



ANDREW HODGKINS

Petrol's Paid Pipers

The present political atmosphere in Alberta is such that criticism tends to be regarded as treasonous...and unpleasant facts are dismissed as ideological heresy.

— Larry Pratt, *The Tar Sands*, 1976

There never was a better time for us to tell the world about our oil sands. Our energy. Ourselves. It's up to us, as proud Albertans, to tell it like it is...The world should know the facts. Start a conversation today.

— Alberta Government advertisement, *Edmonton Journal*, Sept 29, 2010

Since Pratt wrote his account of the tar sands, Alberta has become a global bitumen superpower¹ and the same political party is still in power. But, treasonous or not, there is a dire need to start conversations today with the rest of the world to *tell it like it is* about how basic tenets of democracy including access to information are undermined by a political economy that is oil dependent. While bitumen mining in northern Alberta has been the subject of media attention², there remains a need to go behind the glare of spotlights and examine the kinds of corporate

messages making their way to society's most vulnerable and impressionable members — our children.

My experiences with corporate influence in schools began eight years ago when my daughter came home exuberantly proclaiming that a clown was coming to visit her school to read. Concerned, I phoned the principal for clarification. Indeed the message I had received was true; a fast food franchise was coming to the school to deliver a well-established reading program that would supposedly incent students to read. Despite my best efforts to explain my concerns with commercialism in schools — the mixed messages sent to children (read and be rewarded with junk food) and the need to create safe spaces for children to develop critical thinking skills — the principal responded, “But the kids love the program!” Alas, the principal wasn't clowning around.

The experience opened my eyes to how corporate presence in education gets normalized and legitimized to the point that educators can become staunch champions of these mercenary Trojan horses. Unlike the sale of a specific product, as in the case of the reading program, infusion of corporate ideology into education is arguably more difficult to expose owing to its somewhat amorphous character. This is because rather than one group selling an ideology, a consortium of interests is acting under the same umbrella.

In this article, I examine industry-funded lessons on bitumen mining that have been developed and currently promoted to teachers as a strategy to promote a positive corporate image while maintaining an uncritical business-as-usual approach to development³. As a context, I begin by presenting an overview of key aspects concerning environmental education policy.

Environmental education policy

In Canada there is a need to further develop environmental and energy education policy. According to the Canadian Environmental Grantmakers Network (2006), “Almost all provinces/territories lack a coordinated approach to the development and advancement of environmental education. In many provinces, there is not an environmental education curriculum per se. Instead the approach to environmental education appears as a topic within other subject curricula (e.g. math, sci-

ence, etc.)” (p. 3). A survey conducted by the Alberta Council for Environmental Education (ACEE) involving 459 high school and older youth (ages 18 to 24) “indicates that youths’ knowledge of environmental action — and their reported level of participation in public action — is markedly low” (2010). ACEE’s findings come at a time when the government is holding a dialogue with Albertans regarding the future of education in the province (Alberta Education, n.d.). Feedback to the Council from students, teachers, and agency professionals attests to a need to create an environmental and citizenship curriculum that fosters critical thinking skills and authentic inquiry-based learning experiences (ACEE, 2010a).

In contrast to Ontario’s recently unveiled environmental education program of studies, which is integrated into all subjects and grades, environmental topics generally get lumped into science and social studies in Alberta. One of the four foundations of the Alberta science program is Science, Technology and Society (STS) — a key goal of which is to “prepare students to critically address an understanding of the nature of societal, economic, ethical and environmental issues” (Alberta Education, 2003; 2005). Similarly, the social studies program of studies espouses an “issues focused approach” through active inquiry and consideration of multiple perspectives. A learner outcome of the Grade 10 program is to assess economic, environmental and other contemporary impacts of globalization (Alberta Education, 2007).

With respect to bitumen mining, a perusal of both the Alberta high school science and social studies programs of study turns up only one search for “oil sands” — referenced in the Grade 11 course Science 24, which requires students to describe sources of fossil fuels, their extraction, and refining. By contrast, Ontario’s high school environmental education program of studies mentions “oil sands” three times, and “tar sands” once. Related topics for investigation include impacts on Indigenous populations and local environments, contribution to greenhouse gases, and the effects on public and private investment on local, provincial, and national economies. Effects of tailings effluent on local watersheds is also cited as a topic of study (Ontario Education, 2009).

