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Education for Sustainability (EFS): Citizenship Education for Radical Resistance or Cultural Conformity?

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Abstract

There is little doubt that the use of EFS curricula, resources, and programmes in publicly provided education has been controversial.

This paper will examine the dilemmas, for educators involved in EFS, relating to the politics and conservative forces underpinning national curriculum development in a free market capitalist economy such as Aotearoa / New Zealand.

Concerns have been expressed both within and beyond the developing field of EFS that it has the potential to be narrowly utilitarian and indoctrinatory. A useful response to this critique is to advocate for critical reflection around the ways in which language in the developing field of EFS is, and has been, constructed. It is argued that taking the meanings that are implicit in the terminology used in EFS to be self-evident will endanger its potential to be truly empowering. One consequence might be that the field becomes indoctrinatory and uncritically transmissive.

The area of pre-service teacher education is explored as one that can model environmental education and EFS usefully as educative.

Introduction

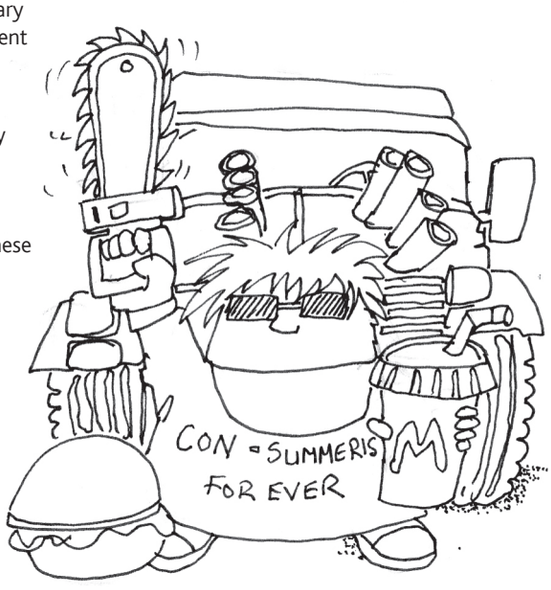
Language may disguise intent and embody a range of meanings that shift according to the context within which they are expressed. The wider social, economic, and political contexts through which words assume their meaning need to be considered. As Jickling (1997) has argued, definitions are not static products. Rather, they are "processes in which teachers, administrators and scholars are all participants" (Jickling, 1997, p.86).

This paper will discuss the background to EFS and the political events that have shaped the language and values it embraces. It suggests that there is perhaps an irreconcilable tension generated by contradictions evident in the field of EFS. A key problem relates to the claims made by proponents of EFS that it will engage students in critical thinking concurrent with the use of rhetorical language to promote the acquisition of certain values and a "sustainable mindset." To avoid any tendency for environmental educators to be uncritical proponents of their subject, it is suggested that at times those in the field of EFS need to adopt a more critical stance–both in their pedagogical action and their understanding of the social and political contexts within which the language of EFS is embedded.

Background

This section will discuss the political, historical, and educational context within which the values and terminology of EFS have been defined and understood from *within* the educational community. The use of "environmental education" (EE) and "education for sustainability" (EFS) as two terms should be noted, although it is important to appreciate that EE and EFS are not interchangeable. In fact the use of these terms is often debated in educational communities, with some authors keen to draw distinctions between them and to defend their territory (McKeown & Hopkins, 2003). It is another example of "[the lack of] clarity of definition or intent with terminology in EE/EFS" (McKeown & Hopkins, 2003, p.117). However, it can be argued that those involved in the field of EE have begun to shift their focus more toward a discourse of "sustainability". Advocates of sustainability tend to focus on broader environmental and social concerns, compared with EE proponents' narrower concentration on issues associated with ecological damage.

EFS in New Zealand and abroad is intensely political and directed unabashedly toward the goal of cultivating sustainability values in the potential citizenry. To educate our children as future citizens who can live sustainably requires the development of the a priori values of "compassion, equity, justice, peace, cultural sensitivity, respect for the environment and recognition of the rights of future generations" (Parliamentary Commissioner for the Environment [PCE] 2004, p. 43) .



