Studying Sustainable Development: Problems and Possibilities

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Popularization of the term "sustainable development" and speculation about its role in education poses problems for educators. Although such programs as "Learning for a Sustainable Future" in Canada have quickly embraced this concept and made it the object of their educative efforts, it is far from clear that these initiatives are appropriate. In explaining why I do not want students to be "educated for sustainable development," I make two points. First, I claim that it is inappropriate to plan and implement curricula without adequate conceptualization of central concepts. In this case, "sustainable development" is fraught with imprecision. Second, confusion arises when little *a priori* thought is given to the concept of education. Thus, I discuss the incompatibility between educating "for sustainable development" and the broader concept of education. In conclusion, I propose alternative, and more educationally justifiable, approaches to studying sustainable development.

Le concept de "développement durable," qui est de plus en plus répandu, et les spéculations sur son rôle dans l'éducation posent des problèmes aux éducateurs. Bien que des programmes canadiens comme "Learning for a Sustainable Future" se soient empressés d'adopter ce concept et d'en faire l'objectif de leurs efforts en matière d'éducation, il n'est pas du tout évident que ces initiatives sont pertinentes. L'auteur expose les deux raisons pour lesquelles il s'oppose à ce que l'éducation donnée aux élèves vise un "développement durable." D'abord, on ne doit pas planifier et mettre en oeuvre des programmes sans une conceptualisation adéquate des notions clés. Or, la notion de "développement durable" manque tout à fait de précision. Ensuite, on voit surgir beaucoup de confusion lorsqu'on n'a pas suffisamment réfléchi *a priori* au concept de l'éducation. L'auteur fait état de l'incompatibilité entre une éducation pour un "développement durable" et une conception plus vaste de l'éducation. Il conclut en proposant d'autres façons d'envisager l'étude d'un développement durable qui seraient plus pertinentes du point de vue de l'éducation.

E. F. Schumacher, in his widely read book *Small is Beautiful* (1973), raises doubts about the efficacy of Western education. Despite widespread belief in education as the key to resolution of our problems, and despite vast amounts of energy and resources devoted to education, Schumacher points out that Western civilization remains in a state of permanent crisis. The common answer, he suggests, is that we must provide more and better education. In spite of our efforts and such rhetoric, he observes, the quality of the education provided remains suspect.

Following Schumacher's observations it is easy to find examples of crisis-inspired or problem-driven forms of education. Consider, for example: environmental education, conservation education, peace education, global education, development education, and AIDS education, to name a few. We also have "education for sustainable development" and, in Canada, the establishment of the Sustainable Development Education Program in 1991. These examples reflect widespread beliefs that education is somehow the key to resolution of social problems; this tendency is of concern to educators. To highlight areas of concern, I examine problems and possibilities associated with the relationship between sustainable development and education.

Although not a new idea, "sustainable development" became an important term during the 1980s. Both the *World Conservation Strategy* (International Union for the Conservation of Nature, 1980) and the Brundtland Commission's report, *Our Common Future* (World Commission on Environment and Development, 1987), have done much to popularize this idea. More recently, world leaders gathered at Rio in June 1992 to discuss the implementation of "sustainable development." For these reasons alone, it warrants our serious attention.

Few would dispute the need for behavioural changes leading to more effective mitigation of environmental problems, but popularization of the term "sustainable development" and speculation about its role in education can be problematic for educators. To illustrate, I explain why I do not think that students should be "educated for sustainable development." In so doing, I make two points. First, I claim that it is inappropriate to plan and implement curricula without adequate conceptualization of central concepts. In this case, "sustainable development" is imprecise. By the 1990s, "sustainable development" had become for many a vague slogan, a bold platitude, susceptible to manipulation and deception. For some it is logically inconsistent. Others are concerned that efforts to implement sustainable development will obscure understanding of the economic, political, philosophical and epistemological roots of environmental issues, and adequate examinations of social alternatives. This raises questions about the idea that anyone should "educate for" such a thing in the first place.

Second, confusion arises when little *a priori* thought is given to the broader concept of education. This concern arises, in part, from my observations of a research seminar held during a conference hosted by the North American Association for Environmental Education in 1990. Amid discussions of quantitative, qualitative, and action research, talk about conceptual analysis was conspicuous by its absence. The lack of attention to philosophical issues of this kind has impeded the development of environmental education. It has also led to the emergence of such surrogates as sustainable development education. Since this is a matter of considerable importance, I examine the relationship between education and sustainable development, particularly in the context of the phrase "education for sustainable development" and implied by the term "sustainable

development education." I argue that these constructions exemplify a conceptual muddle that frequently engulfs well-meaning educators. These two concerns are of course related. It is precisely the lack of attention to clear analysis of the concepts central to environmental education that allowed the expression and proliferation of such questionable ideas. I conclude by proposing that more careful conceptualization of the educational task at hand will lead to alternative, and more educationally justifiable, approaches to studying sustainable development.

