

Community-Based Sustainability: Conservation in the Ballarat Region

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Abstract

The discourse of sustainability is promoted internationally, with the United Nations declaring 2005-2014 as a Decade for Education for Sustainable Development. There is discussion concerning the nature, status and significance of Education for Sustainability and its relationship with the somewhat established discourse of environmental education. This debate requires continuing theorising and one approach is to reflect critically on specific examples of sustainability within specific communities. This article seeks to promote further discussion about sustainability, and to contribute to ongoing theorisation about Education for Sustainability, by considering a particular instance—that of environmental sustainability in the Ballarat region of Victoria. The case study suggests that implementation of this local environmental sustainability strategy was dominated by technocratic and individualistic ideologies.

Introduction

There is an international and a national imperative in Education for Sustainability – both the United Nations and the Australian federal government have declared a strong interest in promoting this field and have developed unequivocal supporting policy statements.

We are currently in the second year of the United Nations' Decade for Education for Sustainable Development. Within this context, the United Nations Educational Scientific and Cultural Organisation (UNESCO) states that:

There can be few more pressing and critical goals for the future of humankind than to ensure steady improvement in the quality of life for this and future generations, in a way that respects our common heritage — the planet we live on. As people we seek positive change for ourselves, our children and grandchildren; we must do it in ways that respect the right of all to do so. To do this we must learn constantly — about ourselves, our potential, our limitations, our relationships, our society, our environment, our world. Education for sustainable development is a life-wide and lifelong endeavour which challenges

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individuals, institutions and societies to view tomorrow as a day that belongs to all of us, or it will not belong to anyone. (UNESCO, 2005)

Nationally, the topic An Environmentally Sustainable Australia is National Research Priority Area #1 (Australian Research Council (ARC), 2005). In the Description of Designated National Research Priorities and Associated Priority Goals concern with sustainability is evident in the statement that:

Natural resources have traditionally fuelled our national and regional economies. They have the potential to generate further wealth and employment opportunities in the future. But our natural resources and biodiversity must be used on a sustainable basis so that the benefits continue to be enjoyed by future generations. (ARC, 2005, p. 1)

These discourses in sustainability are clearly based on global concerns, yet in practice sustainability issues are often quite local in their physical expression (Cocklin & Dibden, 2005); a point long recognised by the United Nations. In June 1992 the United Nations Conference on Environment and Development (UNCED) identified important roles for local governments in achieving sustainable development, such as Agenda 21 (LA21) (WCED, 1993).

There are numerous examples of local Australian communities attempting to address environmental sustainability (see Mercer & Jotkowitz, 2000; Cocklin & Dibden, 2005). Nevertheless, although there is substantial commitment to environmental sustainability a number of problems arise with the implementation of some of the ideas. According to Mercer and Jotkowitz (2000) barriers to implementing LA21 include "extremely modest and tokenistic" (p. 175) community consultation and "the lack of effective political power of both local government and the citizenry in terms of influencing what happens at the local level" (p. 176). It appears that the roles played by both local governments and the community in achieving local environmental sustainability need to be critically examined if LA21 is to be implemented as suggested by the UNCED.

In addition, the topic of education for sustainability has been a contested one in academic circles. There has been much debate concerning the nature, status and significance of Education for Sustainability, and its relationship with the somewhat older and more established discourse of environmental education. Some authors (Fien & Trainer, 1993) make a strong case for education for sustainability; some (Jickling, 1992, 2001) reject the notion as internally flawed and inconsistent with his conception of what counts as education; some (Hopkins, Damlamian & Ospina, 1996) seem to reflect an eagerness to reconcile sustainable development with environmental education, promoting the concept of "education for sustainable development".

In light of this debate over the nature and status of education for sustainability, Jickling (2004) poses questions in relation to the rise of the discourse of education for sustainability. From Jickling's (2004) perspective the concepts of sustainability and education for sustainability require continuing theorising and critical review. One way of doing this is to reflect critically on specific practical instances of sustainability within specific communities.

This article seeks to contribute to this discussion about sustainability by contributing to the ongoing theorisation about education for sustainability by considering a particular instance — that of sustainability in the Ballarat region of Victoria. Our assumption here is that insights into the nature of sustainability, as a global concern, may be gained by examining local, current sustainability issues in specific communities.

