economy is unique in Canada and stands to be hit hardest by the present economic recession. In 2008 the province predicted an \$8.8 billion surplus; today, that prediction has changed to a \$4.75 billion deficit, making it the most volatile revenue stream of any government in North America (Curren, 2010; McLean, 2009).

Prior to the discovery and development of the first oilfields in the 1930s and '40s, Alberta was an agriculturally based economy. The growth of the petroleum industry in the 1970s, followed by enormous investments in the tar sands during the 1990s, has provided the basis

for what Mansell (1997, cited in Taylor, 2001) describes as an increased managerial/entrepreneurial class based on an economy characterized by a large primary sector that exports most of its output, and an underdeveloped manufacturing sector (p. 62).

Mansell suggests that the development of the petroleum sector “simply enhanced the basically rural conservative values of rugged individualism, risk-taking, entrepreneurship, and a unique mix of self-reliance and co-operation” (cited in Taylor, 2001, p. 64). Mansell’s frontier-like characterizations of Alberta’s political culture may also be attributed to its status as an energy-rich periphery of an eastern industrialized core. A growing sense of “western alienation” occurred after attempts by the federal government of Pierre Trudeau to nationalize “Alberta’s” energy resources in the 1980s. The end result of federal “meddling” in provincial policies has been a shift away from a nationalist energy strategy in preference to an export-dependent continentalist strategy, now institutionalized through the 1993 North American Free Trade Agreement (NAFTA). NAFTA’s energy clause significantly ties energy exports to the United States’ market, thereby constituting a loss of sovereignty both in terms of policy options and development scenarios Canada can pursue (Urquhart, 2005, p. 8). As the Alberta Federation of Labour (2009) notes,

Today, Alberta stands as one of only two of the world’s top 15 oil-producing jurisdictions without a publicly owned and publicly mandated corporate energy champion. And Canada is the only major oil-producing national without some kind of national energy strategy that puts the long-term interests of its citizens and its local economy ahead of the short-term interests of private energy companies. (p. 35)

Almost all oil and gas produced for export is shipped to the United States, representing approximately two-thirds of all production (Clarke, 2008, p. 135; Rowat, 2006). Owing to the enormous tar sands reserves, the majority of the country’s petroleum production occurs in Alberta, with the energy sector contributing an average of 42% of provincial GDP, 31% of employment, and 32% of government revenues over the period of 1971-2004 (Davidson et al., 2009, p. 4). Despite the present economic recession these figures show no signs of abating as forecasters predict tar sands output will grow 50% by 2025 (Cooper, 2009).

Ideologically opposed to federal government intervention in favor of unfettered free (and foreign) markets, both the provincial Social Credit (1940- 1971) and Conservative Party (1971-) governments have granted generous industry concessions, including royalty free holidays, publicly financed infrastructure, strike free labor, and reductions on taxable income. As Pratt (1976) noted, “in abdicating responsibility to a socially irresponsible system of power, public government in effect creates the ‘private government of oil’” (1976, p. 85).

Since the time Pratt wrote his account of the creation of the tar sands industry, petro-state theories explaining the political economy in oil-dependent states have been developed — initially with respect to the Middle East (Beblawi & Luciani, 1987), and then later to countries in the developing world (e.g., Karl, 1997; Ross, 2001; Friedman, 2006). These analyses show an inverse correlation exists for oil-rich states; as oil wealth increases, democracy decreases. Friedman (2006) describes petro-states as oil rich regions “that are both dependent on oil production for the bulk of their exports or gross domestic product (GDP) and have weak state institutions or outright authoritarian governments” (p. 31). Up until recently, petro-state theories have primarily examined economic and political factors at the nation-state level. However, if we consider education as a critical factor required in the development of resilient economies and robust democracies, then analysis must also consider state provision for education.

Gyfalcon (2001) provides a useful statistical analysis to support the general contention that an inverse correlation exists between education and natural capital. According to Gyfalcon’s comparative analysis involving 85 countries, secondary enrolment decreases with respect to share of natural capital in national wealth, with similar correlations existing for public expenditure and years of schooling. These quantitative analyses are useful to show the existence of an inverse correlation; however, they are unable to indicate qualitative aspects of schooling. For instance, Gyfalcon concedes public expenditure on education is an imperfect measure of a nation’s commitment to education as it may be of mediocre quality (p. 852).

Kissane’s (2007) qualitative analysis of petro-politics and education in Kazakhstan supports Gyfalcon’s general hypothesis that an inverse correlation exists between resource

development and support for education. This correlation is explained as a function of a lack of incentive to support education as investments in oil-dependent states are almost guaranteed regardless of the state of education or social development. However, like Friedman (2006), Kissane over-states her argument by simplistically delineating states into two categories without providing any supporting evidence — exalting countries like Canada, Norway and the state of Alaska as “provocative models for successful utilization of oil revenues,” in comparison to less developed countries in Africa, Latin America, and the Middle East (p. 205).

Contrary to Kissane’s categorizations, structural characteristics pertaining to oil-dependency have been made at a subnational level for both Alaska (McBeath, Berman, Rosenberg, & Ehrlander, 2008; see also Haycox, 2002) and Alberta (Carter, 2007; Davidson et al., 2009; Harrison, 1999; Krogman & Fluett, 2008; Nikiforuk, 2008; Taft, 2007). While it would be an exaggeration to suggest Alaska and Alberta are petro-states in terms of possessing outright oppressive, authoritarian regimes, deep penetration of oil MNCs into the regions’ political economy have produced similar structural effects. In Alberta, several statistics are worthy of note. Amongst the Canadian provinces, Alberta has the lowest provincial taxes, the lowest voter turnout, and one of the lowest minimum wages. Lavish “prosperity bonuses” totalling \$1.4 billion paid out to Albertans in January 2006 also contribute towards lowering government accountability by producing an increasingly docile and complacent electorate. Unlike its provincial and territorial counterparts, Alberta has the longest running provincial party – the Conservatives, who have governed a near one-party province for thirty-eight years. Like other oil-dependent states, Alberta is a region where accountability to provincial citizens has been replaced by patronage.

As a testament to the neglectful state of affairs, the 2007 independent royalty review indicated an absence of accountability from the government to the owners of the resources, noting, “even with substantial effort, Albertans cannot determine whether their interests are being well served and whether or not the royalty system is performing as intended” (Alberta Royalty Review, p. 5). Similarly, Taft (2007) explains how the provincial government and the petroleum industry go hand-in-hand, describing a venture where Tory politicians formed

their own oil company in 1995 – a blatant conflict of interest that went unchecked as Alberta’s ethics guidelines do not cover perceived conflicts of interest (p. 81). Not surprisingly, the much-touted rhetoric behind the “Alberta advantage” attributed to oil revenues benefiting ordinary Albertans has been debunked. As Gibson (2007) explains, “much of the economic growth is going to corporate profits, increases for corporate executives and dividends to shareholders,” and “according to Statistics Canada, close to half of the assets and over half of the revenue in oil and gas extraction in Canada are foreign-owned” (p. iv). Hence, the benefits of the recent oil boom have trickled up, not down, with ordinary Albertans working longer hours to make ends meet and paying on average more than other Canadians for child care, health care, education, and home utilities (Gibson, 2007; Parkland Institute, 2010).