It seems peculiar, if not logically incoherent, to speak of sustainable development education in a way inconsistent with a broader concept of education. It is important to understand, however, that such concepts as "education" and "sustainable development education" are abstractions, or ideas describing various perceptions. Further, understanding of concepts occurs through the identification of those qualities apparently central to their meaning. For example, understanding the concept "table" or what constitutes "tableness" would occur when it is clear what qualities tables have in common. Similarly, one can come to some understanding of "education" when one identifies those qualities apparently central to the idea of "being educated." Analysis can, therefore, be described as attempts to identify the most useful criteria to delineate the concept in question.

Whereas studying how a word functions provides some understanding about the enterprise or phenomenon it represents, the analysis remains an interpretation of an abstraction in peoples' minds. It is a mistake to think of concepts as objects or concrete entities; they are nothing more than conventional signs or symbols. For this reason the idea of a true, correct, or perfect statement about a concept is implausible. Analysis of concepts is essentially a dialectical business and such analyses are in constant need of re-examination and clarification (Wilson, 1969).

These points can be illustrated by attempting to identify some of the criteria useful in describing the "educated person." For example, we might ask ourselves if acquisition of knowledge is a necessary condition. Many would affirm this, claiming we would not normally say that someone is educated but does not know anything. Still, although the dissemination of knowledge is an important function of schools, we might continue our analysis by asking if the accumulation of mere facts and disconnected information is enough. Although my son, at nine years of age, could go to a map of the world and identify an astonishing number of countries, this was hardly sufficient to convince me that he was educated. We expect the educated person to have some understanding of the relationships between these bits of information, enabling him or her to make some sense of the world; the educated person should have some understanding about why a relationship exists. We might also wonder if the ability to think critically is a necessary criterion for the "educated person." Again, we would expect to find considerable agreement; we would be reluctant to say that a person was educated if we judged that he or she could not think for him or herself.

Although abbreviated, this analysis provides a glimpse of the general approach taken in this kind of research. The philosophically minded person thus attempts to find out which of the possible criteria are necessary. It is important to note that this analysis cannot provide a definitive or complete answer, but only a collection of logical arguments of greater or less merit, a point frequently misunderstood.

This preview of conceptual analysis also identifies some criteria useful for understanding the term "education". Having identified such essential criteria, in this case the acquisition of knowledge, understanding, and the ability to think for oneself, I can now introduce the next task. This is to examine the implications logically following from use of the concept and to see if application of the term in particular instances is consistent with those essential criteria teased out during analysis. Although the analysis of education provided here is by no means complete, the criteria proposed are sufficient to illustrate this task. At the same time I consider the adequacy of "educating for sustainable development."

Although such concepts as "education" must be examined carefully, the same can be said for "sustainable development." For example, we are reminded (Slocombe & Van Bers, 1991) that this term is only a concept and that it is characterized by a "paucity of precision" (p. 11). Frequently researchers acknowledge that there is no agreement about an overall goal for "sustainable development" (e.g., Disinger, 1990; Huckle, 1991; Orr, 1992; Rees, 1989). Analysis of the term has not yet identified sufficient criteria to elucidate common meaning and coherence. Rather, as Slocombe (1993) suggests, the complexity of sustainable development has led to a bewildering variety of detailed conceptions of what is required to achieve it.

It is also possible that that conceptual coherence cannot be achieved. For British educator John Huckle (1991), the term "sustainable development" has entered the dialectic characterizing modern environmentalism. For him, it has taken different, and possibly irreconcilable, meanings for technocentrists and ecocentrists. According to this view, the term is contested and its shared understanding is rendered impossible by inherent contradictions arising from these divergent worldviews. Environmental educator John Disinger (1990) reinforces these doubts: "To some, the term sustainable development is an oxymoron — a self-contained non sequitur between noun and modifier" (p. 3). It appears that there are those who are troubled by questions of logical consistency when "sustainable" is juxtaposed against "development" (e.g., Livingston, 1994; Padua, 1993). If such inconsistency is borne out, the conceptual muddle surrounding "sustainable development" will be perpetuated.

