NUCLEAR ADVOCACY AND ADULT EDUCATION: A CASE FOR COUNTER-HEGEMONIC STRUGGLE

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Abstract

The opposition of citizen groups to the public relations initiatives of the nuclear industry in the province of Saskatchewan, Canada is an example of many anti-nuclear organisations throughout the world. By recognizing the work of anti-nuclear organisations in Saskatchewan as forms of emancipatory adult education, this article raises questions about anti-nuclear advocacy as emancipatory adult education elsewhere. The notions of ideology and hegemony are used as the key concepts in a framework to document the public relations initiatives of the nuclear lobby, and counter-hegemony is used to understand the struggle citizens groups have engaged in to challenge this lobby and advance non-nuclear energy alternatives. With counter-hegemonic citizens group as the model, adult educators are then exhorted to engage in counter-hegemonic education to address nuclear advocacy in their institutions.

Résumé

L'opposition de groupes de citoyens face aux pressions exercées dans le secteur public par l'industrie nucléaire, dans la province de la Saskatchewan, au Canada, fournit un exemple, parmi plusieurs autres exemples à travers le monde, de l'intervention d'organisations antinucléaires. En reconnaissant que le travail réalisé par les organisations antinucléaires en Saskatchewan représente une forme d'éducation des adultes émancipatoire, le présent article soulève des questions par rapport au fait que de telles interventions antinucléaires...
puissent constituer une forme d'éducation des adultes émancipatoire dans les autres pays également. Les notions d'idéologie et d'hégémonie sont les concepts clés du cadre de référence à partir desquels sont analysées les initiatives de relations publiques des groupes de pression pronucléaires, tandis que la notion de contre-hégémonie est le concept clé à partir duquel est analysée la lutte que les groupes de citoyens ont entreprise pour s'opposer aux initiatives pronucléaires et pour proposer des solutions de rechange axées sur la production d'énergie non-nucléaire. A partir du modèle des groupes de citoyens opposés à l'hégémonie pronucléaire, les éducateurs d'adultes sont invités à prendre position, à l'intérieur de leurs propres institutions, en faveur d'une éducation qui, elle aussi, s'oppose à cette hégémonie pronucléaire.

Introduction

Paul Jackson, a columnist to Saskatoon's daily newspaper *The Star-Phoenix*, says we “can turn off the television, toss the microwave into the garbage dump, close down a few industries and throw out thousands of jobs” or “we can go nuclear.”¹ Jackson's advocacy for the construction of a Candu-3 nuclear reactor is part of an aggressive public relations strategy to have residents of the province of Saskatchewan support development of the full nuclear fuel cycle. This populist form of adult education, was only one of more than twelve pro-nuclear articles written by him for *The Star-Phoenix* from 1988 to 1991.²

As part of this strategy, Atomic Energy of Canada Limited (AECL) announced on Friday September 21, 1991, a $50-million joint venture energy agreement with SaskPower, the province of Saskatchewan's electrical utility, to complete the design of a Candu-3 nuclear reactor. On the same day, the Conservative government of Grant Devine called an election for Saskatchewan. The election campaign began with the nuclear industry's offensive at center stage. The offensive promoted broader industry plans to:

- open six new uranium mines
- construct Canada's first lazer uranium enrichment plant,
- demonstrate 10 megawatt Slowpoke nuclear reactor applications at the University of Saskatchewan
- develop a high-level nuclear waste management site
- research agriculture and food irradiation
The announcement followed an earlier "framework agreement" and years of intensive lobbying and public relations by AECL and the uranium industry. This promotion reflects current difficulty of the industry in Canada and the rest of the world. With increasing costs, the failure to provide proper high-level waste management, and concerns about accidents and safety, nuclear energy expansion has slowed dramatically. Only a little more than 400 of the 2000 nuclear reactors predicted in the 1970's to be constructed by the end of the millennium are presently constructed. Instead, many countries have cut back or stopped reactor construction. In the United States, for example, no nuclear reactor has been ordered since 1978, and fifty previously ordered reactors have since been cancelled. Citizens groups there have researched, educated and lobbied to stop the construction of what they regard as a hazardous expensive way to produce electricity. At the same time, major developments in energy efficiencies and alternative energy sources were being recognized as cost effective alternatives to nuclear. Manufacturers and suppliers of nuclear components left with production over-capacity and uncertain markets have had to increase public relations initiatives to influence public acceptability of the nuclear option. The most obvious indication of the nuclear industry's involvement in Saskatchewan education systems comes through its involvement in the University of Saskatchewan, the Saskatchewan Institute of Applied Sciences and Technology, and the province's school system. In the election day announcement between AECL and SaskPower, the University of Saskatchewan became a beneficiary of the research agreement. Besides providing for an accelerator technology center, a nuclear power plant simulator, a training facility, and a chair of nuclear science, the agreement included "a public relations campaign to promote nuclear power." Community college programs and technical institutes have been the sites of projects, policies, and governance restructuring that serves industry interests. Campaigns to promote nuclear policies, have been targeted beyond educational institutions to focus on church, labour, and government leaders as well as the population as a whole.

Against this hegemony, citizens groups and coalitions in Saskatchewan have engaged in resistance and counter-hegemonic actions to contest industry claims, to oppose the development of nuclear projects and to advance alternatives to nuclear development. This paper offers an account of some public relations initiatives in the province of Saskatchewan against which these groups and coalitions have viewed their activities as warranted. The purpose of such an account is to
establish that the counter-hegemonic activities of these groups and coalitions constitute an important form of adult education.

Framework for Nuclear Counter-Hegemony

This paper locates the discussion of counter-hegemonic organisation as adult education within the tradition of critical theory which argues that education for human growth is education for human liberation or emancipation. Within this view, education is essentially a political activity which engages human beings in critical reflection and action. Many critical theorists ground their work in a history of philosophy and sociology that identifies the achievement of the “common good” within approaches that link human moral growth with enlightenment or critical rationality. Socrates, a founder of this tradition, modelled living the morally good life through constant examination and questioning. Since then Aristotle, Fichte, Hegel, Marx, Habermas, and others have developed theories of enlightenment which link theory and action. The work of critical educational theorists like Paulo Freire, Henry Giroux, Antonio Gramsci, Michael Apple, Shirley Grundy, Kathleen Weiller, Edmund Sullivan, and others constitute the broad theoretical discourse within which this paper is written.

Many critical educational theorists have focused their attention upon understanding how patterns of consciousness and social interaction are constructed through education within the modern state. In *Ideology and Curriculum*, Michael Apple argues that the relationship between economic structures and culture or consciousness must be understood dialectically. He opposes overly deterministic views which state that human consciousness and culture are shaped by economic infrastructure. In explicating this relationship, he uses the notion of hegemony which presents determination “as a complex nexus of relationships which in their final moment are economically rooted, that exert pressures and set limits on cultural practice, including schools” (Apple, 1979, 4). Hegemony, which must be continually struggled for, admits of human agents who give their consent to or oppose dominant forces. This analysis offers a means of viewing the public relations program of the nuclear industry in Saskatchewan as a form of hegemony mediated through various agencies, and this analysis allows for human agents who can oppose its dominance.

In his distinction between ideology and hegemony, Apple views ideology as the reproduction of ideals, beliefs and habits through various forms
of overt manipulation. Hegemony refers to “the central effective and dominant system of meanings, values, and actions which are lived” (Apple, 1979, 5). While ideology reproduces habits by manipulating ideas, hegemony consists of cultivating entrenched patterns of activity and meaning which become assumed at a taken for granted level. This distinction makes it possible to view the nuclear public relations campaigns in their ideological and hegemonic forms. It becomes possible to see these campaigns not only as propagating ideas about nuclear development but also as establishing public presence and relationship in civil society which are viewed as natural and taken for granted rather than as the product of political strategy. Beyond resistance, in the various forms of opposition to oppressive beliefs and practices, counter-hegemony involves “more critical and politicized work in the form of organised and conscious collective oppositional actions” (Weiller, 1988, 52). When he recommends that we should “act as if we lived in a democracy,” Henry Giroux argues that citizens must create public spheres to counter the totalizing effects of ideological domination.