Norway is an exception to these trends. In Norway, oil is a common property resource. The country’s national oil company, Statoil, is majority-owned by Norwegians, with approximately 78% of revenues generated from oil production returned to the government purse (Government Accountability Office [GAO], 2007; Thompson & Newman, 2010, p. 20). Its ability to take control of its oil wealth lies in the fact that strong state institutional structures were in place *prior* to the advent of the 1970’s North Sea oil boom that allowed the country to profit through its state-owned national energy program. Karl (1997) considers Norway to characterize Max Weber’s “ideal bureaucracy” of a civil service state, arguing the country’s success lies in its strong civil service, as civil servants perceived their role as superior to the private sector and were “insulated from and impervious to influence peddling” (pp. 216-217). Moreover, “strong mechanisms of accountability, including ombudspeople, special courts, and public access to documents, and even stronger norms ruled out such [corrupt] behaviour” (p. 217).

Unlike Norway, oil rich Alberta literally sits at the opposite end of the scale in terms the total percentage of petroleum revenues collected by government (Alberta Royalty Review, 2007; GAO, 2007). While Alberta’s petroleum Heritage Savings Trust Fund has languished since its inception in 1976—now at \$14 billion (Henton, 2009) — Norway’s has amassed \$400 billion in savings in approximately the same time frame (Nikiforuk, 2008). For 2005-06, the

national average expenditures per student in public elementary and secondary schools in Canada and Alberta respectively stood at \$9,704 and \$10,293 (Blouin, 2008). However, these figures may be misleading. Analysis of 2002-03 data indicates as a percentage of its total wealth (provincial GDP) Alberta spent less on public education than any other province (Alberta Teachers' Association, 2008; see also Neu, 1999). Prior to becoming an export oil-dependent economy, Alberta outspent the other Canadian provinces on education and other social services (Harrison, 1999, p. 37). Alberta also has the lowest graduation rate amongst the provinces in 2005-06 (Blouin, 2008) — an indicator of the counter-cyclical nature of education occurring in mining-dependent states. In comparison, the proportion of students attending colleges and universities in Norway rose from 26% in 1980 to 62% in 1997 (Gyfalson, 2001, p. 851).

The Rise of Corporate “Partnerships”

Before describing educational reforms that have given rise to education-business partnerships over the past two decades, it is first useful to theorize neoliberal state formation, which I argue in the context of this discussion, are shaped and conditioned by the *structures* of oil dependence. Here, I refer to Harvey's (2005) definition of neoliberalism as,

a theory of political economic practices that proposes that human well-being can best be advanced by liberating individual entrepreneurial freedoms and skills within an institutional framework characterized by strong private property rights, free markets, and free trade. The role of the state is to create and preserve an institutional framework appropriate to such practices.... Furthermore, if markets do not exist (in areas such as land, water, education, health care, social security, or environmental pollution) then they must be created, by state action if necessary. (p. 2)

Of particular relevance is the impact neoliberalism has on education and access to information. According to Harvey (2005),

All agents acting in the market are generally presumed to have access to the same information. There are presumed to be no asymmetries of power or of information that interfere with the capacity of individuals to make rational economic decisions in their own interests. Asymmetric power

relations tend, therefore, to increase rather than diminish over time unless the state steps in to counteract them. The neoliberal presumption of perfect information and a level playing field for competition appears as either innocently utopian or a deliberate obfuscation of processes that will lead to the concentration of wealth and, therefore, the restoration of class power (p. 68).

If neoliberalism is about the restoration or reconstruction of class power through active promotion of free markets, then it stands to reason that an inordinate amount of cooperation by subordinated classes is required to reproduce the status quo. Neoliberal state formation therefore requires consent through ideological hegemony; values of the market must permeate civil society in order for the ruling class — whose interests are orchestrated through the state — to maintain its position of control. For Italian Marxist Antonio Gramsci (1891-1937) divisions between the state and civil society are in fact illusory — an illusion that must be maintained in order for the state to exist (Gramsci, 1971/1992). This explanation of the modern state introduces us to the nature by which power operates within it. According to Green (1990),

a hegemonic order represents a temporary settlement, the ideological balance of force of the ruling class, not the homogenous substance of an imposed class ideology. It is won through continual conflict which involves the creation of alliances, the attempted incorporation of subordinate groups and, even, the granting of concessions so long as these do not damage the vital interests of the dominant group. (p. 94)

These theoretical considerations of state formation help to explain how the “policy community” has expanded over time to include larger employers and parents — the manifestation of which is the emergence of education-business partnerships as a key part of new public management. In Canada, privatization of education, which includes corporate sponsorship practices, is generally poorly documented and monitored. According to the Canadian Teachers’ Federation (CTF, 2006), several provinces including Alberta have left decisions regarding corporate presence and private levels of finance in schools up to individual school boards (p. 14). The Alberta Teachers’ Association (ATA) has produced a series of policy directives concerning corporate presence in schools, stating: partnerships

must meet an identified educational purpose, not a commercial motive; partnerships are subject to regular, systematic evaluations; corporate partners should not receive the right to influence curriculum or educational policy as a result of their participation in education activities; partnerships shall not be established to compensate for inadequate provincial funding but rather complement the system. In addition schools should be advertising-free zones; and commercial curricula materials must be subjected to rigorous evaluation, with specific attention to accuracy and completeness, commercialism, bias, and stereotyping (ATA, n.d.).

However, the ability of the ATA to monitor and enforce these directives is problematic considering the government has a vested interest in promoting education-business partnerships. While the ATA issues directives, individual school boards set their own policies. As the CTF (2006) notes, “despite some provincial and territorial departments of education acknowledging commercialism in schools is an ‘issue’ in education finance, very few governments appear to have established policies or guidelines addressing: levels of commercial or corporate involvement in education; advertising; exclusive marketing; private donations; fundraising; or user fees” (p. 14). A perusal of policies with two of the largest school boards in the province, Calgary Board of Education and Edmonton Public School Board indicates that both boards encourage and support the development of corporate partnerships (CBE, n.d.; EPSB, n.d.). Understanding how these relationships came about requires an analysis of educational policy during the 1990s.

Coinciding with Alberta’s political economic transformation from an agricultural to a petroleum based economy is the increasing tendency towards corporate influence in education. In contrast to the provincial government’s Worth Report (1972) which attempted to promote a more “person-centred view that schooling should provide students with skills that help them develop their own sense of personal worth and competence” (cited in Taylor, 2001, p. 65), neoliberal reforms seek to enhance employability, individual responsibility, and lifelong learning. These reforms notably gained momentum in the 1990s during the “Klein revolution.”