The observations reported in the previous two paragraphs accentuate the need for philosophical research, particularly conceptual analysis. Clarifying common understandings of "sustainable" and "development" and examining the logical coherence of their association will help us to assess the usefulness of "sustainable development." Meanwhile, disagreement exists. The implication of this for edu-

cators was foreshadowed by planner William Rees (1989), who argued that a prerequisite to developing acceptable policies and plans for sustainable development is a satisfactory working definition of the concept. Similarly, it seems equally improbable that we can accept any educational prescription in the absence of an adequate conceptualization of "sustainable development." To borrow an analogy, "the situation seems to be parallel to someone wanting to be a shoplifter while not knowing what 'shoplifting' means" (Barrow & Woods, 1988, p. 8). It therefore seems unlikely that I should want anyone to educate students for sustainable development, or plan sustainable development curricula, when it is not clear what on earth it is that they are aiming for.

If, however, an adequate conceptualization of "sustainable development" were advanced, we should still be concerned with the educational appropriateness of aiming for it. Despite such misgivings there does appear to be considerable momentum amongst environmental educators who wish to promote "education for sustainable development." For example, John Disinger in his article "Environmental Education for Sustainable Development?" (1990) discusses the development of this momentum in North America. Noel Gough (1991) suggests that much environmental education in Australia is concerned with land protection and is often associated with "conservation for sustainable development." The United Nations Educational, Scientific, and Cultural Organization together with the United Nations Environment Programme (UNESCO-UNEP) has looked to environmental education as a vehicle to promote "training, at various levels, of the personnel needed for the rational management of the environment in the view of achieving sustainable development" (UNESCO-UNEP, 1988, p. 6). And the United Nations, in its frequently lauded "Agenda 21" (1992), advocates education to promote sustainable development.

In Canada the National Round Table on the Environment and the Economy (NRTEE) established the Sustainable Development Education Program (SDEP) and charged it with national responsibilities for fostering implementation of environmental education. An examination of the discussion paper (SDEP, 1992) describing its rationale reveals several interesting points. First, education initiatives are subsumed by the concept of sustainable development and the SDEP is identified as one of the "new partnerships for education for sustainable development" (p. 2). Second, "Partners will help to define the objectives, develop the resources needed to support teachers and design curricula strategies for education for a sustainable future" (p. 3). Finally, its guiding principles include the development of "attitudes supportive of sustainable development through a process of animating meaningful change within the formal education system in Canada" (p. 5).

The Sustainable Development Education Program is now known as "Learning for a Sustainable Future" (LSF). The authors, not unresponsive to criticism, have dropped from the title "education" and "development." Although this move may have been designed to deflect superficial criticism, it is clear that assumptions

about the relationship between "education" and "sustainable development" remain intact. The title of the program's working document was *Developing a Cooperative Framework for Sustainable Development Education* (LSF, 1993a). Further, it reveals objectives consistent with their earlier discussion paper (SDEP, 1992) in quoting from the United Nations Agenda 21:

Education is critical for promoting sustainable development. . . . Both formal and non-formal education are indispensable to changing people's attitudes so that they have the capacity to assess and address their sustainable development concerns. (United Nations, quoted in LSF, 1993a, p. 4)

Sustainable development remains the object of its endeavours and it appears to remain content in altering peoples attitudes such that they direct their attention toward the achievement of this end — all in the name of education.

A revised version of *Developing a Cooperative Framework for Sustainable Development Education* (LSF, 1993b) was completed in late 1993, with the document further cleansed of difficult passages, including the quotation from "Agenda 21." Nevertheless, its authors still speak about "planning necessary to integrate concepts and principles of sustainable development in all subject matters" (p. i), implementing "programs for sustainable development education" (p. ii), and "what knowledge, skills and values are central to education for sustainable development" (p. 3). Although the LSF program claims educators "in every province and territory have shown their interest in education for sustainable development" (LSF, 1993a, p. 5), it makes no mention of criticisms it has encountered or those who reject their premise and choose not to become partners. Further, references critical of "sustainable development education" are noticeably absent from the bibliography.

This momentum directed toward the promotion of "education for sustainable development" is not, however, without anomalies that should raise our suspicions. Disinger (1990) reports that many environmental educators have difficulty identifying their own positions, particularly with reference to the ecocentric/anthropocentric continuum. He claims that educators generally place greater emphasis on "wise use" than on "non-use" perspectives. Although the implications of these observations are not perfectly clear, there is the suggestion that teachers have sought to identify their preferences in order to determine what perspectives to espouse. Noel Gough (1991) is more explicit. According to his view, environmental education has been overcome by promoters of instrumental land values frequently associated with "sustainable development." For others "sustainable development" represents a particular ideology (Livingston, 1994; McClaren, 1993). And, Canadian educator Milton McClaren (1993) worries that education, which is essentially anti-ideological, is misrepresented with combinations of words like "education for sustainable development." Does this mean that education has frequently become a promotional tool? It seems thus far that

many educators implicitly or explicitly assume that their task, "education for sustainable development," involves the advancement of a particular agenda or ideology.