Within this view, the task of educators is to struggle to create public spheres liberated from the hegemonic sway of the nuclear industry where industry claims can be debated and criticized, and where alternatives to the dominant views can be advanced and organised for. The notion of public spheres as counter-hegemony offers a means of understanding the work of citizens groups as adult education. It grounds this education in forms of critical reflection and practice which constitute resistance and counter-hegemonic strategies.

The Campaign

Some of the industry’s campaign in Saskatchewan is part of a broader campaign by the Canadian Nuclear Association (CNA) to promote nuclear development in Canada. What follows below in this section is a discussion, part of which has appeared in the article “Atomizing Dissent: The Nuclear Industry’s Educational Strategy”, which appeared in the February 1989 edition of Scrutiny. The Canadian Nuclear Association (CNA), made up of more than 130 companies and agencies, has targeted part of its $20-million dollar public relations campaign on Saskatchewan. A Public Education and Communication Strategy for the Nuclear Industry in Canada, a report prepared for the CNA by Goldfarb Consultants (August 1987) recommended three separate campaigns: one directed at the general public, another aimed at opinion leaders and a third focused on regional targets (p. 3). “An extensive lobbying campaign” recommended for key opinion leaders with
a focus on educators, media, government officials and elected leaders, and labour leaders. Saskatchewan is a target region. The campaign objectives are to: make the public more aware of the industry, foster trust in the industry, demonstrate the need for nuclear energy, “aggressively promote the benefits of nuclear energy,” “reduce and neutralize people’s fears and concerns about nuclear energy” and “move people from opposition to neutrality. In our estimation, converting people from being soft opponents to neutral fence sitters is the best the industry can hope for in the short term” (p. 3). The first part of the campaign was to be “low key, informative and factual in its tonality” (p. 4) to raise public awareness and strengthen industry credibility. Then the industry was to initiate a “harder sell campaign” (p. 4) to justify the need for, to promote the benefits of, and to reduce and neutralize people’s fears of nuclear energy. Phase 1 included providing “irrefutable facts that people are forced to agree with to demonstrate that the information is solid, objective and credible” (p. 5). It was to “redefine or reposition the image of the nuclear industry” away from nuclear power plants and “to encourage people to associate the industry and the term ‘nuclear,’ itself, with the positive, progressive, warm sensitive quality of life overtones associated with the medical technology side of the industry (p. 6).” The study suggests literature campaigns, community information displays, production of a documentary film for use in places like schools, visits to nuclear facilities, involvement of the media, teachers, and community people in symposia, and the development and encouragement of the use of industry material in classrooms (p. 7). The more “aggressive and advocacy oriented Phase 2 of the campaign” was to:

- focus on the limited potential and high costs of alternatives
- appeal to the public’s desire for security
- emphasize Canadian economic nationalism in the desire to keep hi-tech jobs
- “appeal to a sense of pride in the industry…”
- reduce and neutralize fear
- demonstrate thoughtout plans for dealing with nuclear waste
- blunt US media criticism of US nuclear plants that spill over into Canada
- build confidence in the people who are responsible for running and inspecting nuclear plants
reassure the public about the “ability to contain the effects of accidents...” (p. 10)

The report also recommended several tactics. These tactics include: “to overwhelm” people with “credible scientific experts...in favour of the nuclear energy option,” testimonials of industry workers, and spokespersons with strong public credibility, and use print, the more authoritative and trusted medium (p. 11).