During the early 1990s the Ballarat community developed an environmental strategy—Ballarat Regional Conservation Strategy (Cotter & Waller, 1991)—which pre-dated international agenda, such as LA21. (Agenda 21 was adopted by more than 178 Governments at the United Nations Conference on Environment and Development (UNCED) held in Rio de Janerio, Brazil in June 1992). Although there have been tangible positive results emerging from the Ballarat community effort we suggest that such outcomes were framed from the least politically contested perspectives. This case study identifies that the promotion of environmental sustainability strategies by local communities (as identified in LA21) may be problematic whilst the dominant perception of environmental issues is technocratic and individualistic ideologies are promoted.

This paper seeks to contribute to the ongoing debate about education for sustainability. We describe how, in a concrete practical instance of sustainability, Ballarat's local authorities encouraged community-based environmental initiatives to identify some of the social and political influences that may have impinged on the implementation of local environmental policies. In addition, we explore some of the implications and challenges for environmental educators. It seems important to do this in light of recent criticisms of the related field of Environmental Education vis-àvis Education for Sustainability which suggest that Environmental Education lacks engagement with social, political and economic considerations – the implication being that Education for Sustainability is an advancement on Environmental Education to the extent it does address these considerations. The case study presented here sheds some light on these assertions.

Ballarat Region Conservation Strategy: A Strategy for Sustainable Living - 1991

The Ballarat region, in western Victoria, is an area of approximately 293 000 square kilometres with a population of approximately 90 000 people (Cotter & Waller, 1991). In 1989 the Ballarat Regional Board for Planning and Development, in developing the Ballarat Region Strategy Plan (Wilson Saver Core Pty Ltd, 1989), identified a need for the "... conservation of significant and man-made [sic] assets of the region" (Wilson Saver Core Pty Ltd, 1989, p. 82). This proposal initiated the production of the Ballarat Region Conservation Strategy (BRCS) (Cotter & Waller, 1991). Preparation of this strategy commenced in May 1990 when the Minister for Planning and Environment and the Ballarat Regional Board jointly agreed to fund preparation of a community-based conservation strategy over a two year period. The Ballarat regional strategy was one of a few Australian examples which demonstrated a co-operative effort by seven local authorities (Low Choy, 2002). Further, Low Choy (2002) considers that the Ballarat strategy was one of a few that addressed ecological principles and sustainability; however this was not unique from other municipalities.

The commencement of the Ballarat project was with the appointment of a project officer who worked with a steering committee of volunteers representing various community groups, State and local authorities. Community involvement was extensive with over 100 people involved in various working groups and, at that time (early 1990s), there was a sense of local optimism about the project, fuelled by the enthusiasm of the Project Officer (Cotter & Waller, 1991).

The agenda for the BRCS was concerned with sustainable development, as is evident in its goal:

... to implement a new approach for our future based on developing a sustainable society that enables its members to achieve a high quality of

life in ways that are **ecologically sustainable**. (Cotter & Waller, 1991, p. 1) (emphasis added)

BRCS was based on *The Nine Principles for Sustainable Living* as presented by the World Conservation Strategy's *Caring for the Earth* (International Union for the Conservation of Nature / United Nations Environment Programme / World Wildlife Fund (IUCN/UNEP/WWF) 1991). These principles were similar to the views expressed in the Tokyo Declaration (WCED, 1990) and there was, at this time, a move to recognise the social and political dimensions of living sustainably:

... hundreds of millions of people struggle in poverty, lacking a tolerable quality of life. One person in five cannot get enough food properly to support an active working life. One quarter of the world's people are without safe drinking water. Every year millions of children die from malnutrition and preventable disease Such conditions are grossly unjust. They also threaten the peace and stability of many countries now, and of the whole world eventually. (IUCN/UNEP/WWF, 1991)

Nevertheless, the BRCS took a much narrower, mainly ecologically focus based on:

- Land management;
- · Streams and catchment management;
- Conserving resources;
- Flora and fauna conservation;
- Using resources wisely; and
- Preserving the past and planning for the future.

This formative step of ecologically positioning the Strategy around ecological restoration, rehabilitation, preservation and "wise use", appeared to evolve from local interpretations of conservation and sustainability which were flavoured by the ecological interests of members of the working parties.