The intent and purpose of EE/EFS is based on three historically important documents – the Belgrade Charter, the Tbilisi Declaration, and Agenda 21 (McKeown & Hopkins, 2003). These will now be discussed and their relationship to important EE/EFS documents in New Zealand highlighted.

The United Nations Educational, Scientific and Cultural Organization (UNESCO) has played a major role in defining the goals and parameters of EFS and in exploring what a sustainable

society might look like. To the backdrop of a growing recognition by scientists of the international environmental crisis, participants at a UNESCO workshop in Yugoslavia in 1975 proposed a global framework for environmental education (Gough, 2006, p.71). Known as the Belgrade Charter, it stated that:

> *The goal of environmental education is to develop a world population that is aware of, and concerned about, the environment and its associated problems, and which has the knowledge, skills, motivations, and commitment to work individually and collectively toward solutions of current problems and the prevention of new ones. (UNESCO, 1975, p.3)*

This statement defined the parameters of environmental education, and has been used to develop a coherent value system to inform EE/EFS. It has generally been accepted by professionals in the field (Gough, 2006).

The Tbilisi Declaration, as part of the final report of the Intergovernmental Conference on Environmental Education, was issued two years after the Belgrade Charter. Building on the Charter's sentiments, the Tbilisi Declaration was able to further refine the aims and basic principles of environmental education. Identifying both the formal and non formal education sectors (including public schooling from pre-school to higher education), the Tbilisi Declaration set out some guiding principles and objectives that are readily identifiable in current policy and curriculum documents (UNESCO-United Nations Environment Program [UNEP], 1978).

In fact, the objectives identified in the Tbilisi Declaration concerning the development of particular levels of awareness, knowledge, attitudes, skills, and participation are paraphrased in the 1999 Ministry of Education (MOE) publication, *Guidelines for Environmental Education in New Zealand Schools*. The Tbilisi Declaration stated for example that one objective of environmental education is "to help individuals and social groups acquire social values, strong feelings of concern for the environment and the motivation for actively participating in its protection and improvement" (UNESCO-UNEP, 1978, p.3). This may be compared with the following statement in the Ministry of Education's environmental education guidelines: "the aims of environmental education are for students to develop, "attitudes and values that reflect feelings of concern for the environment" (MOE, 1999, p. 9).

This Tbilisi Declaration clearly called for the education of a citizenry through the cultivation of certain values and attitudes. Environmental educators rely on it to articulate their value positions. Echoing this sentiment David Chapman writes:

> *Remember, the Tbilisi Declaration calls for new patterns of behaviour! This is very very hard to do. We must all teach ourselves to live more modestly, learn to cooperate not to compete, conserve rather than consume, and be active in challenging the consumptive and exploitative values on which our society is built. (Chapman, 2009)*

The ongoing commitment to explicit acknowledgement of the value framework within which EFS is located was further recorded at the 1992 Rio International NGO Forum held in Brazil. Agenda 21 was the document that arose from this conference (also called the Earth Summit). Principal one of Agenda 21 stated that "environmental education is not neutral, it is value based. It is an act of social transformation" (United Nations Conference on the Environment and Development, 1992, p.1).