The CNA Public Information Program Business Plan 1987 - 1988 reveals dramatic spending increases of more than 1.5 million in 1988 designed to promote the industry’s interests. The plan projected the following costs:

<table>
<thead>
<tr>
<th>Projected Costs CNA Public Information Program</th>
<th>1987*</th>
<th>1988*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Programs</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Waste Management</td>
<td>$10,000</td>
<td>$20,000</td>
</tr>
<tr>
<td>Education</td>
<td>51,000</td>
<td>40,000</td>
</tr>
<tr>
<td>Advertising</td>
<td>1,671,000</td>
<td>3,039,000</td>
</tr>
<tr>
<td>Research</td>
<td>349,000</td>
<td>120,000</td>
</tr>
<tr>
<td>Media Relations</td>
<td>12,000</td>
<td>20,000</td>
</tr>
<tr>
<td>Video/T.V.</td>
<td>70,500</td>
<td>100,000</td>
</tr>
<tr>
<td>Print Material</td>
<td>193,000</td>
<td>200,000</td>
</tr>
<tr>
<td>Information Telephone Line</td>
<td>10,000</td>
<td>50,000</td>
</tr>
<tr>
<td>Speakers Bureau</td>
<td>8,000</td>
<td>20,000</td>
</tr>
<tr>
<td>Supporters Group</td>
<td>200,000</td>
<td></td>
</tr>
<tr>
<td>Advisory Council/</td>
<td></td>
<td>30,000</td>
</tr>
<tr>
<td>Public Participation</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total Costs</strong></td>
<td><strong>$2,381,000</strong></td>
<td><strong>$3,849,000</strong></td>
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| Program Administration                       |       |       |
| Salaries                                     | 142,000 | 340,000 |
| Expenses                                     | 121,000 | 71,000 |
| **Total Costs**                              | **$2,644,000** | **$4,260,000** |

*(p. 8)*

The objectives and results sought for each program section are quite clear as a review of some of them shows. Waste Management program, for example, seeks to “[r]educe the number of people opposed to existing and future use of nuclear power because of a concern relating to safe
management of wastes” (p. 10). The research program was “to have a comprehensive understanding of the views of opinion leaders and the Canadian public on matters relating to the nuclear industry (p. 13). Besides establishing a media data center, the increase of funding to the Media program was to include developing “a media book...a reference document...provided to the media through editorial board meetings, and media briefings...” (p. 14) The Video/TV program was “to prepare a variety of materials to fit the needs of the Education, Media and Speakers Bureau Program” (p. 16). The Information Telephone was to be a 1-800 number manned by persons trained to respond to public inquiries (p. 17), and the Speakers Bureau program would coordinate speakers on nuclear topics into a “Canada wide pool and provide training on the delivery of key messages” (p. 18).

To advance this campaign, Atomic Energy of Canada Limited, funded the Western Projects Development Association, a company that sought to win the support of government officials and community leaders for the construction of a Candu-3 nuclear reactor. Members of this company travelled to town councils, Boards of Trade, and Chambers of Commerce throughout the province in 1988 and 1989 with representatives of AECL and the CNA. In Saskatoon in 1989, AECL proposed to construct a 10-megawatt Slowpoke reactor to heat the University. To advance this proposal, the company set up an office in the city, lobbied the University administration, employed public relations personnel to advance the proposal in the community, hired billboard space, advertised in the newspaper, and conducted consultations with the community. In 1990, AECL began an aggressive campaign to promote public acceptance of the construction of a Candu-3 nuclear reactor and high-level waste management facility.

Targeting Schools

The nuclear lobby in Saskatchewan has invested heavily in securing support by directly influencing schools and the education system. The Saskatchewan Mining and Development Corporation (SMDC) was the first to engage in widespread intervention in schools followed by Uranium Saskatchewan, the uranium section of the Saskatchewan Mining Association. Atomic Energy of Canada Limited (AECL), the federal crown corporation which promotes sales of Candu reactors, became very active in the early 1990s.
The Saskatchewan Mining Development Corporation (SMDC) was the main instrument of nuclear intervention in Saskatchewan schools prior to its amalgamation with Eldorado Nuclear and formation of Cameco. SMDC was established in 1974 through an Order in Council under the Saskatchewan Crown Corporations Act and was established by a special act of the legislature in 1977. Its responsibility was to explore for, develop and mine minerals, primarily uranium, in Saskatchewan. It has also worked to forestall criticism of the nuclear industry and to advance nuclear interests in Saskatchewan schools. While the formal and institutional purposes of the company’s activities are laid out in its handbook, at a conference in 1983 the SMDC corporate affairs vice president stated SMDC’s strategy is to “immunize” teachers to criticisms of the industry. 