Internationally, the sustainability debate was expanding concern about environmental issues from technical, ecological and conservation foci to encompass broader political, sociological and economic factors (WCED, 1990; IUCN/UNEP/WWF, 1991). Supporters of ecologically sustainable development (ESD) saw its role as addressing *causes* of environmental problems and not just the *symptoms*. In contrast to this emerging international perspective, the Ballarat community interpreted ESD as sustainable development of local natural resources. This dominant local agenda may have been prejudiced by:

- personal interests of the volunteers in developing strategies to endorse their interest in local biotic conservation:
- extent and depth of local expertise in natural sciences;
- relatively high social status and education of working party members; and,
- desire within the working parties for consensus of ideas within the frames of reference of the regional strategy.

The mechanism of forming the working parties, which was a public call for volunteers, was a key step in scoping the content of the local strategy which ultimately had political ramifications. Although the efforts of volunteers must be recognised and rewarded, it appears that self-selection of interested people, undoubtedly with their own agenda, does not necessarily represent a diverse community. As Agyeman (1999/2000, p. 2) suggests, many people with environmental interests "are good on notions of what they perceive as 'environmental quality", but poor...on notions of 'human equality''. It appeared the BRCS did not make the connections between the factors that create

inequalities of power and justice and the processes that encourage environmental degradation.

Direct Action

Underpinning the technical orientation informing the Strategy was a call for direct action based on the assumption that many authorities did not recognise the full extent of their environmental responsibilities. The Strategy was written as a document encouraging "a process for change as much as a document to guide change" (Cotter & Waller, 1991, p. 4). Identifying who was responsible for the environment was seen as a strength of the Strategy with the message that community action was required. Members of the working party saw a role for the BRCS in *directing* practical, action-orientated, community-based activities that would have quantifiable outcomes (e.g. area of weeds removed, number of trees planted).

Community education was seen as the "most important" of the four cornerstones underpinning the document. BRCS suggested that community education encouraged community awareness and ownership of issues and solutions. To address this action-orientated, community-based, approach for community education a role for the individual was identified (Cotter & Waller, 1991, p. 66):

Individual environmental awareness and changes in individual behaviour patterns are a fundamental part of the transition period to a more sustainable future.

Personal environmental responsibility was identified as a keystone for the strategy. Only brief mention was made of any social, economic and political histories that might limit the extent of personal involvement, except the following statement:

... awareness and action on the individual level cannot change the world on its own, these need to be combined with changes to our industrial and agricultural management and economic systems, strong leadership and support from all levels of government. (Cotter & Waller, 1991, p. 66).

Individuals were seen as responsible actors if they became environmentally aware, active and responsible for *their* actions. This approach has been central to one orientation of environmental education (see Hungerford, Peyton & Wilke, 1980). However, such a perspective promotes an individualistic ideology assuming that any study of society should emphasise the individual (Tesh, 1988).

A perspective of environmental education that promotes environmentally responsible behaviour is based on the premise that changes in *personal* behaviour will be *personally* empowering and demonstrate, and should be rewarded within the community as, environmental commitment. The emphasis of this "people-power" orientation is to create social change through a ground swell of local "champions" who are apparently capable of influencing the political processes. However, this approach requires authorities actively seeking substantive community-based change. This "grassroots" approach has popular appeal because some see it as the epitome of democracy. Nevertheless, there are rarely any suggestions identifying how "people-power" can influence local government policy other that at the ballot box.

Ballarat Region Conservation Strategy 1999-2004

The first BRCS (Cotter & Waller, 1991) was revised in 1999 (Ballarat City Council, 1999). The revised document continued to emphasise ecological and technical orientations and wider social and political issues were rarely considered. The later edition maintained individualistic and behaviourist approaches to resolving environmental problems.

