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Separate Oil & State¹

Using the media for a critical eco-pedagogy in the classroom

Foreword

I would like to say a few words about what this article is *not* about.

Much of the debate around developing oil reserves, especially in Alberta, includes arguments about the pros and cons of doing so. On the one hand, the fragile economy is greatly strengthened by the well paying jobs the oil patch creates. On the other hand, scientific research points to an impending environmental catastrophe caused by our reliance on fossil fuels. On that particular front, this article is not about the science of climate change; nor is it about the arguments used by climate change deniers in recent years. To say that there appears to be a convergence of issues related to economic power and environmental concerns around much of humanity's reliance on oil would be an understatement. This article, however, is not about the economics involved with developing oil reserves. Of course I will lightly touch upon most of these related issues. Yet, a major objective is to demonstrate to teachers *how to get students engaged* in the many ways in which oil is impacting aspects of our social, economic, and political lives today. It is to inform students about the

reasons why Big Oil seems unconcerned with calls to regulate it. It will also hopefully inspire citizens to do something about it.

In 2007, I wrote an article for *Our Schools/Our Selves* called “Bob Dylan was right — It *is* a political world: The case for critical media literacy.” Despite the reference to the great icon of folk music, the article simply described pedagogy of how I teach students to critically analyze the news in Social Studies and Civic Studies courses. My main argument was that corporate media have corporate interests, and that students need to understand how the corporate media uses certain hegemonic discourses and strategies to influence the political ideology of the public. Yet despite the preponderance of newspaper articles on the front pages that support the corporate agenda, there are also many articles buried in newspapers that give a clearer picture of the politics around major energy resources and regulating their development and operations. This article is, among other things, an example of how to utilize critical media literacy techniques so that students can understand where power is truly located when it comes to taking care of our natural world. For example, students need to fully comprehend why so little government action occurs around regulating the oil industry. This article is in answer to the question posed by Curtis White (2009): Why is this, the destruction of the natural world, happening?

Introduction

Major environmental crises over the past year and a half have made me realize that Rome is burning and in response we are at most only throwing small buckets of water on it.

I have spent 19 years in the high school classrooms of British Columbia. In courses such as Social Studies and Earth Science, I would always be sure to include learning outcomes designed to develop an eco-consciousness. Since 1999, I have taught in various teacher education programs in western Canada, including where I am currently on faculty, at the University of Saskatchewan. In Social Studies, I have often pointed to the tension between a healthy environment and polluting industries. In Earth Science, I would explain in layperson’s scientific language how the greenhouse effect works, or how acid rain is formed or the ozone layer depleted. Yet, recent environmental issues have made it clear that I needed to re-think the pedagogy I was using

to develop a green consciousness. What was missing from my teaching was pedagogy designed to help students understand the difficulties in *regulating* these polluting industries.

Canadians and Americans have experienced close to 40 years of environmental education in schools and elsewhere. The focus of much of this education has been to make a case for the individual to affect change through eco-consumerism: purchasing biodegradable products and creating recycling programs. In recent years, environmental educators have developed pedagogy with the intention of connecting people to place. I applaud all of these efforts, but I do not think they are enough to help us successfully navigate the issues arising from our dependence on fossil fuels. The solution, I believe, *must be a political one*, not one merely based on individual behaviour. Richard Kahn (2009) points us in the right direction by suggesting that environmental education must focus on “the dehumanizing capitalist system: its history, how it operates, for whom, and what potential it holds” (p. 54). This, then, is the goal of the article: to describe how media literacy techniques can lead to an understanding of where power is located in enabling or thwarting further environmental destruction. In short, it is making a case for a *critical* eco-pedagogy in the high school Social Studies classroom.

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Setting the context: is this what schools should do?

It is expected that students will assess environmental challenges facing Canadians, including global warming and ozone layer depletion.

Students who have fully met the prescribed learning outcome are able to explain how industrial and technological development can affect the environment (e.g., global warming and ozone depletion), and

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identify possible responses to global warming *and ozone depletion* (e.g., *Kyoto Protocol*).

(B.C. Social Studies 11 Curriculum, 2005, p. 34, emphasis added)

When I first began teaching high school Social Studies and Earth Science courses back in the 1980s, none of the curricular documents had a prescribed learning outcome (PLO) like the one above taken from the most recent curriculum used in BC high schools. Clearly, the curriculum developers in that province consider environmental challenges such as global warming worthy of being assessed. The province where I now teach, Saskatchewan, is currently revising its social studies curriculum, and it is likely that the upcoming version will reflect the public's concern about the natural world. I would wager that if current provincial Social Studies, Civic Studies or Environmental Studies do not have a similar PLO, before too long they will include one.

Teachers concerned with using media literacy techniques to address environmental issues are also supported by the formal curriculum. The following lengthy PLO from the same B.C. Social Studies curriculum is clear on this point:

It is expected that students will demonstrate effective research skills, including *assessing information*, collecting data, evaluating data, organizing information, presenting information, citing sources.

Students who have fully met the prescribed learning outcome are able to: access a range of information sources on selected topics, including sources *from a range of media types and representing a range of perspectives that deal specifically with Canadian social, cultural, political, legal, economic and environmental issues; access the accuracy, reliability, and relevance of collected information by determining examples of bias and points of view in information, and determine consistency with information obtained from other sources on the same topic (corroboration).*

(B.C. Social Studies 11 Curriculum, 2005, p. 30, emphasis added)

This PLO clearly states that students are expected to use information obtained from a variety of media outlets. It even specifies the goal of helping students determine bias in perspectives pertaining to environmental issues. With this in mind, I have taken most of the information in this article from mainstream and alter-

native news sites: the *Globe & Mail*, *CanWest News* (now called *Postmedia Network*), the *New York Times*, and the BC-based on-line newspaper called *The Tyee*, plus a few others.