As Taylor (2001) explains, the provincial government of Premier Ralph Klein (1992-2006) was able to use a “fiscal crisis” attributed to a 1986 drop in energy prices as well as to the growth in government expenditures to enact massive cuts to the public sector and implement neoliberal policies (p 18). With respect to education, two other discourses were mobilized to achieve the reforms envisaged, which business people were involved in promoting. These included the neoconservative discourse of the “unhappy parent” as advocated through the group Albertans for Quality Education³, and the neoliberal discourse of the “dissatisfied employer.” While the former was able to draw public attention to the perceived need to return to back-to-basics education, the latter argued schools were not adequately preparing students for the world of work. Taylor (2001) argues the hegemonic fusion of neoconservative and neoliberal influence enabled Klein to make cuts to education and restructure the system as seen in the amalgamation of school boards and formation of education-business partnerships. Hence, a revenue problem exacerbated by government reductions in royalty rates and incentives provided to oil producers resulting in massive subsidies to the private sector stimulated an attack on social spending (p. 19). Collectively, these reforms embody characteristics of Harvey’s (2005) conception of neoliberal state formation: “creative destruction” of prior institutional frameworks and powers, aided and abetted through the formation of public private partnerships.

Institutionalizing the educational reforms was the Calgary-based Canada West Foundation (CWF) — a conservative think-tank that produced the Red Ink report (1993). The report “suggests that federal and provincial deficits and debt pose a significant problem for governments because of debt-servicing costs and the potential actions of domestic and foreign investors” (Taylor, 2001, pp. 17-18). CWF also acted in conjunction with the Alberta Chamber of Commerce (ACR) which represents various-sized business interests across the province. ACR lobbied governments to eliminate the deficit without raising taxes, thus translating into funding cutbacks to education (Taylor, 1999).

³ Albertans for Quality Education describes itself as “a decentralized organization consisting of parents, business people, educators and students in many communities throughout Alberta” (cited in Taylor, 2001, p. 22).

The efforts of CWF and ACR, along with the Calgary Educational Partnership Foundation (CEPF), influenced the provincial Department of Education's report, *Framework for Enhancing Business Involvement in Education* (GOA, 1996). After surveying 9000 Albertans, the report states, "Albertans wanted a 'stronger relationship between education and business,' in order to give more students the 'real life' experiences they need to develop necessary workplace skills" (p. 6). The report recommended that "government, businesses and educators must work closely to set up the structures and networks that will enhance communication and assist in promoting and coordinating business-education partnerships and workplace learning opportunities throughout the province" (p. 9). Businesses were encouraged to take an active role in educational policy development by becoming active participants in school councils. The report also recommends each school board adopt and implement a policy respecting involvement of local businesses in education. Despite the fact that two-thirds of respondents felt a policy should be in place to ensure that a balanced perspective be provided, and that respondents raised concerns about "the lack of balance given to alternative beliefs, attitudes and values," no specific policy recommendations were made in the report to ensure a conflict of interest between business and education did not occur. As Taylor (2001) surmises, "what is striking about this ideological work is that it shifts our focus from the economic and social performance of corporations to that of schools without presenting a particularly convincing empirical argument that education is in crisis or that economic problems are tied to education" (p. 51).

The Case of Inside Education

In this section I provide a case study of an educational organization to illustrate the nature by which corporate sponsorship practices are impacting Alberta's schools. Numerous "not-for-profit" organizations provide both environmental, energy, and career education for students. These include the Science Alberta Foundation, Society, Environment and Energy Development Studies Foundation (SEEDS), Careers the Next Generation, The Centre for Environment-Economy Learning, The Alberta Emerald Foundation, and Inside Education. These organizations receive funding support primarily from oil MNCs, as well as from forestry companies, and the provincial government. Evidence of government support for these programs can be found in the Department of Energy's 2010-2013 Business Plan, which

indicates that the GOA has committed to “work within Alberta’s education system to facilitate a flow of age-suitable information about the energy industry, its importance, and its future” (GOA, 2010, p. 101). For the purposes of this analysis, I shall examine the organization Inside Education and the kinds of messages it is delivering to educators and students.

Originally known as “Friends of Environmental Education Society of Alberta,” the organization changed its name in 2004, claiming, it is a name that better reflects “our ability to bring individuals *inside* the issues related to the environment and development. Even though our name has changed, our commitment to quality, bias-balanced education has remained as strong as ever” (Inside Education, n.d.). Board members represent a wide cross section of backgrounds including teachers, academics (University of Alberta), school board employees, representatives from large oil companies, government employees, and non-governmental organizations (Ducks Unlimited and the Pembina Institute). The President and Chair of the Board is employed by Devon, Canada, the Canadian operating subsidiary of Devon Energy Corporation of Oklahoma City (Devon, n.d.). Sponsorships enable the organization to develop educational programs and professional development free of charge. According to its website, the organization claims to have reached tens of thousands of teachers and students, members of community groups and the general public (Inside Education, n.d.). The organization regularly provides multi-day field trips (four in 2009, March-July) and presents at key educational conferences in the province each year, including the annual Alberta Teachers’ Association environmental education conference (GEOEC, n.d.). As part of its work, the organization also provides professional development in-services for teachers that have been awarded grants through British Petroleum’s “A+ for Energy” program, (B.P., n.d.).

While field trips are “free,” certain conditions apply. Teachers attending a field trip are asked to formally thank a corporate sponsor. Participants are interviewed about their professional development experience and responses are then sent out to local newspapers as an endorsement of the program. Field trips also provide an important opportunity for industry and government to get their message out and network with educators. Curriculum materials

and interactive learning websites are showcased and provided for teachers to use in their classrooms. Of these materials, I shall examine the package sent to high schools.

The centrepiece of the high school materials is a 46-minute DVD entitled *The Amazing Athabasca Oil Sands*, which is accompanied by teacher resource guides containing worksheets to be used with the video for grade 10 science and social studies, and for grade 12 chemistry. According to the teacher's guide, "this lesson will help students critically address societal issues related to the development of Alberta's oil sands by using a multiperspective approach." The guide states the video contains "different points of view" and is "bias-balanced" (p. 1). The video is broken into six parts and features interviews with company executives, provincial government ministers, research scientists, a company employee, and a chief of a First Nation community located near the tar sands. These interviews are interspersed with narration, which together form the basis of the information and perspectives provided. The production is licensed by Inside Education (2007) and sponsored by the Alberta Government, Alberta Foundation for the Arts, and major multinational tar sands companies. Curriculum development for the program is funded by the provincial government's Alberta Ingenuity Fund, in partnership with the Centre for Math, Science and Technology Education (CMASTE) at the University of Alberta. According to its website, CMASTE recruits teachers to write science and technology curriculum for use in Alberta classrooms (CMASTE, n.d.).

Part One of the video, entitled "Best Kept Secret" opens with broad expanses of boreal forest. The narrator introduces the video with the following passage:

One of Canada's leading technological and social achievements is also one of Canada's best kept secrets. The oil sands industry and its visionaries fashioned one of the most technologically advanced, economically sound, and environmentally accountable wonders of the modern world. The Alberta oil sands story is and continues to be one of the most remarkable human adventures of our time.