Promoting the concept of sustainability is said to be pivotal in shifting the focus away from essentially "natural" environmental concerns about the Earth's wellbeing towards a humanistic understanding of the interdependence that exists between the Earth and its human inhabitants. This approach has been welcomed by those environmental educators concerned with social justice because "it offered a means of loosening the clutches of natural science on their field" (Selby, 2006, p.354). Advocates of "sustainability" attempt to analyse the ways in which the processes of economic expansion associated with capitalism damage the environment. Discourse relating to the construction of a sustainable society does not ignore the "human side of environmental damage"; it emphasizes social justice, the creation of "democratic spaces" for the inclusion of multicultural and indigenous voices, the place of feminist politics, and the urgent need to alleviate world poverty. As a joint publication by the International Union for Conservation of Nature (IUCN), the United Nations Environment Program (UNEP), and the World Wide Fund For Nature (WWF) noted succinctly, "we will need to understand and accept the consequences of being part of the greater community of life and to become more conscious of the efforts of our decisions on other societies, future generations and other species. We will need to perfect and promote an ethic for living sustainably. Living sustainably must be a guiding principle for all the world's people. But it never will be while hundreds of millions live without even enough of the basic essentials of life" (IUCN/UNEP/WWF, 1991, p. 5).

Perhaps because of its explicit social agenda EFS has since its inception struggled to gain a foothold in schools in New Zealand (Eames & Cowie, 2004). It has yet to achieve a formal place in the curriculum, despite being supported by the *Guidelines for Environmental Education in New Zealand Schools* (MOE, 1999). These Guidelines are designed to help teachers integrate EFS across the curriculum. The report by the Parliamentary Commissioner for the Environment [PCE] (2004) also emphasised the importance of having EFS taught within New Zealand schools. EFS is conceptualised in this report as being broader in scope than EE, and as being well suited to fostering the development of critical thinking about the underlying social, economic and political causes of environmental problems. Furthermore EFS is seen as an empowering and transformational educational practice, one that develops in individuals and communities the opportunity to "acquire the knowledge, values, attitudes, commitment and skills needed to protect the environment" (Parliamentary Commissioner for the Environment, 2004, p.36).

But gains in the area have been offset recently by budget cutbacks announced by the new National Government. EFS funding will cease from December 2009 (Ministry of Education, 2009), because EFS is not considered a priority by the government. This is a clear instance of how the curriculum is constructed through contestation over what knowledge and values are to be represented in school content, organization, and pedagogical processes.

EE/EFS as citizenship education

EFS is a vulnerable and optional newcomer to public education in New Zealand. Its uptake across all sectors of education has been regarded as "partial, limited and marginal" (Chapman, Flaws, & Le Heron, 2006). The difficulties experienced in gaining a strong place for EFS in public education are perhaps not surprising, given its explicitly political status. The ideals of EFS are visionary; they endorse the cultivation of citizens who can participate actively and intelligently in a particular version of what Henry Giroux had termed "the just and good life" (Giroux, 2001, p.168). Educationists, politicians, and the wider community and public commonly articulate fears of indoctrination, as Jickling (1997, p. 96) explained:

> *should education aim to advance particular ends such as red-green environmentalism or sustainable development? And, is it the educator's job to make people think in a particular way? …. This loading of environmental education is at odds with more common understandings of education. Many educators shy away from the imposition of such agendas whether through subtle use, propaganda or indoctrination.*

Jickling's remarks are perceptive and thought provoking. While the educative component of EFS remains undeveloped, as Jickling suggested it is, it will remain vulnerable to marginalization in public schools. If teachers have definitions of EFS imposed on them from lofty heights as finished products then they may fail to become meaningful to the very people working with them. As Jickling opined, definitions should be perceived of as "processes, not products, in which teachers are themselves the co-constructors" (1997, p.100).

Some academics have argued that the language used in EFS has become sterile, rhetorical, and dependent on slogans (Jickling & Spork, 1998; Mappin & Johnson, 2005). They strongly suspect that advocacy of a particular political position has diminished the educative component of EFS. Yet, as Cotton (2006, p.224) remarks, the teaching of controversial issues is complex and emotive and it calls for teachers to be unbiased and knowledgeable in areas that are under debate within the scientific community (such as global warming). It is hardly surprising then that "teachers are often accused of failing at this task, and of indoctrinating children with simplistic 'green slogans', rather than teaching a deeper understanding of the complexity of the issues (Cotton, 2006, p. 224). There is a very real implication here that EFS teachers are attempting to instill into students a particular way of looking at the world and socialising them into collective behaviour patterns. Such conduct opens up the distinct possibility that indoctrination is occurring.