This article strongly suggests that the deregulation of the oil industry has already had profound consequences on our natural world, and will continue to impact our planet at least into the near future. There is also a PLO that supports teachers who want their students to understand the implications of deregulating polluting industries. It calls for the teacher to help develop students' capabilities of applying critical thinking in such a way that they can make connections between events, their causes, and future consequences:

It is expected that students will apply *critical thinking* to make reasoned judgments about a range of issues, situations, and topics.

Students who have fully met the prescribed learning outcome are able to *recognize connections between events and their causes, consequences, and implications*.

(B.C. Social Studies 11 Curriculum, 2005, p. 30, emphasis added)

When considered together, all three of these PLOs make it clear that the government approves of progressive educators teaching students how to use the media to locate power in the convergence of environmental concerns, economics, and the government's role of regulating industry. Yet, even if there is not a state sanctioned PLO to engage in environmental challenges, the costs of not addressing them is too high to ignore. In other words, the enacted curriculum, or pedagogy reflecting important topics to a particular teacher and students, should be experienced even if the formal curriculum does not suggest this (Ross, 2000).

It is clear from these PLOs that using media literacy to develop a critical eco-pedagogy is very much in keeping with what a social studies teacher should do. The late great American philosopher of education, John Dewey, had precisely this type of pedagogy in mind when he claimed the most important role of the school is to develop critical thinkers so that once the students become full fledged citizens they will be able to maturely deal with complex societal problems. The dilemma of climate change in an era of economic uncertainty is one such complex problem.

At this point, a brief look at the actual science of global warming will help kick start the description of this kind of media literacy. This primer is mostly an adaptation of my old Earth Science 11 notes.

Greenhouse gases and global warming: an ever-so-brief primer

The science around global warming itself seems fairly straightforward enough. Carbon dioxide molecules (CO₂) naturally occur in our atmosphere, but only in relatively small amounts. Indeed, nitrogen and oxygen gases comprise 99% of the air we breathe. The CO₂ molecules are unable to trap ultraviolet rays from the sun, but are able to capture the infrared rays emanating from the Earth once the surface is saturated from the sun's heat. Back when I taught high school Earth Science, I used a baseball metaphor with the students: imagine a ball hit so hard that it skips through the shortstop's legs before the player can even move — this is like the ultraviolet rays. Then imagine a much slower ball moving toward the shortstop, one that is much easier to trap before it moves past the player — this is like the infrared rays. I know that this metaphor is not really accurate as it does not involve wavelengths, but it seemed to work with the students. They could at least understand to some degree why heat is trapped in our atmosphere directly from radiation from the Earth but not from the sun.

When we burn any of the fossil fuels (e.g., oil, natural gas, coal, wood) we are emitting carbon into the atmosphere which bonds with oxygen gas to form carbon dioxide. These molecules act like the glass walls in a greenhouse, and this is why scientists say that the warming of our atmosphere is caused by the *greenhouse effect*. Deforestation is another factor in the warming of our atmosphere. Trees act as vacuum cleaners of a sort in that they take in carbon dioxide molecules to grow bigger, and release oxygen gas back into the atmosphere. The extensive deforestation that has taken place across the planet in recent decades is one more reason why carbon dioxide levels have increased throughout the twentieth century from 0.0028% to 0.0038%. This seems like a minute amount, but the effects are gargantuan. Scientists believe that more greenhouse gases has resulted in a 0.6 degrees Celsius increase in

average global temperature over the past century (Monbiot, 2007, pp. 3-4).

Carbon dioxide is not the only greenhouse gas, of course, but it is the most prevalent and contributes to the greenhouse effect more than all of the other greenhouse gases combined. Other greenhouse gases include methane, ozone and nitrous oxides. Numerous scientific studies confirm the notion that human activity is causing all of these gases to be on the increase in our atmosphere.² By the end of the 1980s, concerned scientists and activists called this environmental issue *global warming*. Yet, because there seems to be increasingly chaotic weather patterns, especially with more severe winter storms in many parts of the northern hemisphere, global warming may be a misnomer. Hence, the problem has been renamed *climate change*. Whatever it is called, one thing is certain: the amount of carbon dioxide in our atmosphere is increasing and so is the temperature.

I will demonstrate what I have been suggesting, namely, using the media to show why rigorous government regulation of the oil industry should not be expected any time soon. Almost all of the citations in the remainder of this article will be taken from the work of journalists working for mainstream newspapers, news services, or magazines. As well, I have used two books written by veteran journalists about our reliance on oil: George Monbiot's *Heat: How to Stop the Planet from Burning* (2007), and Andrew Nikiforuk's *Tar Sands: Dirty Oil and the Future of a Continent* (2010). I have cited Naomi Klein's *The Shock Doctrine: The Rise of Disaster Capitalism* (2007) because of its poignant critique of contemporary capitalism. Lastly, I take some quotes from websites set up by climate change deniers, ostensibly the work of so called "scientists" employed by major corporations. This approach will demonstrate that many elected representatives, judges, and so called regulators in the U.S. and Canada are intricately tied to Big Oil.