The Minister of Alberta Economic Development then states:

This is a classic example of Alberta entrepreneurs at work... it was relentless pursuit of how to make this work to the point now we have billions of barrels in reserve...the process only occurred because of the entrepreneurship of Albertans; we have this vast reserve; we know it's profitable; we just have to get to the point that we can get it out of the ground cost effective; they have done that because they are Albertans and the entrepreneurial spirit is alive and well here.

In Part Four, "Society and the Environment," two prominent themes are presented: corporate social responsibility involving a "good neighbour" policy with local Aboriginal people, and environmental stewardship. The following passage is an interview with the Minister of Alberta Economic Development:

One of the most pride inspiring things quite frankly about the whole oil sands project —and hats off to the folks at Syncrude and Suncor and the others who had the vision to do this —was to include Aboriginal skilled labour in the process. And I believe it is Syncrude, 13% of the workforce is made up by Aboriginals⁴. This is remarkable because it gives them not only careers and jobs and hope for the future but it lets them share in the resources that are in many cases in their tribal lands. So it is a great partnership; a leading edge partnership. It is really helping Aboriginals share in the wealth, create opportunities for the future, and have jobs that are meaningful for them and their families.

The minister's viewpoint is then followed up by an interview with Chief Jim Boucher of Fort McKay First Nation:

With the decline in fur demand around the planet, it had a very drastic effect on the area in the sense that we were left without an economy. So we had to change, and that change was brought about with regards with some discussion in the community saying we need to embrace a new type of economy into [sic] a broach the industry and government in a different format in regards to our willingness to work with these people so we can prepare young people for employment opportunities. As a result of that, more and more of our young people graduate from high school and obtain

⁴ According to the corporation's 2008 Aboriginal Review, approximately 8.1% of employees are of self-declared First Nations or Métis descent (Syncrude, n.d., p. 17).

employment with the industry in the area... And now we see more of the benefits with regards to our relationship. In '99 we managed to obtain \$60 million dollars' worth of contracts in the region. By the year 2002 we managed to jump that to \$250 million. So those are significant numbers in terms of our ability to change a relationship from a negative one into a positive one.

The video then moves on to environmental management, described by the narrator as "a critical area of concern," stating:

Oil sands visionaries, leaders, and scientists recognise and acknowledge the impact that this industry has on habitat, Indigenous populations, water and air. An entire environmental protection industry has developed as a result of a greater appreciation and feasibility of the crucial goal of sustainable development. The daily and long term effects are being carefully monitored. And techniques of development and implementation are regularly scrutinized.

This message is followed by a brief description by the narrator and a research scientist of air quality, land reclamation, and water management. Technological fixes to reclaim tar sands tailings along with air quality programs to "ensure current standards are met" are mentioned. With respect to land reclamation, the narrator states:

The main principle of reclamation is to return the disturbed land to a biological state that is just as or even more productive than it was before.

In closing, an interview with tar sands statesmen Eric Newell⁵ is given. This interview appropriately serves to tie in this section of the video's two themes. According to Newell:

The industry has a very good track record of whenever they do a major expansion they try to incorporate the state of the art technologies to reduce the environmental impact but it also improves the economics.

⁵ Newell was the former Chair and CEO of the largest tar sands consortium, Syncrude (1994 and 1989, respectively until 2004), and also chancellor of the University of Alberta (2004-08). In 1999, he was made an Officer of the Order of Canada for being an "advocate of business and education partnerships" and promoting "employment and business opportunities for Aboriginal people" (Order of Canada, n.d.).

Other areas that we have been working a lot in of course is the whole area of land reclamation and we've done a lot of good research projects there, but one of the ones I like to talk about is working with the chiefs. They actually identified an opportunity of instead of putting the land back into trees why not put it back into grazing lands and bring down the wood bison from the north. So as we speak today at Syncrude, we have besides mining oil sands we have a herd of wood bison that is over 300. And we've done the studies and we're working in partnerships with Fort McKay and over the long run we'll be able to sustain a herd over a 1000 head and that will provide a revenue stream to Fort McKay long after the oil sands are gone. So it's an excellent example of sustainable development.

Discursive Strategies and Deception

In this section I analyze both the discursive strategies employed in the video, followed by a refutation of the claims made using scientific sources of information. In their study of transcripts taken from statements made by political proponents of tar sands development in the provincial legislative assembly, Davidson et al. (2009) cluster discursive strategies under three headings: maintaining economic wellbeing; security from external threats/maintenance of internal order; and environmental protection. Here, parallels with their findings and the film indicate both government and industry promote the “party line” to different audiences using similar tactics. Analysis of the video therefore provides important insight into the current attitudes and strategies used by tar sands proponents to maintain legitimacy.

As usual, the mythic “entrepreneurial,” “visionary” Albertan is presented along with the familiar buzzwords, “sustainable development” and “partnerships.” Technological fixes to environmental problems, including the egregiously fallacious notion that land reclamation will result in previously disturbed areas being “even more productive than it was before” is also mentioned to assuage concerns over environmental degradation. Aside from the problematic announcement by the minister of *giving resources* and *sharing in the wealth* with Aboriginal peoples, less obvious aspects concerning the social construction, manipulation and *representation* of both Aboriginal peoples and the environment need to be considered.

As Freidel (2008) notes, “increasingly in Alberta, major players in the non-renewable resource sector have linked their mandates to the real and perceived needs and aspirations of First Nations, Métis and Inuit peoples. By emphasising this association in corporate reporting, Aboriginal people, along with other stakeholders, are understood as ‘partners’ in the pursuit of corporate goals” (p. 240). By tying together Aboriginal issues with the environment the video also reinforces and perpetuates the noble savage motif. As Freidel (2008) explains,

the presence of Indigenous knowledge holders in corporate public relations materials can be understood as a referent, conjuring up images of ‘the ecological Indian’, a colonial construct representing Indigenous people as one-sided beings whose only contribution can be factually based knowledge regarding natural environments. Corporations are not interested in knowledge that is non-fragmented and reflective of other world views, philosophies and ways of knowing; rather, it is the popular image of the Indian as environmental steward that is evoked. (pp. 242-243)

Freidel’s observations regarding the co-optation of Aboriginal peoples are similar to strategies noted by Taylor (2001) in her assessment of education-business partnerships. In both cases a hegemonic alliance of different and competing interests is formed in order to achieve capital accumulation. Applied to Aboriginal peoples, this strategy links the *conservative* socially constructed noble savage motif with the neoliberal imperative to economically develop by “granting of concessions to subordinate groups,” primarily through menial labour and construction contracts. This government/industry strategy is designed to create certainty and opportunities for private investors to exploit natural resources within traditional Aboriginal territories. Failed attempts at assimilation by previous governments have been replaced by neoliberal “partnerships” promoting economic development that effectively separates governance from traditional lands — thus marking a transition from welfare colonialism to oil-colonialism (Castro-Rea & Jimenez-Altamirano, 2007; Slowey, 2008). As Castro-Rea and Jimenez-Altamirano (2007) explain,

the deepening of the globalization process, the creation of frameworks for economic integration, and the expansion of the global market have had an impact on the ways in which governments are dealing with Indigenous demands. Government policies, in this context, are aimed at making self-determination equivalent to economic development, an approach that could be considered a new expression of policies aimed at assimilation. (p. 225)