It would therefore appear Ontario students are likely to learn more about bitumen mining than their Alberta counterparts. At first blush, this discrepancy is surprising given the enormous

media attention on Alberta bitumen as well as its prominence in world energy reserves. It has been suggested dependence on fossil fuels causes some Alberta educators to avoid tackling controversial energy and environmental topics over perceived fears that they run the risk of biting the hand that feeds so many students' parents (Libin, 2008). The discretionary manner by which educators are able to pick and choose environmental topics to be covered in the classroom combined with a culture of ambivalence towards tackling controversial topics, a heavy workload, pressures to prepare students for standardized tests, and a history of promoting education-business partnerships, all contribute towards the present provision of industry-sponsored curriculum materials in schools.

According to research conducted by The Impact Group (2008) oil and gas companies are heavily involved in science and technology (S&T) promotion and are beginning to shift their focus to the environment and sustainability. Most firms prefer to support third party organizations where the company provides funds and in-kind support (e.g. employee volunteers for science fairs and camps). Top reasons for supporting S&T cited in the study included increasing the pool of qualified people for companies to hire, and giving back to the communities in which they have a presence. According to the study, one important measure of success gauged by firms is whether the partnership enhances their reputation: "Is the firm mentioned in a positive way in the media? Do partners acknowledge their support and participation publicly?" (p. 12). Bitumen mining companies are also likely to view sponsorship of education with local First Nations as an investment since the more established these relations are, the better the chances of avoiding costly environmental hearings and litigation related to new developments (Slowey, 2008).

A survey of bitumen mining education

Currently, programs specific to bitumen mining education have been developed for high school science and social studies by the non-profit educational service-provider Inside Education (n.d.), and the University of Alberta's Centre for Oil Sands Innovation (COSI, n.d.). Of the total revenue reported to Canada Revenue Agency for 2009 by Inside Education (\$1,467,472), 9% (\$129,668) came from the provincial government⁴. Based

upon the corporate supporters listed on the organization's web site, it appears that the majority of Inside Education's revenue comes from oil-MNCs as well as other energy and resource companies. Similarly, COSI is also supported by the oil industry (Imperial Oil), as well as both provincial and federal governments respectively through the Alberta Innovates endowment and National Science and Research Council (NSERC) grants. Resources licensed and endorsed by Inside Education include the high school science and social studies "Oil Sands for High School," the centrepiece of which is the video *The Amazing Oil Sands*⁵. COSI resources include a series of high school chemistry investigations involving the extraction of bitumen, a careers lesson featuring research scientists, and an STS "Kitchen Table Narrative" accompanied by extension activities. In both cases, curriculum was written by individuals associated with Inside Education (on-going and former board members) and/or the Centre of Math and Science Technology Education (CMASTE⁶) housed in the Faculty of Education at the University of Alberta.

Teacher resources are accessed through both organizations' web sites and at teacher conventions — some of which are sponsored by the Alberta Teachers' Association⁷. Inside Education also advertises professional development field trips (including a visit to the Athabasca tar sands as part of a multi-day tour of energy in the province) through conferences and their web site, to which teachers can apply to the organization to attend. While field trips are free, teachers are asked to formally thank a sponsor and write an account of the experience for a local newspaper. Teacher testimonials endorsing field trips and programs are posted on the organization's web site.

Inside Education also acts as a service-provider for oil industry specific programs. *Energy in Action* is a school program funded by oil-MNCs and coordinated under the collective umbrella of the Canadian Association for Petroleum Producers (CAPP). The program visits community schools in Alberta, British Columbia, and Saskatchewan, providing tree-planting outings, a sponsored school lunch, and in-class presentations. Workshops for recipients of British Petroleum's *A+ for Energy* grants program⁸ have also been provided by Inside Education.

The Amazing Athabasca Oil Sands is accompanied by two teacher guides, one for Grade 12 Chemistry and one for Grade 10

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Science and Social Studies. Curriculum is developed by Inside Education and supported by the Alberta Government, the Alberta Ingenuity Fund (now called Alberta Innovates), and Syncrude (the largest bitumen mining operation). Guidebooks encourage students to pay attention to the multiple perspectives shown in the video and record these as either science, technology, political, economic, or environmental. Extension activities include having students adopt a particular perspective of a key stakeholder or writing a job description for a career related to bitumen mining (e.g. tree planter, carpenter, truck driver, environmental researcher).