The later BRCS was informed by LA21 (WCED, 1993) with interpretations of LA21 replacing the earlier strategy's reference to *The Nine Principles for Sustainable Living*. However, there was only fleeting reference to any social or political perspectives (e.g. role of women, indigenous peoples) and no mention was made of the role of the Ballarat local government in promoting LA21. The revised BRCS stressed an assumed level of authoritative knowledge and technological solutions to problems. For example:

We have the knowledge that our predecessors lacked. Scientists know a great deal about restoring the balance of nature and how to increase productivity without destroying ecosystems. (Ballarat City Council, 1999, p. iii)

There were other unexamined assumptions underpinning the document:

No longer is there such a need to justify the most common environmental principles ... We have now reached the stage where there is a critical mass to achieve accelerated change and to make a real difference. (Ballarat City Council, 1999 p. iii)

However, this statement is contrary to the Australian Bureau of Statistics (2003) who report that interest in the environment has declined since 1992. In the 1999 BRCS there was still an untested assumption that "people-power" could realise political change and positive environmental outcomes. For example, the 1999 BRCS's environmental mantra was: "THINK GLOBALLY — ACT LOCALLY — RESPOND PERSONALLY" (Ballarat City Council, 1999, p. ii) with a call for people to be good citizens by being environmentally responsible:

The onus is on adults to prepare the citizens of tomorrow for responsible decision making in the future ... The role for adults therefore is to model environmentally responsible behaviour ... Caring attitudes to the environment help to develop qualities of good citizenship with an expectation of an improvement in the social environment. (Ballarat City Council, 1999, p. iii-iv)

Notions that "success" depends upon the responsible actions of all citizens bring to mind the concerns expressed by Tesh (1988) about the effect of a tendency to shift responsibility for redress of any social issue primarily to individuals. Tesh refers to this as an individualistic ideology – one which assumes that the proper study of society concentrates on individuals – that the individual is the basic unit of analysis (Tesh, 1988). In discussing the relationship between individualism and health education, Tesh indicates the ideological character of some approaches to research:

Individualistic ideology ... supports a politically conservative predisposition to bracket off questions about the structure of society – about the distribution of wealth and power, for example – and to concentrate instead on questions about the behavior of individuals within that (apparently fixed) structure ... Unhealthy behavior results from individual choice, the ideology implies, so the way to change such behavior is to show people the error of their ways and to urge them to act differently. (Tesh, 1988, p. 161–162)

Assumptions built into this ideological position are that responsibility is ultimately an individual rather than a social or community matter, that improvement of the situation requires finding a way to change human behaviour, and that it is proper for certain people to "show [other] people the error of their ways and urge them to act differently". Such an ideology promotes the concept of elitist knowledge. Of course, such a response in turn implies a hierarchical power relationship: the people who do the showing and urging can only expect to be effective if they are in a relatively more

powerful position than the people whose behaviour is seen as needing to be "more responsible". This individualistic ideology thus ends up "blaming the victim": the social analysis in terms of which some "empowered" people take it upon themselves to urge other relatively "disempowered" people to change their behaviour actually fails to address itself to the very social, historical and political factors which mitigate against changes in behaviour.

The 1999 BRCS's view on environmental education relates to Tesh's (1988) concerns that emphasising so-called responsible environmental behaviour is flawed because:

- the focus is on the individual by pursuing personal variables which are thought to shape individual's environmental behaviour;
- rarely does this approach take into account the historical, social and political contexts that influence environmental activity;
- there is a sense of environmentalism as individualism with commensurate individual agency and responsibility; and
- to do so misrepresents the nature of environmental issues by over-emphasising individual human agency as the key factor.

Robottom and Hart (1993, 1995) argue that individualism and behaviourism promote a deterministic framework endorsing hierarchy and social control by separating those with authority from those subservient to this authority. As Robottom and Hart (1993, p. 42) suggest:

... in a democratic world interested in independent critical thinkers about a range of social, political and (not least) environmental issues, such determinism is contradictory and self-defeating ... the determinism of behaviourism is anathema to independent critical thinking: it does not make sense to try to force people to be independent and critical.

Unfortunately, to date substantive outcomes from the BRCS have been minimal with Ballarat City Council's failure to incorporate many of the proposed actions into corporate management strategies or to participate with the community in implementation of the Strategy.

What can be Learnt from this Case Study?

Some of the issues that this case study raises concerning the development of the BRCS are:

- does the emphasis within the strategy for individuals to modify *their* behaviour in order to demonstrate "environmentally responsible behaviour" to others actually bring about change?;
- are members of the working parties biased toward ecological rather than social perspectives in their attempts to seek resolutions?;
- are social and political agendas implicit within ESD and LA21, such as community empowerment and participation, adequately addressed?; and
- is there adequate power sharing between the community and authorities?