Evidence of the highly tenuous nature of corporate-Aboriginal partnerships can be seen when comparing statements made by the chief interviewed for the video a year after the video was released. Chief Boucher then stated, “a vacuum has occurred between First Nations groups and the government... The only recourse for many people is through the courts” (Lillebun, 2008). Like numerous other First Nations and Métis communities located in the area, Aboriginal northerners are claiming that traditional ways of life are being destroyed owing to the alarming rate at which the companies are allowed to lease and develop lands (e.g., see Babiak, 2009; Brooymans, 2009; Lillebun, 2008). As Table 1 shows, lease sales have increased dramatically over the past decade. These secretive and discretionary sales occur without public input. Land lease sales are also considered unconstitutional as they occur without due regard for treaty and Aboriginal rights or adequate consultation by the “Crown” (Ross & Potes, 2007).

Table 1. Tar Sands Lease Sales by Calendar Year

Year	Lease Area (Hectares)
2007	1,134,481.73
2006	1,542,473.40
2005	355,307.84
2004	299,198.12
2003	64,351.20
2002	168,576.00
2001	234,525.20
2000	186,991.64

Source: Baker, Grant, & Dyer (2008)

Equally problematic is the video portrayal of environmental monitoring and reclamation efforts, as industry self-monitors the region's land, air, and water. According to Schindler (2008) data collected by industry-funded monitoring programs is considered proprietary and published reports released to the public escape the scrutiny of peer review. As Holroyd and Simieritsch (2009) also note, there is “no land use plan that protects wildlife and the regional ecosystem; no lower limit on flows of the Lower Athabasca River below which oil sands water withdrawals would be prohibited; and no certification standards for oil sands reclamation” (p. 2). Consequently, information presented regarding environmental monitoring and reclamation in the video is a public relations exercise — evidence of which can be seen in the contradictory findings of reports published by industry-sponsored monitoring agencies and independent scientists.

Two organizations conduct environmental monitoring in the tar sands region: the Regional and Aquatics Monitoring Program (RAMP) monitors rivers and lakes; and the Wood Buffalo Environmental Association (WBEA) monitors air quality. A third body, the Cumulative Environmental Management Association (CEMA), determines and recommends the best management tools available to protect, sustain, and reclaim the environment. These organizations also take a joint approach to community education and awareness (Joint Community Update [JCU], 2008).

The WBEA section of the report states, “Results from 2005 show that exposure to all pollutants measured was lower, and often times much lower, than existing Alberta Environment guidelines and Canada wide standards” (JCU, 2008, p. 7). However, the report does not elaborate on the 2006-07 results presented in table format. These include periodic exceedences of air quality based on Alberta Environment Guidelines at the twelve Air Monitoring Stations (AMS), including sulfur dioxide; hydrogen sulphide, and ozone. The RAMP section of the report summarises the 2006 results, stating after eleven years of monitoring “there were no detectable regional changes in aquatic resources related to oil sands development. There were however, site specific exceptions” (JCU, p. 13). RAMP also reports that “mercury levels in fish from the Athabasca delta are no higher than levels found

in other parts of the Athabasca upstream of the oil sands region” (p. 13). The concluding section of the report is provided by CEMA, which describes various management frameworks being enacted. This section of the report also makes mention of the use of Traditional Ecological Knowledge (TEK) which it “incorporates into the decision making process and products via a TEK Standing Committee. This committee is composed of representation from First Nations and Métis Locals within the Municipality of Wood Buffalo” (p. 16).

However, problems of representation with the monitoring agencies have resulted in these organizations being ineffectual industry apologists. As Price (2008) notes, “despite calling RAMP a ‘multi-stakeholder’ body, it is funded and dominated by the tar sands companies, and First Nations and environmental organizations have now distanced themselves from the organization due to concerns over impartiality and competence” (p. 17). Similarly, according to its web site, the majority of CEMA board members are industry representatives (44%) – an institutional bias that has resulted in both Aboriginal and environmental NGOs withdrawing their support and pulling out from the association (CEMA, n.d.).

Independent research conducted by experts paints a worrisome picture of the health of the region and contradicts official reports. For instance, Schindler, Donahue, and Thompson (2007) found values of carcinogens below Fort McMurray were several times higher than those on the upstream reaches of the Athabasca River (p. 10). The researchers also reported there has been a 29.1% decline in the Athabasca River at Fort McMurray average summer flow between 1971 and 2005 (p. 16). A summary of the land reclamation provided by Alberta Environment (2004, cited in Schindler et al., 2007) casts doubt on the ability to “reclaim” the land as celebrated in the video. According to Schindler et al. (2007) no land has been certified as reclaimed; the area under reclamation is 56.3 km²; the current disturbance is 330.6 km²; approved disturbance is 950.4 km²; and the planned disturbance that has yet to be approved is 2000 km² (p. 32).

Increasingly concern is also being expressed over perceived increases of cancer related deaths in the area (see Chen, 2009). These concerns stand to reason given the amount of

“leakage” released from the lake-size toxic “tailings ponds.” Despite government and industry remaining mute on the subject, the Environmental Defence Fund has calculated in 2007, the ponds were leaking over 11 million litres a day to the environment, or about four billion litres a year (Price, 2008, p. 14). Out of concern over incidences of rare forms of cancer associated with toxic effluent, the community of Fort Chipewyan commissioned an independent report by ecologist Dr. Kevin Timoney (2007). Like Schindler et al. (2007), Timoney’s findings contradict official reports, stating,

the people and biota of the Athabasca River Delta and western Lake Athabasca are exposed to higher levels of some contaminants than are those upstream.... Mercury levels in fish used for human consumption present a serious concern. If [United States Environmental Protection Agency] standards are applied, all walleye (pickerel), all female whitefish, and ~ 90 % of male whitefish exceed subsistence fisher guidelines for mercury consumption. (p. 1)

Timoney (2007) specifically critiques RAMP’s (2006) report. According to RAMP (2006), fish mercury concentrations observed were “consistent with the natural range of concentrations observed in this region of northern Alberta” (cited in Timoney, p. 57). However, Timoney notes “RAMP did not provide locations. RAMP (2006) further stated that significant temporal trends in tissue mercury were not found, but only three years of data were available and no statistics were provided” (p. 57). Timoney also calls into question the methods used: “In its most recent report, RAMP (2007) used a ‘pathology index’ that is not comparable to estimates made earlier. While RAMP (2007) stated that 3.2% of the fish examined from 2006 showed external abnormalities, it is unclear from the data presented... how that number was calculated. As typical of previous RAMP reports, changes in methods and means of reporting undermine the utility of the results” (p. 61).