Recent major oil-related events in the news

On April 20th 2010, news reports began to circulate that there had been a terrible catastrophe at the Deepwater Horizon drilling rig in the Gulf of Mexico in which 11 workers had been killed. Shortly afterward, we learned that the explosion at this drilling rig led to the "largest unintentional oil spill in history, surpassed

only by the intentional spills in 1991 during the Persian Gulf War” (Achenbach & Fahrenthold, *The Washington Post*, August 3, 2010). According to a report released on August 2nd, 2010 by the U.S. Geological Survey and the U.S. Department of Energy, 4.9 million barrels, or 205.8 million gallons, of oil have been spilled into the Gulf of Mexico waters from this well that is owned and controlled by the oil giant, British Petroleum (BP). By comparison, in 1989 the Exxon Valdez oil tanker, considered to be the worst ever oil spill in U.S. history, released approximately 10.8 million gallons of oil into Prince William Sound in Alaska (Hadhazy, *Scientific American*, 2009). The 1989 Exxon disaster resulted in an estimated 250,000 seabirds dying within months. Even more frightening, “[s]ome of the spill remains to this day, with a 2003 estimate pointing to about 20,000 gallons soaked deep into intertidal zones, slowly poisoning ducks and other shore creatures” (Ibid). Have we learned from the Exxon Valdez disaster? The reaction to the BP Gulf of Mexico catastrophe is telling.

Within days of the explosion, President Obama called for a six-month moratorium on issuing new permits for deepwater drilling, as well as the suspension of drilling at 33 exploratory wells in the Gulf. This moratorium was immediately overturned by U.S. District Judge Martin Feldman of New Orleans on the grounds that it was “arbitrarily imposed” (Kunzelman, *The Globe & Mail*, June 22, 2010). A few days later it was revealed that Judge Feldman stood to lose money if the moratorium was passed because of his “extensive investments in the oil and gas industry” (Anderson & Kunzelman, *The Globe & Mail*, August 17, 2010). That a judge would even consider such a brazen act of personal financial gain in the middle of a gigantic environmental crisis speaks to the heart of the matter in this article. It is time for citizens to separate the oil industry from society’s regulators in both government and the courts. But this is going to be a very difficult task. If Feldman was simply a rogue judge, the problem might not be that serious. But the ties between the American state and Big Oil goes much deeper than Feldman.

The magnitude of the BP disaster in the Gulf of Mexico brought the attention of many Americans to the destruction wrought by the oil industry (*The Economist*, August 5, 2010). In November 2010, almost six months after the BP crisis, scientists discovered that the spilt oil had moved much faster than they

had expected through the Gulf of Mexico's food web (Borenstein, *The Globe & Mail*, November 8, 2010). Moreover, mere days after the BP Gulf of Mexico disaster, a pipeline owned by Calgary-based Enbridge Inc. broke and released "some three million litres of crude into Michigan's Kalamazoo River" (McCarthy, *The Globe & Mail*, July 29, 2010). In terms of revenue, Enbridge is the 18th largest corporation in Canada. It owns and operates the longest crude oil pipelines in the world. One broken pipeline is bad enough, but between "1999 and 2008, Enbridge recorded 610 spills that released 132,000 barrels of hydrocarbons into farms, wetlands and waterways" in North America (Nikiforuk, *The Tyee*, July 31, 2010). This is about half the amount of oil that spilled from the Exxon Valdez in 1989. According to the U.S. National Safety Transportation Board and the Transportation and Safety Board of Canada, the Michigan oil spill is the 12th major mishap caused by an Enbridge-operated pipeline this decade (Ibid). Citizens on both sides of the border must ask themselves why this company is allowed to keep on operating in such a reckless manner.

The following quote clearly explains why it is so difficult in the United States to regulate the oil industry: "There is a desire to reduce the amount of fossil fuels here in the United States. We exist to persuade the government not to do that, and so far with the Congress I think we've been successful" (Tom Corcoran, cited in Dembicki, *The Tyee*, June 28, 2010). Tom Corcoran, who used to be a Republican congressman, is currently the executive director of the Centre for North American Energy Security, which is a powerful lobby group for the oil industry (Ibid). That Big Oil has hired former politicians to lobby on its behalf should not be a surprise to anyone. What may be disconcerting, however, is how many American and Canadian politicians today used to be employed by oil companies prior to entering politics. The photo of a Chevron super oil tanker is evidence of how close this connection is in the U.S. (see Figure 1). As well, most people are aware that before becoming the U.S. Vice President, Dick Cheney was the CEO of the giant oilfield services and exploration corporation, Halliburton. Probably less known are the facts that as Halliburton's CEO Cheney was able to almost double the money this company received from the U.S. Treasury (Klein, 2007, p. 351). Halliburton gave Cheney a severance package of \$36 mil-

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lion dollars when he left the company to become Vice President (Teather, *The Guardian*, February 18, 2004). Almost immediately, Halliburton benefited tremendously from this golden handshake: as of early 2004, the company had already received more than \$9 billion in contracts associated with the U.S.-led invasion and occupation of Iraq (Ibid).

A quick look at some of the federal politicians' connections to Big Oil in Canada will help explain why the economic interests of the oil industry resonates in the legislative chambers of this country, as well.



Figure 1: Chevron supertanker, the Condoleezza Rice (source: Marinucci, *San Francisco Chronicle*, May 5, 2001)

The slippery slope between Big Oil and politics: the Canadian situation

In 2002, before he became Prime Minister of Canada, Stephen Harper made the following statement:

My party's position on the Kyoto Protocol is clear and had been for a long time. We will oppose ratification of the Kyoto Protocol and its targets. We will work with the provinces and others to discourage the implementation of those targets. And we will rescind

the targets when we have the opportunity to do so.