This strategy has been most evident in the work of SMDC’s Northern Opportunities Branch (NOB). This branch mandated, funded, hired personnel, and developed programs for schools and students. It formed ongoing relationships with school boards, principals, teacher groups, the Department of Education, and the provincial cabinet. The repertoire of public relations initiatives in the north alone included: several bursaries for students; public relations visits with teachers, counsellors and principals; mine employment opportunity materials; donations of books to the forty five area libraries; assistance to the Northern Area Teacher’s Association; a speakers bureau and resource service; a summer geology program for students which included the production of slide tape shows for school distribution and a highly publicized banquet of northern dignitaries; tours of students, teachers and school boards to the mine sites; and publication of a high quality pro-nuclear magazine distributed free to all northern students. In the late 1980’s and early 1990’s Uranium Saskatchewan, the uranium section of the Saskatchewan Mining Association, offered opportunities for school teachers and students. Uranium Saskatchewan provided a free binder of suggested lesson plans, student hand-outs and overheads for teachers for use with all grade eight and nine students in the province. In 1989 Saskatchewan’s Lieutenant Governor officially opened a $300,000 Uranium Today trailer that visits Saskatchewan schools with its pro-nuclear message. The uranium companies and their association continue to maintain contact with teachers and students.

Spratt and Associates, industry consultants for AECL, spell out how to influence school systems and the education establishment in their publication titled, Rationale for P.J. Spratt & Associates Approach to the
Challenge of Effective Communicating With the Education Community.
It views the education system as a market, with which the industry can set up long term cooperative arrangements. The Ontario school system alone, for example, constitutes a market of two million students and 96,000 teachers who can influence their neighbourhoods. However, the industry requires “marketing” and “communication” strategies to penetrate the bureaucratic school systems with their ministries, boards of education, elementry and secondary schools, teachers, professional teacher associations, and administrative personnel without alienating them. Industry therefore needs to design and refine its requests to each educational sector’s sensibilities and ability to respond positively.

In their “Rationale” Spratt and Associates point out that to penetrate the education system outside interests need to understand that “education has established norms regarding its internal decision-making and relationships with the community.” Because schools support liberal democratic norms and seek to appear neutral on debateable items, the industry is advised to present resources within the framework of traditional values and not as alternative to them. They also identify the distribution of teaching aids and teacher training as two key elements in informing teachers. To overcome the credibility gap of distrust between education and corporation, characterized by teacher suspicion of nuclear advocacy, they suggest that the industry should develop convenient usable information aids for busy teachers. The development of these aids should result from cooperative efforts in which teacher and industry interests are mutually satisfied. Teachers and suitable provincial representatives should be involved in this production if they are not to be alienated from them.

Spratt and Associates produce Bridges: The Magazine for Canada’s Opinion Leaders, an independent quarterly magazine available free to all classroom teachers in Canada. AECL operates an Information Center in Saskatoon, provides print and visual resource materials, and sends representatives to visit schools where they discuss the many ecological, environmental, health and safety, and weapons issues related to nuclear proposals. The combined strategies of the Canadian Nuclear Association, Uranium Saskatchewan and its member companies, and AECL have constituted a significant assault on schools. This combination probably comprises the most systematic attempt by any industry in the history of the province to use the schools as a medium to convey ideas, beliefs, and ideology, and to establish a relationship of hegemony on an ongoing basis. For adults to understand how the
industry has established and seeks to maintain its influence in schools, they will have to engage in critical reflection and action.