Taking Control

The case of Inside Education ironically represents what Robertson (2005) refers to as “privatization from the *inside* [emphasis added] out.” According to Robertson, “privatization isn’t just about market share, it is about mind share too” (p 7). Hence, “the role of corporate propaganda is to impair our ability to think, to render us superficial and unconcerned with

what is taking place around us. The role of corporate propaganda is to protect corporations from democracy” (Robertson, 2005, p 36). As the video analysis shows, corporate propaganda creates consent by bombarding viewers with a one-way passive flow of information. Contrary to the organization’s emphasis of being “bias-balanced,” the video produces a set of sanitized images and misleading claims while concomitantly appealing to sentimentalism of viewers. From a marketing point of view, privatization from the inside is extremely effective if one considers the ability of teachers to reach a large, captive audience, and the degree of influence that trusting parents and students place in educational authority figures to act in their best interests. In the end it is society’s most vulnerable and impressionable – children – that become the unwitting victims of privatization from the inside out.

Taken from a Freirean pedagogical perspective, the case analysis also illustrates “banking education,” where students are made docile recipients through the *deposition* of knowledge, instead of being allowed to develop a “critical consciousness which would result from their intervention in the world as transformers of that world” (2006, p. 73). Of particular relevance is the connection Freire makes between banking education and oppression. According to Freire (2006),

the capability of banking education to minimize or annul the students’ creative power and to stimulate their credulity serves the interests of the oppressors, who care neither to have the world revealed nor to see it transformed. The oppressors use their “humanitarianism” to preserve a profitable situation. Thus they react almost instinctively against any experiment in education which stimulates the critical faculties and is not content with a partial view of reality but always seeks out the ties which link one point to another and one problem to another. (pp. 72-73).

How then can educators reclaim mind share and engage students in *real* environmental education in a manner that develops active democratic citizenship and the formation of a critical consciousness? In an effort to restore and reclaim mind share a group of teachers, including myself, working for Edmonton Public Schools developed a series of lesson plans to educate students about environmental, social, and economic issues related to tar sands

development (Ho, 2008). Using a mock panel hearing into a proposed expansion occurring in proximity to a fictitious northern community, students assumed various stakeholder positions to debate whether or not the expansion should go ahead. As part of the preparation for the hearing, a variety of sources of information were gathered and analyzed, including videos and newspaper articles. By collecting a wide variety of information from different sources, students were able to develop *critical* media literacy skills as evidence of bias in the information gathered became apparent. These activities led to important overarching discussions of how information is used and misused in society, and by whom. Presenting a position paper as part of the debate at the mock hearing also enabled students to appreciate power differentials occurring between various stakeholders' positions, and the manner in which information is wielded and spun to leverage control in the policy arena.

Some schools in northern Alberta are actively monitoring the environment through the international project GLOBE, which is an acronym that stands for Global Learning and Observations to Benefit the Environment (GLOBE, n.d.). The web-based program has 110 participating countries and over 2000 GLOBE schools around the world. The program requires students to conduct longitudinal monitoring of the local environment in order to track changes over time. Data gathered enables students involved with the project to analyse and compare results internationally with a community of fellow researchers. Like the mock environmental hearing into the proposed tar sands expansion, GLOBE empowers students through active inquiry based learning – a notable pedagogical difference compared to the passive one-way flow of information presented in videos. Hence, in the context of competing interests and corporate propaganda, both programs can be considered to represent counter hegemonic globalization, or what Marshall (cited in Mayo, 2004) refers to as “globalization from below,” by enabling educators and students to collectively “speak truth to power” (McLaren, 2006).

Conclusion

Government attempts to ward off state legitimacy threats include a variety of strategies designed to increase the distance between rhetoric and reality. Given recent threats to Canada's staples-based economy and its positions as energy satellite of the United States,

strategies designed to protect the interests of MNCs inevitably collide with the interests of citizens, leading to a democratic deficit that has implications for access to information required to make informed choices about building sustainable communities through responsible stewardship of resources. Considering the majority of oil MNCs operating in the province are foreign owned, the (*il*)legitimacy of Canada's energy policy has far-reaching implications, not the least of which is corporate hegemony in schools. In the case of Alberta, a legacy of neoliberal reforms has resulted in increased pressures to develop education-business partnerships in order to align instrumental values of the market with educational needs to the point that industry sponsorship of curriculum materials and professional development activities for educators is now commonplace.

The analysis has also shown the negligent state of affairs in monitoring commercialization occurring in Canadian schools. An inventory and assessment of corporate involvement in schools is needed, including a comparative analysis involving other provinces and territories in Canada and abroad, in order to ensure bias-balanced perspectives are being presented. Only then can the directives of teachers' associations designed to protect our children from corporate influence be appropriately supported. This of course will require the restoration of appropriate levels of funding for education by governments, which in the case of an oil-dependent state like Alberta, will first require reclaiming resources.

References

Alberta Federation of Labour (2009, March). *Lost down the pipeline*. Retrieved August 9, 2009, from <http://www.afl.org/publications-research/>

Alberta Royalty Review Panel (2007, September 18). *Our fair share*. Retrieved March 20, 2009, from http://www.albertaroyaltyreview.ca/panel/final_report.pdf

Alberta Teachers' Association (n.d.). *Corporate presence in schools*. Retrieved July 15, 2009, from www.teachers.ab.ca

Alberta Teachers' Association. (2008, September 15). *Education funding*. Retrieved April 2, 2009, from <http://www.teachers.ab.ca>

Alberts, S. (2009, March 31). Obama climate bill could side-swipe Alberta oilsands. Retrieved April 4, 2009, from <http://www.canada.com/business/Obama+climate+bill+could+side+swipe+Alberta+oilsands/1449046/story.html>

Audette, T., & Henton, D. (2009, March 26). New brand to counteract image of 'dirty oil': Province to spend \$25M over three years. *Edmonton Journal*, pp. A1-A2.

Babiak, T. (2009, July 5). U.K. Bank backs oilsands lawsuit. *Edmonton Journal*, Retrieved July 16, 2009 from <http://www.edmontonjournal.com/Business/Bank+backs+oilsands+lawsuit/1761084/story.html>

Baker, C., Grant, J., & Dyer, S. (2008, August). *Taking the wheel: Correcting the course of cumulative environmental management in the Athabasca oil sands*. Retrieved from the Pembina Institute Web site: http://pubs.pembina.org/reports/Taking_the_Wheel-report.pdf

B.P. (n.d.). A+ for Energy. Retrieved September 14, 2009, from www.aplusforenergy.org

Beblawi, H., & Luciani, G. (Eds.). (1987). *The rentier state*. New York: Croom Helm.