(Stephen Harper, *Ottawa Citizen*, November 22, 2002, cited in *The Canada eZine*)

Climate change has been a hot topic in the news for several years (no pun intended), especially since the Kyoto Protocol was ratified by many countries, including Canada, in 2003. The promise Stephen Harper made prior to becoming Prime Minister of Canada, would seem difficult to keep. After all, he is the leader of a minority government. Moreover, an Angus Reid poll in 2007 showed that 59% of those surveyed believed that Canada should honour its commitments to the Kyoto Protocol, while only 31% agreed with him (Monbiot, 2007, p. xii). Yet, the Harper government has since pulled Canada out of the Kyoto Protocol and was accused of “stonewalling the climate change discussions in Bali” in 2007 (McDonald, *CBC*, January 25, 2008). In late 2009, the Copenhagen Summit once again highlighted the potential catastrophes caused by warmer air temperatures. Right on cue, the Harper-led government blocked yet another international initiative to deal with climate change (Reguly & Vanderklippe, *The Globe & Mail*, December 6, 2009).

True to his word on this particular issue, since becoming Prime Minister, Harper has done whatever he can to further the interests of the oil industry. Not only has he ignored Canada’s commitment to the Kyoto Protocol, but “the Harper government has been aggressive in removing all obstacles to tar sands expansion” in Alberta (Frampton & Redlin, 2008, p. 257). For example, when federal court justice Daniele Tremblay-Lamer ruled against the new Exxon-sponsored Kearl tar sand project on the grounds that the greenhouse gas emissions were uncertain, the Harper government quickly moved to overrule the court decision (Ibid, p. 258). Since then, “not a single tar sands project application has ever been denied” (Ibid, p. 259). Why is the Canadian Prime Minister so willing to please the oil industry even when there are so many environmental and social ethical issues and problems?

A brief look into the Prime Minister’s life prior to entering politics may at least partially explain his behaviour. Harper’s father was as an accountant for Imperial Oil (Nikiforuk, 2010, p. 11), and the future Prime Minister also worked for Imperial Oil before entering politics (Bunting, 2007). With many campaign

donations from the oil industry in his pocket, perhaps Canadians should not be surprised that Harper, as leader of the Official Opposition, stated that “Kyoto is essentially a socialist scheme to suck money out of wealth-producing nations ... Implementing Kyoto will cripple the oil and gas industry” (*The Toronto Star*, January 31, 2007). Environmental educators, indeed *all* citizens, should be very concerned.

The first Minister of the Environment that Prime Minister Harper appointed was Rona Ambrose. Ambrose also has deep connections to the oil industry. Like Harper, her father worked for Big Oil internationally (Taber, *The Globe & Mail*, June 2,

2007). As the first Minister of the Environment in a Harper-led conservative government, she brought in the Clean Air Act, which investigative journalist George Monbiot (2007) calls “commendable only for its comedy value” (p. xi). Monbiot explains that the focus of this act, namely, “carbon intensity ... renders it worse than useless ... because a reduction in intensity under this act

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means, in reality, an increase in emissions” (Ibid, p. xi). This is precisely the kind of legislation that the oil industry expects from the politicians it helps get elected to office.

Ambrose took this even further than oil industry executives would expect, however. A climatologist at Environment Canada, Mark Tushingham, wrote a science fiction novel called *Hotter Than Hell* (2006). Shortly before an event to showcase the book, an event organized by the publisher, Minister Ambrose phoned the scientist/author forbidding him from attending his book launch and from discussing the book with the news media (Austen, *The New York Times*, May 1, 2006). Although many pundits claimed that Ambrose was quashing Tushingham’s freedom of speech because the perspective in his book did not mesh with the government’s position on global warming, her office stated

that they blocked him because proper protocol was not followed. Readers can decide for themselves what Ambrose's real intentions were. The optics certainly did not look good for Harper's first Minister of the Environment.

There are also numerous employment connections between the Alberta provincial government and the oil industry. According to Nikiforuk (2010), the distinctions "between the business of hydrocarbons and civic affairs ... have all but disappeared in Alberta" (p. 177). A few examples will help make this point: Six months after leaving the Alberta Legislature, former premier Ralph Klein became a "paid business advisor in the oil patch" (Ibid, p. 177); Peter Elzinga left Klein's office in 2004 to become a lobbyist for tar sands giant Suncor before he became the executive director of the Alberta Conservatives in 2005 (Ibid, p. 178). Klein's successor as premier, Ed Stelmach, hired the vice-president of Suncor, Heather Kennedy, to regulate the ever expanding tar sands development. Kennedy is the assistant deputy minister in the provincial treasury department but is paid by Suncor (Ibid, p. 178). Need I say more?

We are beginning to glimpse the answer to the dilemma posed by Curtis White (2009): "There is a fundamental question that environmentalists are not very good at asking, let alone answering: 'Why is this, the destruction of the natural world, happening?'" There is clearly a very cozy relationship between Big Oil and elected government representatives in both Canada and the United States. In fact, as we have seen, some of these elected representatives are former executives in the oil industry. But are elected representatives and regulators the only positions within the state apparatus where former oil industry people are employed? The next section addresses this question as it pertains to Alberta's Tar Sands.