A critical understanding of certain definitions by teachers is important because if they become slogans then they will invoke meaning that may be "taken for granted" (Jickling & Spork, 1998, p.323). For example, although the concept of "sustainable development" is integral to EFS there have been numerous attempts to define it (Grainger, 2004, p. 12). Part of the complexity and difficulty in defining sustainable development is that it is both a theoretical concept and a political ideal. According to Grainger (2004, p.12), "in theoretical discourses sustainable development is essentially a matter of optimizing the balance between the economic, social and environmental dimensions of development." He went on to argue that in practice the various interest groups that embody competing discourses that "broadly represent Capital, Labour and Environment" (p. 20). Reconciling the political agendas of these groups makes "sustainable development" a complex and, perhaps, impossible struggle (Grainger, 2004). He outlined his core thesis in the following way: "A society that did develop sustainably would *never,* virtually by definition, fulfill all the requirements of the environmentalist discourse, or of the other two competing discourses. This should give those who equate sustainable development with a 'green society' food for thought" (p.20). EFS in schools can likewise reflect a range of political agendas, and the overarching assumption that these agendas reflect the values referred to by the New Zealand Parliamentary Commissioner for the Environment should not be taken for granted. A Capitalist and Environmental agenda will necessarily embrace different and contradictory value structures (Grainger, 2004, p12) .

Environmental education faces many of the same tensions, contradictions, and struggles that have faced other subjects historically (such as social studies)—those that centre broadly on what democratic citizenship education entails. There is a persistent historical tension between democratic social philosophy and the dependence of the state on citizens socialized into collective attitudes and behavior patterns (Archer & Openshaw, 1992).

The role of EFS in producing citizens who are in tune with the dominant "environmental sustainability" ideologies, predictably, has stimulated debate outside academia in the public arena. Newman (2007), for instance, was adamant that the launch of a new national curriculum in New Zealand in 2007 represented a "turnaround" that signaled the curriculum had become "dangerously politicized" (Newman, 2007, p.2). She elaborated on her thesis as follows:

> *Using a 'divide and rule' strategy, a ruling party can represent its political ideology as educational principles or values which it then requires schools to teach. This is certainly the case with 'sustainability' and 'climate change', key Labour Party policies that they have now embedded into the curriculum. (p.2)*

The fear which Newman expresses is that environmental interest groups in New Zealand are using public schooling as a means for advocating particular political ideologies. Although there are a variety of ways that educationists can respond to this criticism, Mappin and Johnson (2005) argue that none will be effective if EFS cannot justify its inclusion in public schooling on an educational level. The tensions explained above are likely to be of special interest to teachers, pre-service teachers, and educationists involved in the field. There is evidence to suggest that some teachers find the lack of clarity over terminology in EFS worrying and that they believe "education for the environment" is merely furthering the interests of a political movement (Jickling & Spork, 1998). One of the main problems is that the use of terminology in EFS is often taken to be self-explanatory.

In the murky waters of EFS gaining a clear sense of educational purpose is paramount. Ashley (2005) maintains that if EFS is to preserve its integrity then educators need to address the tensions between indoctrination and the development of student judgment. The latter is defined as "the ability to exercise judgment and express political will as a citizen in an environmentally attentive democracy" (Ashley, 2005, p.187). The development of students' critical thinking capacities in EE/EFS is important in order to prevent the transmission of a highly conservative and uncritical approach to "citizenship". Cotton (2006, p.238) agrees and argues that, "students need to be taught to examine critically the information they are given and the attitudes or values that have led to its production." Paying attention to the development of students' judgment and critical thinking capacities is a necessary counter to charges of indoctrination.