Blouin, P. (2008, July 28). Summary public school indicators for the provinces and territories, 1999/2000 to 2005/2006. Retrieved April 2, 2009, from the Statistics Canada Web site: www.statscan.gc.ca

Brooymans, H. (2009, May 13). Protect the water or see us in court, First Nations warn, *Edmonton Journal*. Retrieved July 17, 2009, from <http://www.edmontonjournal.com/news/Protect+water+court+First+Nations+warn/1590766/story.html>

Calgary Board of Education – Curriculum- Based Partnerships. Retrieved July 16, 2009 from <http://www.cbe.ab.ca/policies/policies/AR1027.pdf>

Canadian Teachers' Federation (CTF) and Canadian Centre for Policy Alternatives (CCPA) (2006). Commercialism in Canadian schools: Who's calling the shots? Retrieved July 14, 2009, from http://www.ctffce.ca/commercialism_in_school/default.htm

Carter, A. (2007, May-June). *Cursed by oil? Institutions and environmental impacts in Alberta's Tar Sands*. Paper presented at the annual meeting of the Canadian Political Science Association, Saskatoon, SK.

Castro-Rea, J., & Jimenez-Altamirano, I. (2007). North American peoples: Self-determination or economic development? In Y. Abu-Laban R. Jhappan, & F. Rocher (Eds.). *Politics in North America: Redefining continental relations* (pp. 225-249). Peterborough, ON: Broadview Press.

CEMA (n.d.). Retrieved November 20, 2008, from <http://www.cemaonline.ca/>

Chen, Y (2009, February). *Cancer Incidence in Fort Chipewyan, Alberta 1995-2006*. Report prepared for the Alberta Cancer Board Division of Population Health and Information Surveillance.

Chomsky, N., & Hess, E. (1988). *Manufacturing consent: The political economy of the mass media*. New York: Pantheon Books.

Clarke, T. (2008). *Tar sands showdown*. Toronto, ON: James Lorimer & Company.

Crawford, T. (2009, July, 2). Oilsands earns Canada bottom ranking WWF releases climate change report card. Retrieved July 14, 2009, from the *Edmonton Journal* Web site

<http://www.edmontonjournal.com/business/Oilsands+earns+Canada+bottom+ranking/1751815/story.html>

CMASTE (n.d.). Retrieved September 16, 2009, from <http://www.uofaweb.ualberta.ca/cmaste/>.

Cooper, D. (2009, June 6). Oilsands output could grow 50% by 2025: Forecast. Retrieved July 10, 2009, from the *Edmonton Journal* Web site,

<http://www.edmontonjournal.com/business/Oilsands+output+could+grow+2025+forecast/1669866/story.html>

Curren, R. (2010, Feb. 9). Alberta deficit to widen to C\$4.75 billion before surplus seen. Retrieved May 3, 2010, from <http://www.businessweek.com/news/2010-02-09/alberta-deficit-to-widen-to-c-4-75-billion-before-surplus-seen.html>

Davidson, D., Gismondi, M., & Isaac, K. (2009, August). *Talk about tar: Legitimizing discourse among legislative proponents of tar sands development in the province of Alberta*. Paper presented at the Meetings of the American Sociological Association, San Francisco.

Andrew Hodgkins

Devon (n.d.). Retrieved September 11, 2009, from
http://www.devonenergy.com/Pages/devon_energy_home.aspx

Edmonton Public Schools Board Policies – Educational Partnerships and Sponsorships
(n.d.). Retrieved July 16, 2009, from <http://policy.epsb.ca/jaa.bp.shtml>

Finch, D., & Varella, P. (2009, March 2). Oilsands may be at tipping point on issue of public trust. *Edmonton Journal*, p. A19.

Freire, P. (1970/2006). *Pedagogy of the oppressed* (30th ed.). New York: Continuum.

Friedel, T. (2008). (Not so) crude text and images: Staging *Native* in 'big oil' advertising. *Visual Studies*, 23(3), 238-254.

Friedman, T. (2006, May/June). The first law of petropolitics. *Foreign Policy*, 28-36.

Gibson, D. (2007). *The spoils of the boom: Incomes, profits and poverty in Alberta*.

University of Alberta: Parkland Institute. Retrieved March 02, 2009, from the Parkland Institute Web site: www.ualberta.ca/parkland

Global, Environmental, and Outdoor Educational Council [GEOEC]. (n.d.). One World, Infinite Diversity Conference, Jasper, Alberta, April 24-26, 2009. Retrieved on April 8, 2009, from <http://www.geoec.org/conference/index.html>

GLOBE (n.d.). Retrieved September 16, 2009, from www.globe.gov

Government of Alberta. (n.d.). *Royalty Calculation*. Retrieved May 2, 2010, from government website: <http://www.energy.alberta.ca/1526.asp>

Government of Alberta (2010). Budget 2010. Retrieved April 9, 2010, from, <http://www.finance.alberta.ca/publications/budget/budget2010/energy.pdf>

Government of Alberta. (2009, February). Responsible actions: A plan for Alberta's oil sands. Retrieved April 8, 2009, from www.oilsands.alberta.ca

Government of Alberta. (2008a). Provincial Energy Strategy. Retrieved July 14, 2009 from http://www.energy.alberta.ca/Org/pdfs/AB_ProvincialEnergyStrategy.pdf

Government of Alberta. (2008b). Land use framework. Retrieved December 9, 2008, from <http://www.landuse.alberta.ca>

Government of Alberta. (1996, May). *Framework for enhancing business involvement in education*. Edmonton: Alberta Department of Education, Curriculum Standards Branch.

Government Accountability Office. (2007, May 1). *Oil and gas royalties: A comparison of the share of revenue received from oil and gas production by the federal government and other resource owners*. Retrieved March 20, 2009, from http://www.gao.gov/docsearch/locate?searched=1&o=0&order_by=rel&search_type=publications&keyword=government+share+of+industry+oil+revenues

Gramsci, A. (1992). State and civil society. In Q. Hoare & G. Nowell Smith (Eds. & Trans.), *Selections from the prison notebooks of Antonio Gramsci*. New York: International. (Original work published 1971)

Green, A. (1990). *Education and state formation*. UK: The Macmillan Press.

Gylfason, T. (2001). Natural resources, education, and economic development. *European Economic Review*, 45, 847-859.

Harrison, T. (1999). The "Alberta Advantage": For whom?. In T. Harrison & J. Kachur (Eds.), *Contested classrooms: Education, globalization and democracy in Alberta* (pp. 33-44). Edmonton, AB: The University of Alberta Press.

Andrew Hodgkins

Harvey, D. (2005). *A brief history of neoliberalism*. New York: Oxford University Press.

Haycox, S. W. (2002). *Alaska: An American colony*. Seattle, WA: University of Washington Press.