Inspection of comments in *Our Common Future* (World Commission on Environment and Development, 1987) illustrates this problem:

Sustainable development has been described here in general terms. How are individuals in the real world to be persuaded or made to act in the common interest? The answer lies partly in education, institutional development, and law enforcement. (p. 46)

This statement, similar to the earlier-mentioned mission "To develop attitudes supportive of sustainable development" (SDEP, 1992, p. 5), and Agenda 21's "promoting sustainable development" (United Nations, 1992), suggests that sustainable development is in the common interest and the public must be persuaded, or made, to pursue this end. Further, education can contribute to the process of persuasion or coercion required. This raises the question: Should education aim to advance a particular end such as sustainable development? Is it the job of education to make people behave in a particular way?

To seek answers to these questions, consider first the idea that environmental education should promote "training for the rational management of the environment in the view of achieving sustainable development" (UNESCO-UNEP, 1988, p. 6). As I have argued elsewhere (Jickling, 1991), training is concerned with the acquisition of skills and abilities, and frequently has instrumental connotations.[1] We generally speak of training for something; we might be training for football or training for work in a trade. Further, training tends to be closely associated with the acquisition of skills perfected through repetition and practice and not necessarily involved with understanding. Thus, the capacity for rational management is inconsistent with the means suggested for its achievement.

By contrast, we speak of a person being more or less well educated, indicating a broader and less determinate understanding that transcends immediate instrumental values. We would not normally speak of educating "for" anything. To talk of "educating *for* sustainable development" is more suggestive of an activity like training or preparation for the achievement of some instrumental aim. This position seemingly rests on at least two assumptions: first, that sustainable development is a clear and uncontested concept; and second, that education is a tool to be used for its advancement. The first point is clearly untrue and should be rejected; there is considerable scepticism about the coherence and efficacy of the term. The second assumption can also be rejected as the prescription of a particular outlook is antithetical to the development of autonomous thinking.

As seen earlier, education is concerned with enabling people to think for themselves. Education "for sustainable development," education "for Deep Ecology" (Drengson, 1991), or education "for" anything else is inconsistent with that criterion. In all cases these phrases suggest a pre-determined mode of

thinking to which the pupil is expected to subscribe. Clearly, I would not want students to be "educated for sustainable development." The very idea is contrary to the spirit of education. I would rather students were "educated" than conditioned to believe that "sustainable development" constitutes a constellation of correct environmental views or that hidden beneath its current obscurity lies an environmental panacea.

Having argued that we should not educate *for* sustainable development, however, it is quite a different matter to have students study this concept. World leaders met in 1992 at the United Nations Conference on Environment and Development (UNCED) to discuss, among other things, the relationship between economic growth and environmental management frequently captured by the term "sustainable development." One cannot ignore such a phenomenon, since it is not often that such leaders agree on a common agenda. Further, I believe that examination of this concept can justifiably be included as content in any environmental studies program. Where education is needed most, in examining day-to-day realities, is where it is often not found. Students need to be prepared to study those issues that matter most to them and to be given practice in making judgements about them. And, "sustainable development" is an important part of their reality.

Studying sustainable development can also provide a context for examining a number of other important issues. For example, the terms "sustainability" and "development" are in themselves important, yet evolving. As such, they are in constant need of re-examination and evaluation (e.g., Livingston, 1994; Padua, 1993; Shiva, 1990). Further, questions about such topics as ownership and common property resources, international and intergenerational equity, and qualitative versus quantitative growth are significant (Slocombe & Van Bers, 1990) and can arise from studying interpretations of sustainable development. Perhaps, as one educator put it, "the best that could come of sustainable development, in educational terms, is the fostering . . . of a broad mix of new concepts" (Slocombe, 1993).

When so many environmentally aware politicians favour "sustainable development," one suspects that they do not understand what it means (Cairncross, 1991). This should give rise to a number of other questions. Although I would like my students to know about the arguments supporting this concept and to attempt to clarify it, I would also like them to know that "sustainable development" is contested, and I want them to be able to evaluate that criticism and participate in it if they perceive a need. I want them to be able to examine critically the assumptions that provide foundations for various conceptions of this term. I also want them to have the opportunity to examine the implications arising from alternative assumptions. I want them to realize that there is a debate going on between a variety of stances—for instance, between adherents of an ecocentric worldview and those who adhere to an anthropocentric worldview. I

want my students to be able to participate intelligently in that debate. To do so they will need to be taught that these various positions also constitute logical arguments of greater or less merit, and they will need to be taught to use philosophical techniques to aid their understanding and evaluation of them. They will need to be well educated to do this.