Critical thinking and possibility

Jickling (1997) has identified one of the defining characteristics in the EFS literature as being "[the development of] critical thinking and to enable problem solving." EFS is also meant "to engage students in cultural criticism and reconstruction", he urged. These characteristics suggest the basis for a truly socially critical education. However, some commentators have concluded that a socially critical approach to EFS has not been achieved in Aotearoa / New Zealand (Chapman, Flaws, & Le Heron, 2006; PCE, 2004). According to the Parliamentary Commissioner for the Environment, for instance, "Education for sustainability … tends to take a more explicit socially critical perspective. Unfortunately much education that is currently practiced in New Zealand and overseas may actually be working against this practice" (PCE, 2004, p.39).

Similarly, work by Chapman, Flaws, and Le Heron (2006) details a "sobering conclusion" on gains in the area of implementation of sustainability in the New Zealand education institutions, which they regard as "certainly not transformational" (p.281). These authors cite "institutional obstacles and impediments" to EE/EFS having gained a foothold in New Zealand school curricula, university courses and degrees. They declare that in university and school curricula in New Zealand

> *…work that critically examines our behaviour, incorporates ideas about biological and social systems and their interdependence, looks at resource allocation, rich and poor, critically analyses message systems and the interests they serve, and does this in context of planetary guardianship is rare … Environmental Education is clearly a low profile area in the curriculum and in the lived culture of schooling. (p. 288)*

In short, critique relating to the dominant approach to EFS in New Zealand university courses and degrees and in school curricula points to the existence of constraints in educational frameworks. These suggest that changes in line with endorsing the principles of "sustainability", and in particular the central tenet of critical thinking, are merely cosmetic (Chapman, Flaws, & Le Heron, 2006).

This may be due in part to the dominance of an entrepreneurial ethos in schools currently, one that emphasises the creation of passive citizens who fit readily into predetermined roles in a market society (Openshaw, 1996/1997). The dominant forms of oppression inherent in a capitalist social order and the logic of the market as a counter to a truly democratic public life are unacknowledged by New Right voices in New Zealand. Democratic political citizenship has been displaced by "the acquisition of differentiated social identities" (Cohen, 1997, p. 71).

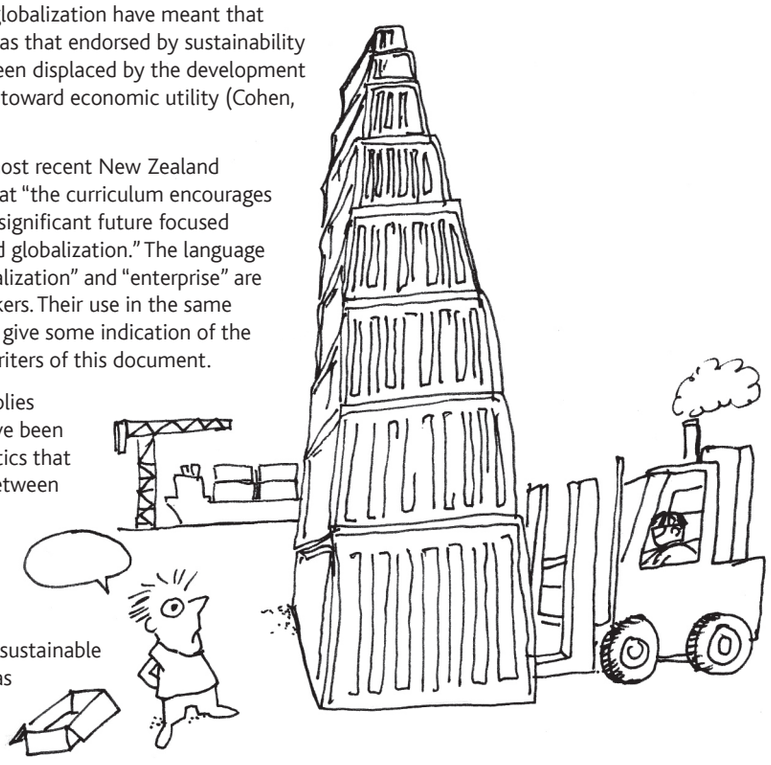
According to Cohen, the pressures of economic globalization have meant that notions of democratic political citizenship (such as that endorsed by sustainability advocates and environmental educators) have been displaced by the development of skills and competencies oriented purposefully toward economic utility (Cohen, 1997).