It must be stressed that our analysis of both the 1991 and 1999 BRCS should not be seen as criticism of the efforts of the working parties because there have been some positive outcomes from the strategies (e.g the Linear Network of Communal Spaces project (Ballarat City Council, 2005), and formation of the Ballarat Regional Seed Bank and Ballarat Biodiversity Network). Nevertheless, although extensive community effort went into producing policy documents, there has actually been little critique of the culture of power and authority, which was retained by local government. This

outcome appears in contrast to the basis of LA21, which promoted a re-orientation for governance:

As the level of governance closest to the people, they [local governments] play a vital role in educating, mobilizing and responding to the public to promote sustainable development. (UN Department of Social and Economic Affairs, 2003)

It appeared in this case that local government was reluctant to relinquish its control arguing that it was ultimately responsible to ratepayers for local governance. Community groups were identified as only advisory to authorities and not considered as policy makers. The process of establishing community-based processes to develop policy, although popular, may promote romantic notions of democracy and participation, but fail to acknowledge that there were few mechanisms available for communities to interact as partners and collaborators with government. As Syme (1992) and Mercer and Jotkowitz (2000) suggest, participation processes organised by local government can often be tokenistic if the issue of power is not central to any political transactions.

Ballarat City Council emphasised that it *listened* to advisory groups and was supportive of environmental activities organised by the community. However, this leaves the community in a reactive, as opposed to participative, role. Actions as outlined in the Strategy, although endorsed by council, were rarely considered, particularly if such action appeared to conflict with local government's dominant economic development agenda.

The lack of a critical perspective on the part of the community of their role, and of the role of local government in environmental issues, tends to promote conservative approaches to developing environmental strategies. The assumptions would be that *suitable* environmental strategies would be those accepted by both community and authorities without contest. Such assumptions encourage non-confrontational approaches to policy development which maintain the established hierarchy of power.

In this case there has not been any demonstrated shift from the traditional, authoritative, power-base — nor was this probably identified as the justification for involving the community in the first place. Perhaps the outcomes (maintenance of the political *status quo* and promotion of behaviourist and individualistic ideologies) were expected as actors played out their *expected* social roles which were politically and historically framed by a dominant social paradigm emphasising the existing hierarchy.

Development of environmental responsibility by promoting changes in the individual's behaviour provides avenues for local government to excuse itself from its social responsibilities. Authorities can become observers of community (in)action more than engaged partners facilitating the community in what is essentially a political process. Such a situation for local government means that any change it endorses is used to exemplify effective government-community partnerships, but if the community's desire for change clashes with the authority's dominant agenda then maintenance of power by those in authority is seen by them as an example of rational governance.

Environmental issues will often remain locally contentious and unresolved whilst there is a lack of appreciation of the political, as differentiated from the pragmatic, purposes of promoting community activity. However, it must be noted that there is a social cost to this outcome. If local authorities wish to engage and participate with their community there must be an appreciation of the social, political and historical complexities that embed people within local issues.

It must be recognised that participation is an inherently political process (Sharp, 2002). Failure to value the interests, aspirations and efforts of the wider community may

lead to exhaustion of participants who battle tirelessly, but often in vain, to challenge entrenched ideas framed by resistant hierarchies. In smaller regional communities the end result may be apathy towards community consultation and volunteer burnout, which Barr and Carey (1992) suggest is a result of:

- a realisation that an incapacity to challenge existing power structures can lead to their reinforcement;
- a tendency for groups to reinforce traditional and inward-looking viewpoints;
- a lack of long-term institutional support; and
- a realisation that community exclusion can be real and important.

This cautionary tale outlined here provides additional evidence supporting these conclusions.

Conclusion

Environmental sustainability has become the *lingua franca* for governments in Australia (see for example, Liverpool City Council, 2004; Department of Environment and Heritage (DEH), 2004, 2005a; Department of Sustainability and Environment (DES) 2005) and has infiltrated debates in environmental education with promotion of numerous initiatives encompassing Education for Sustainability (Fien & Trainer, 1993; Hopkins, Damlamian & Ospina, 1996; DEH, 2005b). In contrast, Jickling (2001, 2004) expresses his concern that Education for Sustainability may be predicated on promotion of a particular set of values, a direction that appears contrary to encouraging a sense of critical thinking in education.