The Political Parties

Upon taking office in 1981, Saskatchewan's Conservative government endorsed the construction and privatization of nuclear reactors to supply electrical power into the provincial grid. Premier Grant Devine said "nuclear energy has many advantages for Saskatchewan, given the province's large uranium resources.... We have a big potential advantage." Announcement of the agreement between SaskPower and AECL on September 21, 1991, the same day as the announcement of a provincial election culminated a Conservative and nuclear industry political strategy cultivated over several years. The announcement pre-empted the report of the Saskatchewan Power Options Panel which the provincial government struck in 1990 to "seek opinions and increase public understanding of future energy options." The panel was to report on the viability of alternatives ranging through coal, wind, solar, hydro, energy efficiencies, bio-mass, and nuclear for the production of electricity in Saskatchewan. However, before the report was submitted in November¹⁰ SaskPower announced that site selection for a Candu-3 reactor was to be undertaken immediately.¹¹

Not to be restricted to the declining fortunes of the provincial Conservative party in its second term of office, the nuclear industry has made inroads in all provincial political parties. Linda Haverstock, leader of the provincial Liberal party, indicated she is solidly behind nuclear development in the province. This pro-nuclear policy was made clear for the first time in the summer of 1991. She has advocated a "thoughtful" approach to nuclear development. Although the Liberal party has had virtually no standing in the provincial legislature since the 1982 Conservative sweep, the pro-nuclear stand offered the party some elements of an economic policy. The New Democratic Party initially supported the expansion of uranium mining in Saskatchewan in the 1970's and has historically been split on nuclear issues. As the NDP went into the 1991 election, AECL forwarded packages of information to each NDP councillor on the benefits of supporting nuclear expansion.¹² The package was part of its strategy to contest NDP policy to phase out uranium mining and to oppose construction of Candu and Slowpoke reactors. However, in a three to one vote, the party confirmed its opposition to construction of Candu and Slowpoke reactors, opposed the research agreement announced September 21, and
opposed high-level waste management in the province. It also avoided efforts to reverse the party position on uranium mining.

**Resistance and Counter-Hegemony**

By reviewing aspects of the CNA, Uranium Saskatchewan, and AECL public relations campaigns, this account has shown that nuclear industry public relations initiatives in Saskatchewan constitute a form of ideological hegemony. It has demonstrated that these campaigns are extensive, strategic, mandated, and funded. Through them, the nuclear industry creates ideas and beliefs and constructs continuing relationships with political parties, educational institutions and other organisations. The purpose of this account was to establish that within a critical theory approach to adult education, if counter-hegemonic struggle is warranted in response to hegemonic conditions, counter-hegemonic approaches are warranted in response to nuclear public relations strategies in Saskatchewan.

In fact, opposition to development of the nuclear industry in Saskatchewan began in the mid-1970’s when several organisations pressed the NDP to call a moratorium on uranium mining. Through several manoeuvres, pro-uranium forces convinced the NDP government to conduct a public inquiry into the future of uranium mining in the province. Several church, aboriginal, labour, environmental, international NGOs, anti-nuclear, and other groups in opposition to uranium mining boycotted the inquiry and conducted their own education campaigns around the issue. Although they did not stop uranium mining, they continued to do research and undertake resistance strategies to uranium mine expansion. These citizens groups won a clear victory in 1979 when they opposed and helped prevent the construction of a uranium refinery at Warman near Saskatoon.

Adult education as counter-hegemony has been evident in the early 1990’s through the work of three citizens groups. Pokebusters Citizen’s Coalition is an ad-hoc committee of Saskatoon citizens who organised initially to oppose the construction of and propose alternatives to a Slowpoke reactor at the University of Saskatchewan. This coalition has organised public meetings, debated industry representatives, published material, sought expert advice, lobbied the government and the University, and written letters to the editor in the local paper. The coalition continued its work by debating and opposing proposals for a Candu-3 reactor and nuclear waste management site. The
Inter-Church Uranium Committee, founded in 1980 by members of the Catholic, United, Anglican, Lutheran, and Mennonite churches, conducts research, undertakes education and lobbies government on nuclear issues, particularly uranium mining. Although this organisation focuses on its constituent organisations, it operates in a milieu of interested organisations with which it interacts on a continuing basis. The Saskatoon Environmental Society operates a resource center which offers resources on alternative energy and energy efficiencies as well as other environmental issues. It was active as early as the uranium inquiry of 1977 where it led opposition to uranium mining proposals with a representative acting as an intervener in questioning mining proponents.