For example the "future focus" principle in the most recent New Zealand curriculum document (MOE, 2007, p.9) states that "the curriculum encourages students to look to the future by exploring such significant future focused issues as sustainability, citizenship, enterprise and globalization." The language used here is significant because notions of "globalization" and "enterprise" are dominant concepts employed by neoliberal thinkers. Their use in the same space as "sustainability" and "citizenship" should give some indication of the type of "sustainable citizen" envisioned by the writers of this document.

The acquisition of a particular social identity implies that certain attitudes, behaviours, and values have been transmitted 'successfully". This set of characteristics that constitutes a social identity may seem similar between different discourses but their intent or agenda can be entirely different. For example, it could be argued that conservation of the Earth's resources is equally as important to those persons located on the political right as it is to those on the left. This is the case with the term "sustainable development" which, according to Carruthers, was once counter-hegemonic but is used now "to help legitimize a grand universal project of neoliberal globalization" (Carruthers, 2001, p. 93).

The principles of sustainability in their original sense offer spaces for resistance. It is up to educators to explore these spaces. The key determinant is the teacher's positioning with regard to critical thinking in and about citizenship education. Sometimes the goal of critical thinking may receive token approval by teachers and academics alike, without any comprehensive theoretical understanding of its implications. Using the term "critical thinking" as an all-encompassing and fashionable catch-word, without rigorous academic exploration of what it might mean in practice, may lead to the dominance of an uncritical citizenship transmission tradition in EFS.

While the pedagogical and theoretical tenets of EFS are able to support a critical approach to education, the structural constraints on education in a capitalist society create challenges. Teacher education is an important arena in which to actively promote the development of critical thinking skills. As Kincheloe (2001, p. 196) has argued, teachers who are armed with theoretical and historical understandings will ask good questions of education. For example, they may be able to address the ways in which the language of sustainability has been recreated in the context of "knowledge" that is unequivocally market driven (Giroux, 2001). Giroux observed that we live in a world altered by "hypercapitalism" (2001, p. xxviii), and concluded that schools and universities are suffused with a culture



based on these economic relations.

Our job as educators is not to somehow transfer the "sustainability" concept into the minds and conduct of our students. This is a utilitarian approach to EFS, consistent with a neoliberal agenda that focuses on socializing children into patterns of collective behaviour. If EFS in New Zealand schools and universities is directed toward maintaining and promoting this mainstream value (sustainability) then it necessarily negates a critical pedagogical approach. This problem becomes even more complicated in the case of universities, perhaps even more overtly in Aotearoa / New Zealand where tensions arise between a legally enshrined rationale under the 1990 Education Amendment Act for a university existing as an institution—as a critical conscience of society—and conservative forces of the larger society.

Critical approaches to EFS have also come under scrutiny for the imposition of a *priori* values and ideology. For example, Scott and Oulton (1999, cited in Huckle, 2006) have claimed that the underpinning assumptions of socially critical approaches to EFS preclude it from effective practice because they are too radical to be accommodated in schools. Their suggestion of "multiple approaches unfettered by particular groups' a priori assumptions about ends, means, and theoretical frameworks", does however seem contradictory. All approaches will have particular ideologies, assumptions, theories and values. The advantage of a critical approach is that these elements can be subject to analysis and their underlying agendas exposed.

Critical Literacy: Possibilities in teacher education

This theme of "possibility" in environmental education is taken up by Fien (1993), who argued that teachers' views on human agency and social structure are central to their work. Fien (1993) claimed that critical pedagogy in environmental education aims to develop critical environmental consciousness in students. This includes the ability to comprehend that the entire school curriculum is value laden and the capacity to analyse language patterns in policy documents in order to identify the discourses embodied in them (Grundy, Warhurst, Laird, & Maxwell, 1994).