Henton, D. (2009, June 15). Heritage fund lost hits \$3B. Retrieved July 16, 2009, from the *Edmonton Journal* Web site: <http://www.edmontonjournal.com>

Ho, C. (2008, June 13). Grade 9 class gets lesson on public discourse over oilsands. Retrieved July 24, 2009, from <http://www.canada.com/edmontonjournal/news/cityplus/story.html?id=c0e79f40-40ef-4307-be01-445d1be45a8a>

Holroyd, P., & Simieritsch, T. (2009). The water that binds us. Retrieved July 24, 2009, from the Pembina Website: <http://pubs.pembina.org/reports/watersthatbindus-report.pdf>

Inside Education. (n.d.). Retrieved April 8, 2009, from <http://www.insideeducation.ca/>

Joint Community Update (2008). Reporting our environmental activities to the community. Retrieved July 17, 2000, from http://www.ramp-alberta.org/UserFiles/File/CommunityReports/2008/Joint_commreport_08.pdf

Karl, T. L. (1997). *The paradox of plenty: Oil booms and petrostates*. Los Angeles, CA: University of California Press.

Kissane, C. (2007). Education: the untapped resource in oil rich countries. *Globalisation, Societies and Education*, 5(2), 201-218.

Krogman, N., & Fluett, C. (2008). Changing Alberta's oil and gas tenure system: Lessons from an oil-dependent state. *Journal of Planning*, 8, 120-139.

- Klump, E. (2009, February 19). Big oil sidelined in energy debate: Conoco CEO. *Edmonton Journal*, p. F3.
- Kunzig, R. (2009, March). The Canadian oil boom: Scraping bottom. *National Geographic*. Retrieved April 10, 2009, from <http://ngm.nationalgeographic.com/2009/03/canadian-oil-sands/kunzig-text>
- Lillebun, S. (2008, June 5). Native groups sue gov't over oil sands. *Edmonton Journal*, Retrieved July 17, 2009, from <http://www.sierraclub.ca/national/media/inthenews/item.shtml?x=2571>
- Mayo, P. (2004). *Liberating praxis: Paulo Freire's legacy for radical education and politics*. Westport, CT: Praeger.
- McBeath, J., Berman, M., Rosenberg, J., & Erlander, M. F. (2008). *The political economy of oil in Alaska: Multinational vs. the state*. Boulder, CO: Lynne Rienner.
- McGregor, G. (April 8, 2009). Alta. Oilman picked for clean energy work group. *Edmonton Journal*, p. A11.
- McLaren, P. (2006). *Rage and hope: Interviews with Peter McLaren on war, imperialism, and critical pedagogy* (Ed.). New York: Peter Lang.
- McLean, A. (2009, August 24). No quick end to bad news. *Edmonton Journal*, p. A1.
- National Energy board. (n.d.). How Canadian markets work? Retrieved April 10, 2008, from <http://www.neb-one.gc.ca/clf-nsi/rnrgynfmtn/prcng/crdlndptrlmprdcts/cndnmrkt-eng.html>

Andrew Hodgkins

Neu, D. (1999). Re-investment fables: Educational finances in Alberta. In T. Harrison & J. Kachur (Eds.), *Contested classrooms: Education, globalization and democracy in Alberta* (pp. 75-84). Edmonton, AB: University of Alberta Press and Parkland Institute.

Nikiforuk, A. (2008). *Tar Sands: Dirty oil and the future of a continent*. Vancouver, BC: Greystone.

O'Neill, J. (2009, March 1). Ottawa launches oilsands probe. *Edmonton Journal*, pp. A1, A2.

Order of Canada. (n.d.). Retrieved August 23, 2009, from <http://www.gg.ca/honours/search-recherche/honours-desc.asp?lang=e&TypeID=orc&id=5572>

Parkland Institute (2010, Feb. 03). More than nickels and dimes: Albertans pay highest out-of-pocket costs for services. Retrieved May 3, 2010, from http://parklandinstitute.ca/research/summary/more_than_nickels_and_dimes/

Pratt, L. (1976). *The tar sands: Syncrude and the politics of oil*. Edmonton, AB: Hurtig.

Price, M. (2008, December). The tar sands leaking legacy. Retrieved from the Environmental Defence Fund Web site: http://www.environmentaldefence.ca/reports/tarsands_dec_2008.html

Robertson, M. J. (2005, February 18). *The many faces of privatization*. Retrieved July 17, 2009, from <http://bctf.ca/IssuesInEducation.aspx?id=5956>

Ross, M. L. (2001, April). Does oil hinder democracy? *World Politics*, 53, 325-61.

Ross, M., & Potes, V. (2007). *Crown consultation with aboriginal peoples in oil sands development: Is it adequate, is it legal?* (Occasional Paper No. 19). Retrieved

November 7, 2008, from the Canadian Institute of Resource Law Web site:
www.cirl.ca

Rowat, M. R. (2006, September). *Boom times: Canada's crude petroleum industry*.
Statistics Canada occasional paper.

Sarich, J. (2009, February, 17). Legislative Assembly of Alberta [Alberta Hansard], p. 84.

Schindler, D. W., Donahue, W. F., & Thompson, J. P. (2007, May). Part 1: Future Water
Flows and Human Withdrawals in the Athabasca River in *Running out of steam?
Oil Sands Development and Water Use in the Athabasca River-Watershed: Science
and Market based Solutions*. Edmonton, AB: Environmental and Research Studies
Centre, University of Alberta.

Schindler, D. (2008, Dec 15). Who's dishing real tar sands propaganda? *Edmonton
Journal*, Retrieved July 17, 2009, from [http://oilsandstruth.org/who039s-dishing-real-
tar-sands-propaganda](http://oilsandstruth.org/who039s-dishing-real-tar-sands-propaganda)

Slowey, G. (2008). *Navigating neoliberalism: Self-determination and the Mikisew Cree
First Nation*. Vancouver, BC: UBC Press.

Syncrude (n.d.). *2008 Aboriginal Review*. Retrieved September 11, 2009, from
<http://www.syncrude.ca/pdf/aboriginal-review-2008.pdf>

Taft, K. (2007). *Democracy derailed: The breakdown of government accountability in
Alberta and how to get it back*. Calgary, AB: Red Deer Press.

Taylor, A. (1999). From boardroom to classroom: School reformers in Alberta. In T.
Harrison & J. Kachur (Eds.), *Contested classrooms: Education, globalisation and
democracy in Alberta* (pp. 99-106). Edmonton, AB: The University of Alberta Press

Andrew Hodgkins

Taylor, A. (2001). *The politics of educational reform in Alberta*. Toronto, ON: The University of Toronto Press.

Thompson, D., & Newman, K. (2009). Private gain or public interest: Reforming Canada's oil and gas industry. Retrieved April 9, 2010, from http://parklandinstitute.ca/downloads/reports/privategainorpublicinterest_fullreport.pdf

Timoney, K. (2007, December). *A study of water and sediment quality as related to public health issues, Fort Chipewyan, Alberta*. On behalf of the Nunee Health Board Society. Retrieved July 14, 2009, from <http://www.cbc.ca/edmonton/features/fort-chipewyan/pdf/fc-final-report-revised-dec2007.pdf>

Urquhart, I. (2005, April). *The second coming? Past, present and future in Alberta's oil sands*. Paper presented at the Annual Meeting of the Western Social Science Association, Albuquerque, New Mexico.