Language and the regulation of Alberta's Tar Sands

Industry executives and many Canadian politicians get upset when they hear the term tar sands. They think tar is "greenie speak," a tasteless pejorative for the largest deposit of oil outside of Saudi Arabia. Marketers and CEOs prefer the word oil in relation to the sands because it sounds abundant, accessible, and clean. (Nikiforuk, 2010, p. 12)

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For several decades, the vast reserves of the black, sticky tar-like substance called bitumen in northern Alberta were called the *tar sands*. Indeed, long before the invention of the internal combustion engine, First Nations people used this tar-like substance to repair canoes. Canadian journalist Andrew Nikiforuk (2010) states a few facts about bitumen in the introduction to his book on the Tar Sands (p. 3). In order to make *one barrel* of bitumen, *two tons of earth and sand* must be excavated, and *three barrels of fresh water* from the Athabaska River are required. Despite being part of the world's third largest watershed, "industrial monitoring on the Athabaska River is a fraud." This is a crime against nature, of course, but it is also a crime against Aboriginal peoples: the Athabaska River now has a tailings pond right by it, and some people of Fort Chipewyan have developed "rare cancers" (Nikiforuk, 2010, p. 3) This is an example of *environmental racism*.

Today, the Alberta Tar Sands are the biggest emitter of carbon dioxide in North America. Because bitumen requires so much effort to turn it into something resembling oil, one joule of energy is burned for every 1.4 joules of energy produced from it (Nikiforuk, 2010, p. 4). In October 2010, hundreds of ducks died after they landed in a tailings pond operated by Syncrude (White, *The Globe & Mail*, October 26, 2010). Tar sands production is obviously "an environmental minefield but remains the crown jewel of Canada's \$110-billion oil industry, and the industry hopes to double oil sands production in the next decade, to nearly three million barrels a day" (Wingrove, *The Globe & Mail*, December 15, 2010). Clearly, citizens need to have their voices heard on the ways in which this resource is being developed.

There does not seem to be much effective resistance to these crimes against nature and humanity. When resistance does arise, either from Aboriginal peoples or environmental groups, the federal and provincial governments engage in a public relations battle to ensure the profits of the major oil corporations continue to rise unabated. Indeed, six of the planet's largest corporations, all of them the major players of Big Oil, are "shovelling billions of dollars into Alberta's oil sands" (Dembicki, *The Tyee*, January 17, 2011). These six "petro giants" are ExxonMobil, BP, Royal Dutch Shell, Total, ConocoPhillips, and Chevron. Many politicians in both Canada and the U.S. are happier doing the bidding of these

powerful corporations than listening to indigenous peoples or environmental activists.

The opening quote describes one such public relations “victory.” Indeed, a public relations firm told both the federal and Alberta governments to stop referring to the bitumen deposits as the tar sands, that “oil sands” will work better (Mesley, *CBC*, April 21, 2010). This strategy has led to almost every mainstream media outlet and many alternative news sources to refer to the resources as the oil sands.

The struggle over language does not stop there. Canadian conservative activist Ezra Levant recently wrote a book entitled *Ethical Oil: The Case for Canada's Oil Sands* (2010). The main premise of the book is that compared to the locations of other sources of oil reserves, the “oil sands” are much more ethical to develop. According to the conservative-minded Levant, Iranian and Saudi attitudes toward women and gay people should not be tolerated, and so developing Alberta’s oil reserves is therefore a much more ethical endeavour. It is doubtful that the Cree people of Fort Chipewyan would agree with Levant’s rebranding of the tar sands as “ethical oil.”

It is clear, however, that Prime Minister Harper agrees with this new term from the “former spin doctor” of the Reform Party (Taber, *The Globe & Mail*, January 14, 2011). Harper has begun telling journalists that “Canada is a very ethical society and a safe source for the United States” (Chase, *The Globe & Mail*, January 7, 2011). His newly appointed Environment Minister, former television journalist Peter Kent, has already used the phrase “ethical oil” whenever he is asked about the tar sands. In fact, it appears as though the intention of Kent’s “green” agenda is really only designed to “clean up [the] oil sands’ dirty reputation” (Chase, *The Globe and Mail*, January 6, 2011a). In another article by the same journalist on the very same day, Kent said that “the Harper government will not impose any greenhouse-gas reductions on the oil patch that discourage investment” (Chase, *The Globe and Mail*, January 6, 2011b). So much for expecting our elected representatives to regulate the oil industry and enforce policies of sustainable development. If anyone is concerned that the oil companies cannot afford to comply with stringent environmental regulations, you do not have to worry. Suncor’s fourth quarter 2010 earnings from the tar sands was

\$1.3 billion, which was nearly triple the profits from the fourth quarter reports of 2009 (*Canadian Press*, February 2, 2011).

This discussion has pointed to a massive array of corporations, governments and lobbyists poised to exploit as many oil reserves as possible. Yet, as many members of the public are

aware, there is vast scientific research that proves the amount of carbon dioxide in our atmosphere is increasing and so is the temperature. These scientists are emphasizing the urgent need to decrease carbon

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dioxide emissions before climate change processes are irreversible. The question educators must ask themselves is this: Why is it now commonplace to hear the discourse that the scientific community is divided on this issue?

Climate Change and the Denial ‘Movement’

Till now, I have avoided more than very limited comment on the whole global-warming-carbon emissions controversy. But now that colossal spending and regulating programs impend on these issues, I must say that the Al Gore-David Suzuki conventional-wisdom hysteria is an insane scam.

(Conrad Black, *The National Post*, November 28, 2009, emphasis added)

The quote above began an op-ed piece in the *National Post* newspaper written by the former Canadian media mogul Conrad Black as he sat in a prison cell in Florida over convictions of fraud and obstruction of justice. Very few convicted criminals would be able to have their views on what constitutes sound science appear in a national newspaper. Black was the founder of the archconservative *National Post* where his piece appeared, and this undoubtedly was a factor in his views being published at all. Yet, for all the things Black is known for, an understanding of science is not one of them.