The development of a critical literacy approach in pre-service teacher education is of particular importance. Pre-service teacher educators of EFS should be engaging students in an exploration that questions whether "the song of sustainable development can really capture the song of the Earth" (Selby, 2006, p. 354). Critical pedagogy does, after all, aim to foster in students the ability to challenge the constructed meanings and values implicit in dominant political rhetoric (Kanpol, 1994, p.94).

According to Lankshear (1997, p. 141) critical literacy practice moves beyond "an autonomous model of literacy" based on reading and writing, encoding and decoding. Rather, a socio-cultural conception of literacy such as that posited by Freire in the 1950s and 1960s reflects a "changing literacies" movement in thinking among critical educators (Lankshear, 1997, p.3). Critical literacy involves deconstruction of *meaning:* "what meanings *are,* where meanings *come from,* how meanings *get fixed,* what *authorizes* particular meanings" (p.3).

A critical literacy approach takes as pivotal the wider socio-historical, economic, and political forces that shape the policy and practice of EFS in Aotearoa New Zealand. It also presupposes an understanding of teacher educators and beginning teachers not as mere technicians to implement a curriculum developed "elsewhere" but as potential critical pedagogues. Both groups should be given the opportunity and support to engage in and develop skills of textual deconstruction of meaning and discourse analysis.

Conclusion

An education that embraces the genuine values of EFS would, by definition, be transformative and educative. Paying attention to the educational dimension of EFS, and in particular the tenet of critical thinking, can help to counter allegations of indoctrination. It also protects EFS from losing its counter-hegemonic agenda. The current dominant "enterprise culture" in Aotearoa / New Zealand, based on global economic competitiveness, is reflected in public schools. It is not a culture, however, that many people in the field of EFS would want to endorse.

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References

Archer, E., & Openshaw, R. (1992). The battle for social studies in New Zealand schools 1942- 1964. In R. Openshaw (Ed.), *New Zealand social studies: Past, present and future* (pp. 49-64). Palmerston North: Dunmore Press.

Ashley, M. (2005). Tensions between indoctrination and the development of judgment: The case against early closure. *Environmental Educational Research, 11*(2),187-189.

Carruthers, D. (2001). From opposition to orthodoxy: The remaking of sustainable development. *Journal of Third World Studies, 18* (2), 93-112.

Chapman, D. (2009). *Big Issues*. Retrieved June 27, 2009, from http://education.massey.ac.nz/massey/depart/education/online/environmental-education/environmental-education_home.cfm

Chapman, D., Flaws, M., & Le Heron, R. (2006). A due diligence report on New Zealand's educational contribution to the UN Decade of Education for Sustainable Development. *Journal of Geography in Higher Education, 30*(2), 281-292.

Cohen, R. (1997). Autonomy, citizenship, the market and education. In D. Bridges (Ed.), *Education, autonomy and democratic citizenship* (pp.61-73). London: Routledge.

Cotton, D. (2006). Teaching controversial environmental issues: Neutrality and balance in the reality of the classroom. Educational Research, 48(2), 223 – 241.

Carruthers, D. (2001). From opposition to orthodoxy: The remaking of sustainable development. *Journal of Third World Studies*, *18* (2), 93-112.

Eames, C., & Cowie, B. (2004). Environmental education in New Zealand schools: Characteristics and achievements. *SET: Research Information for Teachers, 2*, 19-24.

Fien, J. (1993). (Ed.). *Environmental education: A pathway to sustainability. Geelong, Victoria*: Deakin University Press.

Giroux, H. A. (2001). *Theory and resistance in education: Towards pedagogy for the*

opposition. Westport, CN: Bergin & Garvey.

Gough, A. (2006). A long, winding (and rocky) road to environmental education for sustainability in 2006. *Australian Journal of Environmental Education, 22*(1), 71-76.