These groups have contested industry claims, organised against their influence, and advanced alternative options. They have published information, conducted public forums with expert speakers, held press conferences, attended hearings, organised demonstrations and rallies, consulted with interest groups, built alliances and coalitions of support among labour, church, environmental, and other groups, lobbied politicians, provided a speakers service, and operated resource centers. To support their public education, they research issues and maintain communications with similar groups throughout Canada and the world. To mount educational campaigns, these citizens groups have establish themselves as counter-organisations with mandate, resources and structure. The emancipatory commitment to public education is not simply to oppose, but to generate possibility and advance options for the common good.

Adult educators working in upgrading and post-secondary institutions can also advance an emancipatory education which addresses the hegemony of the nuclear industry. Pro-nuclear ideology in institutions of adult education is most obvious in overt public relations and information strategies. However, the incorporation and restructuring of these institutions over the years within government, education, and economic policies which services nuclear interests offers a more complex structure of hegemony for educators to critically reflect and act upon. Many adult educators are in positions to question how educational policy, governance, curriculum, and instruction may be shaped to serve nuclear interests, to the detriment of full rational consideration of energy alternatives. While citizens groups address nuclear advocacy in the broader public sphere, adult educators in educational institutions can construct counter-hegemonic struggles which critically question and
offer alternatives to the nuclear option. To develop counter-hegemonic adult education, educators can research their own circumstances, link with other counter-hegemonic groups, strategize to address industry claims, and construct pedagogies that empower educators and students.

In Conclusion

This article provides a Canadian case study of the nuclear debate within a critical theory understanding of adult education. This critical theory approach has been more substantially developed in a previous volume of this publication. Within this framework, the notions of hegemony and counter-hegemony are used to understand public relations initiatives of nuclear companies, and the oppositional organisation of citizen groups. The counter-hegemonic struggles of citizen groups is presented as a model of adult education recommended for practitioners in educational institutions as warranted. The purpose of this account is to establish the counter-hegemonic activities of these groups and coalitions as a legitimate part of the adult education movement.

Bibliography

Giroux, H. Teachers as Intellectuals, Toward a Critical Pedagogy of Learning (Granby, Mass: Bergin and Garvey, 1988).
Habermas, J. Knowledge and Human Interests (Boston: Beacon, 1971).

Reference Notes

6. SMDC's strategy for "immunizing" teachers to criticisms of the nuclear industry was laid out by the corporate affairs vice-president at Future-Scan, a conference for business and industry held in Saskatoon in the spring of 1983. At this conference, the vice-president laid out three stages of the relationship between the uranium mining industry and the public. He located many "stakeholders" as potential allies and presented SMDC's public relations strategy. The stakeholders in the southern part of the province were identified as the media, the medical profession, business, churches, labour, the education profession, and women's groups. In the north, they were divided into the categories of adolescents, post-adolescents, and middle-aged people (Smart, 1983, p. 24). In his presentation, he advocated developing a strategy to deal with critics of the industry rather than responding in a "knee-jerk" fashion. He expressed preference for an "indirect approach...the facilitating a crown corporation can do." He explained: "When you set up...interaction between industry and one of the stakeholders, you produce antibodies. And when something happens, that group or somebody from the group can respond to it, so, that person is like attacking it" (Smart, 1983, p. 23-24).
8. See *Uranium in Saskatchewan* (Saskatoon: Uranium Saskatchewan, nd).
12. See letter to Councillor from David Bock, Vice-President, Western Region, AECL Candu, Suite 100, 128 4th Avenue South, Saskatoon, Saskatchewan, S7K 1M8.