Black is not alone in thinking that his grasp of science, or lack thereof, gives him the right to denounce any scientific studies

linking human activity, including the use of fossil fuels, is in any way connected to increasing temperatures in the Earth's atmosphere. There are many people claiming that such studies are "junk science" (Monbiot, 2007, p. 33). Black's column appeared in the newspaper on November 28th 2009, barely a week before the United Nations Climate Change Conference took place in Copenhagen, Denmark. Yet he need not have devoted any time to denounce anybody concerned with climate change. Stolen e-mail messages from one of the world's foremost climate research institutes were circulated to various delegates and media outlets a few days before the Copenhagen Summit (Revkin & Broder, *The New York Times*, December 6, 2009).³ Clearly, there are many people who simply do not want government to take action on climate change.

In order to find out who is behind the misinformation campaign, renowned journalist George Monbiot (2007) did an investigation of the so called dispute among scientists. Monbiot describes the path his investigation took to uncover the sources of these contrarian views. He also used his regular column in the respected British newspaper *The Guardian* to challenge the credentials of those who claim that the research is wrong and that global warming has nothing to do with human activity. The description of his fact-finding mission provides many clues for what a critical eco-pedagogy should include.

Monbiot began his investigation after reading several accounts in the British media claiming that climate change was a hoax (2007, p. 23). He found that many of these journalists cited the works of a few scientists who, in turn, cited in their own work a non-existent paper from 1989 in *Science* magazine (Ibid, p. 25). Various groups with important sounding names like The Advancement of Sound Science Coalition use fake data from internet sites such as www.iceagenow.com and www.sepp.org. For example, www.iceagenow.com included false claims disputing the widespread scientific belief that the world's mountain glaciers are retreating. Here is one such claim: "Since 1980, there has been an advance of more than 55% of the 625 mountain glaciers under observation by the World Glacier Monitoring group in Zurich" (Ibid, p. 25, emphasis added). After finding that the claims of these climate change deniers were bogus, Monbiot made a very disturbing

discovery: *all* of these groups “have been funded by Exxon” (Ibid, p. 27).

Exxon is the “world’s most profitable corporation” and stands to substantially lose if there are serious efforts to take on climate change. Apparently they have not taken concerns over global warming sitting down. Indeed, some of the beneficiaries of Exxon money are well known conservative ‘think’ tanks such as The Cato Institute and The Heritage Foundation. Others have names that make them sound like academic bodies with serious researchers disputing the real scientists: The American Council on Science and Health and the National Environmental Policy Institute are but two of many examples (Ibid, p. 28). One of the most aggressive climate change deniers in the United States, Patrick Michaels, a University of Virginia professor who is also a “senior fellow” at The Cato Institute, openly admitted on *CNN* that 40% of his funding comes from Big Oil (DeMelle, *The Huffington Post*, 2010). Interested readers may find the list of groups and scientists who claim that climate change has nothing to do with fossil fuels and human activity at www.exxonsecrets.org, which uses data from Exxon’s official documents.

Yet, something that all educators should be aware of is that the campaign to spread false information about fossil fuels and global warming did not originate by Exxon or any other oil company. Perhaps surprisingly, the initial “climate change is a hoax” discourse emanated from the world’s largest tobacco company Philip Morris (Monbiot, 2007, p. 31). In 1993, the tobacco giant hired a public relations firm, APCO, to help them thwart state and city plans to implement passive smoking bans. APCO directed Philip Morris “to create the impression of a ‘grassroots movement’ — one that had been formed spontaneously by concerned citizens to fight ‘over-regulation’” (Ibid, p. 32). The PR firm suggested that they set up a national coalition to help “educate” the media, politicians and the public. The response of the tobacco company was to provide the funds for a “fake citizen’s group” called The Advancement for Sound Science Coalition (TASSC). One of the first tasks of TASSC was to strongly suggest that there was an abundance of “junk science” around the issues of tobacco use, global warming and nuclear waste disposal.

According to Monbiot, TASSC has “done more damage to the campaign to halt [climate change] than any other body” (p. 34).

This has not gone unnoticed by the threatened corporations. Exxon officials have come to understand that their best strategy to keep profits up is to challenge the scientific consensus around global warming and climate change (Ibid, p. 34). In a clear demonstration of Gramsci's organic intellectuals (1971) spouting hegemonic discourses by so called experts, corporate media sources in the United States and Australia have been using Exxon employees and other non-scientists to pose "as serious scientists" (Ibid, p. 37). As an example, *Fox News* hired the TASSC executive director, Steve Milloy, whom they describe as "an advocate of free enterprise and an adjunct scholar at the Competitive Enterprise Institute" to challenge scientific findings that may hurt corporate profits (Ibid, p. 35). Milloy writes a column for *Fox News* called "Junk Science" in which he denigrates any scientific study that, among other things, documents the ill effects of second-hand tobacco smoke or proves that climate change is occurring.⁴

It gets worse. In 2004, *Harper's Magazine* published a leaked memo from the Competitive Enterprise Institute to a man named Phil Cooney, the chief of staff of the White House Council on Environmental Quality (cited in Monbiot, 2007, p. 38). This memo showed that this group and Cooney were working in tandem to dispute the findings in a report on climate change from the Environmental Protection Agency (EPA). The following year, the environmental columnist for the *New York Times*, Andrew Revkin, revealed that the American Petroleum Institute had pushed for Cooney to work at the White House in that capacity (Revkin, *The New York Times*, June 8, 2005). Moreover, and equally disturbing, Exxon had paid the Competitive Enterprise Institute over \$2 million to do this work (Monbiot, 2007, p. 38). Such is the situation with the climate change denial movement in the U.S.