The 45 minute video is broken into six parts, and consists of 10 interviews featuring a citizen (daughter of scientist who pioneered bitumen extraction), a chief of a local First Nation, two provincial government representatives (a former premier and the minister of economic development), two industry scientists, and four industry employees.

The “Oil Sands at the Kitchen Table” narrative features a family that gathers to discuss a newspaper heading: “Oil company celebrates production of one billionth barrel.” The family is comprised of a father (oil sands related business owner), mother (chemist who now volunteers at homeless shelters), daughter (philosophy graduate student, University of Toronto), and son (recent graduate of business, University of Alberta). Once students read the narrative they are asked to participate in a class discussion using three leading points: identify multiple perspectives; create a list of related topics; and write a follow-up paragraph to how this discussion could continue. An extension activity includes investigating advantages and disadvantages of increasing production. A list of websites is provided for students to begin their research.

Multiple perspectives?

In keeping with the provincial programs of study, both resources claim to adopt a “bias balanced” and “multi-perspective” approach. However, evidence of bias, contradictions, and inaccuracies exist which collectively thwart attempts for students to arrive at multiple perspectives or develop a critical understanding of the issues associated with bitumen mining. While it is beyond the scope of this paper to present the entire transcripts of

Excerpt from *The Amazing Athabasca Oil Sands*

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.

— **Minister of Economic Development**

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 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.

— **First Nations Chief**

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... 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.

— **Narrator**

Excerpt from “Oil Sands at the Kitchen Table”

Daughter: “I’ve heard that to produce a barrel of oil it takes almost twice as many barrels of water. Wouldn’t that mean that if one billion barrels of oil were produced in the next ten years, then at least 2 billion barrels of water would be consumed as well?”

Mother: “Yes, but for that kind of rate of production, think of the magnitude of scientific achievements which have been made in the last 40 years,” countered Mrs. Young. ... Now, because of incredible research happening at the University of Alberta and other laboratories around the world, Albertans are able to produce a valuable natural resource with such efficiency, that it will continue to vastly improve our economic position.”

Daughter: “It seems contradictory that a company would celebrate the production of its one billionth barrel, when one of the goals of the Kyoto Accord was to eventually cut emissions by 30%.”

Father: “But Jess,” her father said, “think of the monetary benefits for the province: better funding for health care and education and maybe even tax cuts.”

either resource, the sections presented here are representative of the video and narrative. In the case of the video, all interviewees uncritically extol benefits of bitumen mining; only occasional and vague references to associated challenges are made.

As evidenced in the Minister of Economic Development’s statement, myth-making and appeals to regional sentimentalism are offered instead of any substantive analysis of how the industry was originally negotiated between Canadian governments and oil-multinational corporations (e.g. see Pratt, 1976). Representation of Aboriginal peoples in the video neglects the on-going concerns of Indigenous people in the region. The same First Nations chief interviewed for the video recently testified before the 2009 Standing Committee Review of the Impacts of

Oil Sands Developments, citing rising pollution and industry encroachment for losses to both traditional lands and culture (Duncan, 2010). The industry-funded “environmental protection industry” mentioned in the last passage has been criticized over methodology and reporting procedures; information by the monitoring agency is considered proprietary, and published reports escape the scrutiny of peer review (Ayles, Dubé, & Rosenberg, 2004; Schindler, 2008). Evidence of carcinogenic toxins leaking from tailings ponds contradicts government and industry claims (Kelly, Schindler, Vodson, Short, Radmanovich, & Nielsen, 2010). Stating disturbed land will be returned to a biological state that is “even more productive than it was before” contradicts basic ecological tenets.

Analysis of the teacher’s guide and answer key reveals significant problems, including the prevalence of numerous tautological responses, a tendency to mismatch responses with categories, and failure to validate perspectives presented. The categorisation of science, technology, economy, etc as constituting multiple perspectives is misleading and inaccurate considering the absence of multiple ideological perspectives presented in the video. Evidence of the aforementioned problems is found in the Grade 10 answer key: scientific perspectives include a list of technological spinoffs (e.g. “petroleum products, fuels/plastics”); *technological* perspectives include “high-tech jobs,” and “massive equipment technology development”; *ecological* perspectives include “world class mines next to small villages,” “responsible’ development,” and “land reclamation”; and *economic* perspectives fail to consider actual costs of development to both the environment (e.g. costs of reclamation) and society (e.g. drug and alcohol abuse, STDs, suicide, housing shortages, etc. — all associated with a rapid influx of transient workers).