Grundy, S., Warhurst, J., Laird, D., & Maxwell, T. (1994). Interpreting the curriculum. In E. Hatton (Ed.), *Understanding teaching: Curriculum and the social context of schooling* (pp. 111-128). Marrickville, NSW: Harcourt Brace.

Grainger, A. (2004). Introduction. In M. Purvis & M. Purvis (Eds.), *Exploring sustainable development: Geographical perspectives* (pp. 1-32). London: Earthscan Publications.

Huckle, J. (2006). *Education for sustainable development*. *A briefing paper for the Training and Development Agency in Schools*. Retrieved June 29, 2009, from http://john.huckle.org.uk/download/2708/Education%20for%20Sustainable%20Development%20a%20briefing%20paper%20for%20the%20Teacher%20Training%20Agency.doc

International Union for Conservation of Nature/United Nations Environment Program/World Wide Fund for Nature. (1991). *Caring for the earth: A strategy for sustainable living*. Gland, Switzerland: Author.

Jickling, B. (1997). If environmental education is to make sense for teachers, we had better rethink how we define it. *Canadian Journal of Environmental Education, 2,* 86-103.

Jickling, B., & Spork, H. (1998). Education for the environment: A critique. *Environmental Education Research, 4*(3), 309-327.

Kanpol, B. (1994). *Critical pedagogy: An introduction*. Westport, CN: Bergin & Garvey.

Kincheloe, J. L (2001). *Getting beyond the facts*: *Teaching social studies /social sciences in the twenty first century.* New York: Falmer Press.

Lankshear, C., with Gee, J., Knobel, M., & Searle, C. (1997). *Changing literacies*. Buckingham: Open University Press.

McKeown, R., & Hopkins, C. (2003). EE = ESD: Defusing the worry. *Environmental Education Research, 9*(1), 117-128.

Mappin, M. J., & Johnson, E.A. (2005). Changing perspectives of ecology and education in environmental education. In E. A. Johnson & M. J. Mappin (Eds.), *Environmental education and advocacy*: *Changing perspectives of ecology and education* (pp.1-28). Cambridge: Cambridge University Press.

Ministry of Education. (1999). *Guidelines for environmental education in New Zealand*. Wellington: Learning Media.

Ministry of Education. (2007). *The New Zealand curriculum for English-medium teaching and learning in years 1-13*. Wellington: Learning Media.

Ministry of Education. (2009). *Budget 2009: Education savings*. Retrieved June 1, 2009, from http://www.minedu.govt.nz/theMinistry/Budget/Budget2009/EducationSavings.aspx#NonDepartmental

Newman, M. (2007, November 11). Selling our kids short. *The New Zealand Centre for Political Research*. Retrieved June 29, 2009, from http://www.nzcpr.com/weekly108.htm

Openshaw, R. (1996/1997). Social studies in the New Zealand curriculum: Critical citizenship or crucial cop-out? *Delta, 48* (2), 159-171.

Parliamentary Commissioner for the Environment. (2004). *See change learning and education for sustainability.* Wellington: Author.

Selby, D. (2006). The firm and shaky ground of education for sustainable development. *Journal of Geography in Higher Education, 30*(2) , 351-356.

UNEP-UNESCO. (1978). The Tibilisi Declaration. Retrieved June 26, 2009, from http://education.massey.ac.nz/masey/depart/education/online/environmental-education/about-environmentail-education/the-tibilisi-declaration.cfm

United Nations Conference on the Environment and Development. (1992). *Environmental education for sustainable societies and global responsibility: A citizen's treaty from the NGO Forum of the UNCED*. Rio de Janeiro: Author.

United Nations Educational, Scientific and Cultural Organization. (1975). *The Belgrade Charter*. Retrieved August 10, 2009, from portal.unesco.org/.../47f146a292d047189d9b3ea7651a2b98The+Belgrade+Charter.pdf