Education for Sustainability appears a worthy goal, especially considering the evidence in the Australia State of the Environment Report 2001 (DEH, 2004) of a decline in Australia's environment; however Education for Sustainability is often framed by individualistic behaviour modifications. This directive is problematic unless there is recognition that environmental issues are politically framed:

... one thing we do know for sure is that environmental problems are political, based in government support of corporate interests ... Although hundreds of people attempt to take action everyday, there are powerful and even brutal counterveiling forces which easily bring about defeat and thereby instil fear, apathy and the sense that nothing can be done ... heaping more and more information, without the recognition of what people already know and have to offer, on to people's heads leads unnecessarily to resistance and green fatigue. (Clover, 2002, pp. 321–322).

Connell et al. (1999) and Thiekling and Moore's (2001) evidence of "action paralysis", that is, the inability of young people to respond to growing environmental concerns, appears to concur with Clover's (2002) concern about "green fatigue". Nevertheless, in this case we identified that the initial community awareness of environmental problems, expressed as passion to create change, was evident within some sections of the Ballarat community. Our story corroborates Selman and Parker (1999) who found that "LA21 may have attracted some remarkably dedicated volunteers and able professionals, but it has a long way to go before the hearts and minds of the majority are truly won" (p. 59).

We suggest that there is a role for community-based environmental education to challenge existing and emerging political frameworks (including those associated with Education for Sustainability), which if they become institutionalised and resistant to change may mean that outcomes, if any, will only underpin and possibly reinforce a status quo. As Clover (2002, p. 322) suggests, the "pedagogic and the political must be

intertwined. And pedagogic choices can implement political objectives". Therefore, if Education for Sustainability is to have some meaning for communities the political consequences of community-based environmental education need to be continuously deliberated.

Keywords: LA21; environmental education; sustainability; local government; Ballarat.

References

- Agyeman, J. (1999/2000). Local sustainability: Balancing quality and equality? Australian Journal of Environmental Education, 15/16, 1-7.
- Australian Bureau of Statistics (2003). Environment: Environmental views and behaviour. Retrieved June 5, 2005, from http://www.abs.gov.au/ausstats/abs@.nsf/Lookup/B188426A2452BF4BCA256CAE001599BD
- Australian Research Council (2005). Priority areas for ARC Funding. Retrieved February 22, 2006, from http://www.arc.gov.au/grant_programs/priority_areas.htm
- Ballarat City Council (1999). Ballarat region conservation strategy: A strategy for sustainable living, Ballarat. Retrieved May 19, 2005, from http://www.ballarat.vic.gov.au/ConservStrat/index.html
- Ballarat City Council (2005) City of Ballarat: The LINCS expansion project. Retrieved February 23, 2006, from http://www.ballarat.vic.gov.au/Page/Page.asp?Page_Id=954&p=1
- Barr, N., & Carey, J. (1992). Greening a brown land. Melbourne: Macmillan Education Australia Pty Ltd.
- Clover, D. (2002). Transversing the gap: Concientización, educative-activism in environmental adult education. *Environmental Education Research*, 8(23), 315–323.
- Cocklin, C., & Dibden, J. (Eds.) (2005). Sustainability and change in rural Australia. Sydney: UNSW Press.
- Cotter, B., & Waller, H. (Eds.) (1991). Ballarat region conservation strátegy: A strategy for sustainable living. Ballarat: Ballarat Regional Board.
- Connell, S., Fien, J., Lee, J., Sykes, H., & Yenken, D. (1999). If it doesn't directly affect you, you don't think about it: A qualitative study of young people's environmental attitudes in two Australian cities. *Environmental Education Research*, 5(1), 95–114.
- Department of Environment and Heritage (2004). Australia state of the environment 2001, Report. Retrieved June 6, 2005, from http://www.deh.gov.au/soe/2001/
- Department of Environment and Heritage (DEH) (2005a). Ecologically sustainable development. Retrieved June, 6, 2005 from http://www.deh.gov.au/esd/
- Department of Environment and Heritage (2005b). Achievements in environmental education. Retrieved June 6, 2005, from http://www.deh.gov.au/education/achievements.html
- Department of Sustainability and Environment (2005). Our environment, our future: Victoria's environmental sustainability framework. Retrieved June 6, 2005, from http://www.dse.vic.gov.au/DSE/nrence.nsf/LinkView/C50F9AEFF496CEA8CA256FE800232FE1E2176756455B21FFCA256E57007C82CF
- Fien, J., & Trainer, T. (1993). Education for sustainability. In J. Fien (Ed.), *Environmental education:* A pathway to sustainability (pp. 11–23). Geelong, Victoria: Deakin University.
- Hopkins, C., Damlamian, J., & Ospina, G. (1996). Evolving toward education for sustainable development: An international perspective. *Nature and Resources*, 32(3), 2–13.