Evidence of bias is also found in the “Oil Sands at the Kitchen Table” narrative and includes: 1) *number of participants* in favour for (3) and critical (1) of bitumen mining; 2) *age* of participants (two of the three proponents are adult authority figures who supposedly know more than youth); 3) *academic training and discipline* (proponents: science and business; critic: philosophy); and 4) *region* (the critic is schooled in eastern Canada — a region of distrust among many Albertans over national energy policies by the eastern-supported Liberal government of Pierre

Trudeau). Statements in favour are jingoistic; statements opposed are vaguer and appear to be stated as straw men arguments for the next person to either refute or ignore. “Monetary benefits” attributed to increased development of bitumen mining (tax cuts, better funding for health care and education) have been called into question: the benefits of the recent construction/oil boom have trickled up not down, with ordinary Albertans working longer hours and paying more than other Canadians for child care, health care, education, and home utilities (Gibson, 2007; Parkland Institute, 2010).

In both sets of resources, there is also a bias in the reference lists provided for extension activity research. Of the 40 web sites provided in the Inside Education teacher guides only one presents a critical perspective; similarly one of the 17 resources listed in the COSI resource offers a critical perspective⁹. Finally there is the use of the term “oil sands” which belies the energy and resource intensive processes required to refine the tar-like bitumen.

Conclusion

The age-old proverb, “He who pays the piper calls the tune” gives pause for educators who recognize the professional and moral obligation of creating commercial free spaces in schools. In light of the preceding discussion, **public-private partnerships** and **petrol’s paid pipers** are like six P(eas) in a pod. Considering bitumen mining is now defining the nation’s economy in a country that lacks a national energy strategy, the current ad hoc approach to environmental education should come as no surprise. Consequently, pressure to sing the same tune praising the metaphysics of the market may continue unabated unless there are concerted efforts to develop a more coordinated approach to environmental education. In short, governments, not industry, must fund education, otherwise we will continue to run the risk of prostituting our schools and ourselves to the technocratic market-driven imperatives conceived of and developed by a select few.

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***Andrew Hodgkins** is originally from northern Canada, and now lives in Edmonton where he is a doctoral student in Educational Policy Studies at the University of Alberta. His research interests include vocational*

education and training partnerships, resource development and Aboriginal governance.

ENDNOTES

¹ Canada is considered second only to Saudi Arabia in terms of recoverable fossil fuel reserves, and is the number one importer of oil to the United States. Of the 175 billion barrels of recoverable oil in the country, 97% are located in Alberta's three northern bitumen regions. Current production estimates are at 1.5 million barrels per day for 2010, with production forecasts ranging from 3.46 million barrels per day by 2025 (CAPP) to 11 million barrels per day (Wihbey, 2009).

² In September 2010, there were 102 bitumen sands related articles in the Edmonton Journal. By way of comparison, a combined total of 38 related stories were published for the same month in the same newspaper over the past three decades.

³ See Tannock (2009) for a similar analyses of K-12 mining programs in Ontario.

⁴ Government revenue has dropped considerably compared to reporting periods between 2000 and 2008 when it averaged 20%. In comparison, the Science Alberta Foundation received 74% of its revenue from government from 2000 to 2008 reporting periods (calculated by dividing total revenues by total government funds reported for years 2000 to 2008).

⁵ Similar resources have also been developed that are suitable for Grades 4-8, as well as climate change investigations for high school chemistry and challenges associated with oil booms for Grade 10 Social Studies.

⁶ Formerly called IONCMASTE; ION stands for Imperial Oil National — a subsidiary of ExxonMobil. Imperial Oil originally funded the centre and continues to support some projects.

⁷ According to the ATA, schools should be advertising free zones and “curriculum materials produced by commercial enterprise must be subjected to rigorous evaluation, with specific attention to accuracy and completeness, commercialism, bias and stereotyping” (ATA, 2000/2010).

⁸ Two months after the largest offshore oil disaster involving BP in the Gulf of Mexico, BP won an Alberta Emerald award for best environmental educator (June 2010). The annual awards are industry-government funded and “acknowledges the people and organizations who are making the world greener” (Alberta Venture, 2010). Inside Education was a finalist.

⁹ The Pembina Institute (listed in both resources) presents critical perspectives on bitumen mining, although it should be noted the organization has been criticized for deriving a significant portion of its revenue from industry clients, and has negotiated with both industry and government behind closed doors.

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