For we who are educators the task is not to "educate for sustainable development." If we wish students to think intelligently about environmental issues it simply does not make sense to allow our educative efforts to be subsumed by such prescriptive thinking. In a rapidly changing world we must enable students to debate, evaluate, and judge for themselves the relative merits of contesting positions. There is a world of difference between these two possibilities. The latter approach *is* about education; the former *is not.*

A certain amount of crisis might be inevitable in education and there will always be demands that educators should respond to social issues. Failure to plan responsive curricula within a well-articulated and justified concept of education can, as illustrated, lead to a conceptual muddle. By this I do not mean to imply that there is a single "right" conception of education. Rather, I suggest that when such arguments are made explicit they can be better evaluated. Further, it seems reasonable to expect that by making one's premise clear the likelihood of establishing coherence between "education" and the socially responsive curricula is increased. Failure to do so can, as I have attempted to illustrate, lead to the proliferation of dubious ideas and inadequate forms of education.

NOTE

[1] I do not wish to suggest that training is not important to schooling or, for that matter, education. Certain kinds of training can be pre-requisite to, and necessary for, the achievement of education.

REFERENCES

Barrow, R. St. C., & Woods, R. G. (1988). *An introduction to the philosophy of education* (3rd ed.). London: Routledge.

Cairncross, F. (1991). *Costing the earth.* London: Economist Books.

Disinger, J. F. (1990). Environmental education for sustainable development? *Journal of Environmental Education, 21*(4), 3–6.

Drengson, A. R. (1991). Introduction: Environmental crisis, education, and deep ecology. *The Trumpeter, 8*(3), 97–98.

Gough, N. (1991). Narrative and nature: Unsustainable fictions in environmental education. *Australian Journal of Environmental Education, 7,* 31–42.

Huckle, J. (1991). Education for sustainability: Assessing pathways to the future. *Australian Journal of Environmental Education, 7,* 43–62.

International Union for the Conservation of Nature. (1980). *World conservation strategy.* Gland, Switzerland: Author.

Jickling, B. (1991). Environmental education and environmental advocacy: The need for a proper distinction. In R. Lorimer, M. M'Gonigle, J.-P. Revéret, & S. Ross (Eds.), *To see ourselves/*

To save ourselves: Ecology and culture in Canada (pp. 169–176). Montreal: Association for Canadian Studies.

Learning for a Sustainable Future [LSF]. (1993a). *Developing a cooperative framework for sustainable development education* (working document). Ottawa: LSF.

Learning for a Sustainable Future [LSF]. (1993b). *Developing a cooperative framework for sustainable development education.* Ottawa: LSF.

Livingston, J. A. (1994). *Rogue primate: An exploration of human domestication.* Toronto: Key Porter Books.

McClaren, M. (1993). Education, not ideology. *Green Teacher, 35,* 17-18.

Orr, D. W. (1992). *Ecological literacy: Education and the transition to a postmodern world.* Albany: State University of New York.

Padua, S. M. (1993). Sustainability vs sustainable development. *Green Teacher, 35,* 13-16.

Rees, W. (1989). *Defining "sustainable development"* (Research Bulletin). Vancouver, BC: University of British Columbia, Centre for Human Settlements.

Schumacher, E. F. (1973). *Small is beautiful.* New York: Harper & Row.

Shiva, V. (1990). Development as a new project of western patriarchy. In I. Diamond & G. Ornstein (Eds.), *Reweaving the world: The emergence of eco-feminism* (pp. 189–200). San Francisco: Sierra Club Books.

Slocombe, D. S. (1993). Getting to the heart of sustainable development. *Green Teacher, 35,* 10-12.

Slocombe, D. S. & Van Bers, C. (1991). Seeking substance in sustainable development. *Journal of Environmental Education, 23*(1), 11-18.

Sustainable Development Education Program [SDEP]. (1992, April). *The rationale for a sustainable development education program* (Revised Discussion Paper). Ottawa: SDEP.

United Nations. (1992). *United Nations Conference on Environment and Development: Agenda 21.* Rio de Janeiro: UNCED.

United Nations Educational, Scientific, and Cultural Organization/United Nations Environment Programme [UNESCO-UNEP]. (1988). *International strategy for action in the field of environmental education and training for the 1990s.* Paris: UNESCO-UNEP.

Wilson, J. (1969). *Thinking with concepts.* Cambridge: Cambridge University Press.

World Commission on Environment and Development. (1987). *Our common future.* Oxford: Oxford University Press.

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