Canada is not immune from similar tactics by the oil industry. Prior to the 2008 federal election in Canada, an Alberta-based group made up of academics and former oil industry insiders named the Friends of Science formed (De Souza, *CanWest News Service*, February 17, 2008). This group ran a series of ads that pushed for Canada to renege on its Kyoto Protocol commitments. The ads were presented during the election campaign in Ontario ridings where incumbent Liberal MPs were in danger of losing

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seats to the Conservatives. During the campaign, The Friends of Science media contact person, Morten Paulsen, became an unpaid spokesperson for Stephen Harper and the Conservative Party. Paulsen also works for Fleishman-Hillard, one of the largest public relations companies in the world, with a specialty in crisis management for many industries, including Big Oil (Ibid). One has to wonder what influence this group had on the Harper government's "mysterious cancellation [of] an 18-month investigation into oilsands pollution" (De Souza, *CanWest News Service*, July 6, 2010).

The disinformation campaign that posits any scientific study linking human-made greenhouse gases to climate change to be "junk science" has been very effective. In recent years, I am always taken aback whenever I hear students or colleagues tell me that the scientific community cannot agree on this extremely serious issue. What is even more alarming, however, is that many of our elected officials also parrot this discourse.

Conclusion

Oil hinders democracy and corrupts the political process through the absence of transparent reporting and clear fiscal accounting. Alberta, a classic petrostate, has one of the least accountable governments in Canada, as well as the lowest voter turnout.

(Nikiforuk, 2010, p. 4)

The time has arrived for the schools to address climate change and other potentially catastrophic environmental events. Not to do so would be shirking our most important responsibilities as educators. Kahn (2009) demands that environmental educators turn their efforts toward "an organized understanding of the unsustainable logic of the capitalist system" (p. 55). In response, this article is an attempt to shine the spotlight on how capitalism, especially in this era of neoliberalism, manages to infiltrate governments in Canada so that their plans are supported even without regulations. Deregulating Big Oil is antithetical to sustainable development. Yet, this fact means little to certain Canadian and American politicians, and therefore resistance must appear from concerned citizens. An informed and vigilant citizenry is required to have all aspects of the oil industry regulated. It really is a matter of survival.

A major concern citizens should have about the intimate and intricate relationship between the oil industry and government officials is that it will be much more difficult to engage in meaningful debate about the pros and costs of developing further oil reserves, whether it be in and around northern Canada or the Gulf of Mexico. Hence, it is only responsible to give students, the future citizens of both the U.S. and Canada, the necessary information and fact finding techniques to get information. I have also wondered about the potential of critical educators and inspired students to engage in access to information projects in which they might be able to uncover other nefarious collaborations between industry and government.

The internet has made this kind of media studies project much easier than ever before. Is the choice of what media pieces the critical educator highlights an example of cherry picking? Undoubtedly — after all, selecting what information is included or excluded into any text are *political* decisions. But as you have seen in the news reports I chose for this article, there are many crystal clear issues that the public should be concerned about. The goal of the critical educator is to ask an important question. The question I asked here was this: Why can't we do something to stop the serious threat to our natural world caused by the oil industry? The answer I found from searching various media sources is very clear: *We must separate Oil and State!* After all, not every politician in Canada and the United States is beholden to Big Oil. Perhaps if we are serious about dealing with climate change and other oil-related catastrophes, an informed public will elect people into office who are just as concerned about the fate of the planet as they are.

Bringing eco-pedagogy into the classroom

Richard Kahn and other environmental educators have called for teachers concerned with the degradation of the environment to critique capitalism. To take this call seriously, the first step would be for teachers to lead students toward a basic understanding of both political ideology and the economic system called capitalism. For a brief description of how I do ideology critique, please see Orłowski, P. (2007, Fall). “Bob Dylan was right – *It is a political world.*” *Our Schools/Our Selves*, 17 (1), 33-49.

Second, the teacher should demonstrate how searching various media sources should glean enough information to make an argument in answer to an initial question. In other words, I think that a politically conscious teacher should be able to create something along the lines of what I wrote about in the preceding article.

After that, teachers should be able to expect students to use the media to find answers to important questions. Because we live in the age of the internet, it is much easier for students to research how the various media outlets cover important issues. As well, students need to understand that although corporate media have corporate interests, they often will publish articles that do not have the same ideological perspective on issues that corporate leaders would approve of. Of course, articles emphasizing counterhegemonic positions are often buried in the newspaper or deep inside their websites, yet they are still there. Students with any talent for sleuth work at all should be able to find out the backgrounds of elected representatives and regulators as I did for the “Separate Oil & State” article.

The teacher would be wise to provide the websites for several mainstream newspapers, as well as several alternative news websites. Of course, where one lives will dictate which newspapers should be analyzed. It would seem appropriate for the students to work in pairs on projects like this because searching the internet for information could even be a fun exercise for each student as they confide with their partner in making their case. To help the students begin their investigations, I would suggest the following mainstream sites:

theglobeandmail.com, nationalpost.com, thestar.com, nytimes.com, washingtonpost.com.

I would also recommend the following alternative news sources:

theyee.ca, rabble.ca, salon.com, altemet.org

Once the students have completed the fact-finding component of the

assignment, they should write a report that demonstrates how the information they obtained answers the important question they asked. As well, because their research is on very important societal issues, each pairing of students should be expected to make presentations to their classmates so that their peers can also learn about these obstacles to sustainable development.