- Hungerford, H., Peyton, B., & Wilke, R. (1980). Goals for curriculum development in environmental education. *Journal of Environmental Education*, 11(3), 42–7.
- International Union for the Conservation of Nature / United Nations Environment Programme / World Wildlife Fund (IUCN, UNEP and WWF) (1991). Caring for the Earth. Gland: International Union for the Conservation of Nature. Retrieved February 23, 2006, from http://coombs.anu.edu.au/~vern/caring/caring.html
- Jickling, B. (1992). Why I don't want my children to be educated for sustainable development. Journal of Environmental Education, 23(4), 5-8.
- Jickling, B. (2001). Environmental thought, the language of sustainability, and digital watches. *Environmental Education Research*, 7(2), 167–180.
- Jickling, B. (2004). Educating for sustainability. In I. Robottom (Ed.), *Trends and issues in environmental education* (pp. 1–9). Geelong, Victoria: Deakin University.
- Liverpool City Council (2004). Sustainability framework: Sustaining Liverpool. Retrieved June 6, 2005, from http://www.liverpool.nsw.gov.au/scripts/viewoverview_contact.asp?NID=4181
- Low Choy, D. (2002). Collaborative partnerships for sustainable outcomes. Retrieved January 18, 2006, from http://www.regional.org.au/au/soc/2002/4/lowchoy.htm
- Mercer, D., & Jotkowitz, B. (2000). Local Agenda 21 and barriers to sustainability at the local government level in Victoria, Australia. Australian Geographer, 31(2), 163-181
- United Nations Department of Economics and Social Affairs: Division of Sustainable Affairs (2003). Local authorities initiatives support of Agenda 21. Retrieved June 6, 2005, from http://www.un.org/esa/sustdev/documents/agenda21/english/agenda21chapter28.htm
- Robottom, I., & Hart, P. (1993). Research in environmental education: Engaging the debate. Geelong, Victoria: Deakin University Press.
- Robottom, I., & Hart, P. (1995). Behaviourist EE research: Environmentalism as individualism. *Journal of Environmental Education*, 26(2), 5–9.
- Selman, P., & Parker, J. (1999). Tales of local sustainability. Local Environment, 4(1), 47–60.
- Sharp, L. (2002). Public participation and policy: Unpacking connections on one UK Local Agenda 21. Local Environment, 7(1), 7–22.
- Syme, G. (1992). Where and when does participation count? In M. Munro (Ed.), Citizen participation in Government (pp. 78–98). Sydney: Hale and Iremonger.
- Tesh, S. (1988). Individualism and science. In S. Tesh (Ed.), *Hidden arguments: Political ideology and disease prevention policy*. New Brunswick, New Jersey: Rutgers University Press.
- Thielking, M., & Moore, S. (2001). Young people and the environment: Predicting ecological behaviour. Australian Journal of Environmental Education, 17, 63-70.
- United Nations Educational Scientific and Cultural Organisation (UNESCO) (2005). Education for sustainable development. Retrieved June, 6, 2005, from http://portal.unesco.org/education/en/ev.php-URL_ID=23279&URL_DO=DO_TOPIC&URL_SECTION=201.html
- Wilson Sayer Core Pty Ltd. (1989). Ballarat region strategy plan: Draft. Melbourne: Wilson Sayer Core Pty. Ltd., Planning and Development Consultants / Travers Morgan Pty. Ltd. Transport and Management Consultants.
- World Commission on Environment and Development (WCED) (1990). Our common future. Melbourne: Oxford University Press.
- World Commission on the Environment and Development (WCED) (1993). Agenda 21 sustainable development action program: Rio declaration on the environment and development. Rio de Janeiro, Brazil: United Nations, Conference on the Environment and Development.