From my 19 years as a high school teacher, I think that there are many topics that would resonate with students today. Here are 10 topics that I consider important in terms of environmental sustainability, as well as healthy human and wildlife populations:

Environmental Racism – There has been an increase in the cancer rates of some First Nations communities living close to tailings ponds from the oil industry. Do a media analysis of the Aboriginal perspectives on tar sands development. How effective have their voices been with oil companies, mining companies, and government people?

Tax Breaks for Big Oil – On September 25, 2009, Prime Minister Harper said that tax breaks for the oil industry would stop. Yet, the federal government continues to give billions of dollars in tax breaks to the companies producing oil and gas in Canada. (Analysis shows a total of \$1.4 billion per year in federal subsidies, \$840 million of which are special tax breaks, with a disproportionate share going to “dirty” fuels such as the Alberta Tar Sands.) Do a media analysis of where the cuts to programs are being done to offset the tax breaks for the very profitable oil companies working in Canada. Have any polls been done to determine whether Canadians approve of these tax breaks for Big Oil?

Canada’s Fresh Water: Who Owns it? – Everyone uses water to sustain our bodies, grow our food, support industry, have fun and get around. Canada is also the host country for the biggest clean supplies of fresh water in the world. Are there plans to sell our water to other countries? If so, who reaps the profits? Who is regulating this?

Fish Farming – The east coast fisheries are no longer as profitable as they once were. The wild salmon stocks on the west coast of BC also seem to be in a precarious position. A fairly recent ascendancy of the fish farming industry is now entrenched. What are the impacts of salmon farming on the environment and wild salmon in particular. Do a media analysis of salmon aquaculture operations on BC’s west coast. Who are the regulators? Which governments in Canada and in British Columbia have supported this industry? Which ones have called for moratoriums until environmental assessments have been completed? Do citizens have a voice on this issue?

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Big Oil and Wildlife –The trees, plants and animals provide “goods and services” essential to all life — collectively they clean the water, purify the air and maintain the soil. Do a media analysis of how the effects on our natural habitat are affected by the oil industry in Canada. Who regulates the industry in this regard?

Canada’s Ocean Waters – Oceans are critical to all life on earth, providing food, oxygen, recreation and economic opportunities. They also face many threats. Do a media analysis about how our governments are protecting Canada’s coastal and marine environments. At what points do citizens have a voice on this issue?

Industrial Pollutants and Human Health – By now most Canadians are aware that our bodies are being infiltrated by pollutants and toxins emanating from various industries. Who is regulating this extremely important aspect of our lives? Are they former industry employees? Or are they highly educated people not connected to the industries they regulate? How can citizens force politicians to implement policies that act to decrease these toxins from entering the environment?

Canada’s Grizzly Bears – Grizzly bears are an essential part of a healthy ecosystem. They support plant and forest health, for example, by transferring ocean nutrients brought to the rivers by wild salmon. Are federal and provincial governments working to protect grizzlies? What effect does the trophy hunt have on their populations? Who is regulating the trophy hunt? Do a media analysis on the protection of Canada’s grizzly bears.

Our Food Crops: Pesticides versus Organic – What are the pros and cons of using pesticides in our food crops? What are the pros and cons of supporting the organic food industry? Who is lobbying government officials on this extremely important aspect of our lives? Who is regulating the use of pesticides? How does the media cover these issues? Whose voices are heard?

Canada’s Meat Industry – By now most Canadians are aware of terms like “mad cow” disease, “hoof-and-mouth” disease, and the “avian flu.” In recent years, the words “listeriosis” and “listeria” have entered the common lexicon. What are our elected representatives doing to protect the health of Canadians around the consumption of meat? Who regulates the meat industry? How does the media interpret these health issues? To what extent and in what ways do the media support free range and wild meat options?

Note: Teachers should bear in mind that contemporary curriculum developers often include Prescribed Learning Outcomes (PLOs) that

sanction pedagogy such as suggested here. Yet, even if they do not exist in some provinces or states, there is always the opportunity for the autonomous educator to tailor pedagogy to critically interrogate socioeconomic structures, policies, regulations, and practices.

* * *

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ENDNOTES

¹ On August 3rd, 2010, a group of Greenpeace environmental activists rappelled from the top of the Calgary Tower, home to Alberta's oil industry, to hang a banner that read "Separate Oil & State." A Greenpeace spokeswoman said that the action was "to highlight the need to sever the cozy relationship between the toxic tar sand oil industry and the federal and provincial governments" (Dearing, August 3, 2010).

² For a list of these scientific studies, please see the United Nations Intergovernmental Panel on Climate Change (IPCC) 4th Assessment Report, Working Group 1 report, summary for policymakers, published 2 February 2007, <http://www.ipcc.ch/SPM2feb07.pdf>.

³ The gist of the e-mail messages, according to climate change deniers, suggested that the scientists were being disingenuous about their observations. This seemed to rock the confidence of many of the delegates to the Copenhagen Summit. Since then, all of the scientists were cleared of any wrong doing whatsoever. The leak, however, seemed to have been a success for those who do not want to see an international agreement to take on climate change ratified.

⁴ Environmental and social studies teachers will find the backlash against scientific research on numerous environmental issues at <http://www.junkscience.com>. This site emphasizes that global warming is a hoax, but it also has articles suggesting that the environmental movement is rapidly abolishing private property in America.

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Ally (*noun*) One in helpful association with another, one with common interests, backer, benefactor, booster, champion, colleague, companion, comrade, endorser, friend, helper, partner, patron, supporter, upholder

Ally (*verb*) To place in a friendly association, to connect in a personal relationship, band together, combine, come aboard, come together, consolidate, cooperate, fuse, hook up, join together, meld, merge, mingle, network, plug into, pool, relate, stand behind, sympathize, team up, tie in, unite



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