# If Environmental Education Is to Make Sense for Teachers, We Had Better Rethink How We Define It!

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#### **Abstract**

In light of recent criticisms of environmental education, it is timely and important to renew discussion about how environmental education is defined. This, I argue, means giving more attention to the *educational* dimension of environmental education. It also entails more that just critiquing definitions of this field, but more fundamentally, critiquing the processes by which we define education, and derivatively environmental education. I conclude that we should stop thinking of definitions simply as products, but also as processes in which teachers, administrators, and scholars are all participants.

# Résumé

A la lumière des récentes critiques formulées à l'égard de l'éducation relative à l'environnement, il importe de réorienter la discussion sur la façon dont est définie l'éducation relative à l'environnement. L'auteur soutient qu'il convient de donner plus d'attention à la dimension éducationnelle de l'éducation relative à l'environnement. Il ne suffit pas de critiquer les définitions existantes, mais plus fondamentalement, de critiquer les processus selon lesquels nous définissons l'éducation, et en conséquence, l'éducation relative à l'environnement. L'auteur conclut que nous devons cesser de considérer les définitions uniquement comme des produits; elles sont aussi des processus auxquels participent les enseignants, les administrateurs et les étudiants.

It is time for renewal—time for environmental education to be revitalized. These are not just my words, but the sentiments of others who hold different perspectives and represent different research traditions (e.g., Gough, in press; Jickling, 1995; Simmons, 1996a; Wade, 1996.) Some sense of urgency is found in the "President's Message[s]" (Simmons, 1996a & b) and articles in the North American Association for Environmental Education's (NAAEE) *Environmental Communicator*. Environmental education has come under scrutiny and some of the criticisms have not been very nice. However, like the NAAEE president (Simmons, 1996a), I think that we should welcome this as an opportunity for open and vigorous discourse.

Part of the criticism can probably be explained by our success. If society is accustomed to devaluing environmental values, as Anthony Weston (1996a) describes very well, then some degree of backlash should be expected when this normal (if largely unconscious) practice is challenged—if the status quo is threatened. We environmental educators can expect some "bad press" for our part in this process. However, there is also much warranted criticism about the nature and purpose of environmental education. And for this reason, I think there is a broad desire to rethink our work, to breathe new life into the field, and to enliven discussion.

There are also doubts about the status of environmental education in formal education. In a recent study, Kimberly Wade (1996) reported that in the United States, environmental education inservice education is managed mainly by natural resource agencies. Further, it is not a priority of education agencies, and it is delivered by inservice providers who are typically more skilled in environmental science than classroom pedagogy or the educational priorities of states and schools. She further poses the possibility that environmental education is in danger of becoming less relevant to schools and school support systems. If true, this would be an alarming trend, and its very possibility requires careful inquiry.

So, we have several questions to investigate. What is there about environmental education that is troubling to its critics, both in and outside of the field? Why might it be that educational agencies are not more interested in environmental education? And, what inhibits environmental education's ability to further penetrate formal education?

These are of course large questions requiring examination and analysis from a number of angles. However, as I seek to identify a suitable scope for this paper, I feel compelled to go back to our most fundamental assumptions, back to how we define environmental education. This is, to be sure, only one of many starting points, but if I can point to obstacles that might arise from the way that we conceive of, or conceptualize, this field, then we will have an important basis for participating in the continued shaping and unfolding of environmental education, to help us understand what environmental education can become.

In this paper, then, I propose that to expand environmental education's presence in formal education (and possibly elsewhere), we will need to give more attention to the concept of education, and thus the educational dimension of environmental education. This is not an new idea but one that needs further attention (e.g., Jickling 1992, 1991; Robottom, 1987; Wade, 1996). Ian Robottom's (1987) observation that professional development in environmental education has been more "environmental" than "educational," together with Wade's (1996) research (almost a decade later) underscores this need. Second, I will argue that as we seek to put the education back into environmental education, we will not just be critiquing the definition of the field, but more fundamentally, critiquing the very process of defining education. Finally, I will argue that part of rethinking how we define environmental education will entail reconceiving the role of practitioners, and practitioners in training, in the process of defining this field.

One of the "education's" challenges lies in the realization that it is itself a difficult idea. Not only has it developed and changed over time, it suggests a fluidity of meaning that shifts across a range of contexts (e.g., Peters, 1973; Williams, 1976; Walsh, 1993). In other words, it doesn't always mean the same thing, and its intended meaning depends on how, and where, we use the term. For example, "education" often is used in the context of formal schooling; we send children and young adults to our institutions to gain an "education," to become "educated." However, this term is also used more broadly, or widely, to think of education as the learning that accrues through a lifetime of experiences. This broad meaning can be particularly poignant for First Nations people whose experiences with institutions has very often been negative and, in many instances, destructive. Louise Profeit-Leblanc (1996),

for example, speaks about these other means of education in her belief that "education is how we live our lives and how you live with everything around you. Everything in existence teaches us something about life" (p. 14).

At other times we use education to distinguish between activities which take place within schools. Some argue that there is an important distinction to be made between education and schooling (e.g., Barrow, 1981). As contemporary schooling trends give more emphasis to preparing students for the work force, critics cry foul. They might claim that this is not really in the interests of "education," or that education has been co-opted by a corporate agenda. And, this agenda they claim is more concerned with "training" workers and inculcating values essential in supporting corporate needs (e.g. Saul, 1995; Barlow & Robertson, 1994). These examples should begin to convey the complex nature of this idea, "education." And, they anticipate difficulties that can be expected by anyone attempting to define the term.

"Environmental education" is not exempt from the vagaries of language use. Attempts have been made over the years to define this idea, and with each definition has come, whether explicitly or implied, an idea about "education." We should be asking, however, where these ideas fit with more general understandings about "education," and in particular those understandings which have currency with the broader educational community. A useful way to do this will be to examine two well known definitions of "environmental education." The first, which is commonplace amongst environmental educators in North America, is derived from the work of Harvey (1976), launched by Hungerford, Peyton, and Wilke (1980) a few years later, and which persists today unchanged. As stated recently, "the ultimate goal of environmental education (EE) is to develop informed and skilled citizens who are willing and able to take action to resolve environmental issues" (Lane, Wilke, Champeau, & Sivek, 1995). The second example has its roots in Australia. In that country, environmental education has been defined by many as "education for the environment." This definition can be traced to the work of Lucas (1979) and here too, it has remained remarkably resilient (Gough, in press).

#### An American Example

A closer look at the emergence of Hungerford, Peyton, and Wilke's (1980) ultimate goal reveals that Harvey's preceding (1976) work was largely descriptive. Seeking a generally accepted definition of environmental education, he concluded that none existed. His remedy was to synthesize one from the most prolific key words and phrases used in existing interpretations. These interpretations were based largely on assertions and prescriptions by an assortment of environmental educators, then self-validated by members of the same community (Jickling, 1993, 1991). While Harvey may have established some measure of what environmental education was, he did little to help us understand what environmental education ought to be. Nor did he help us to understand how his, and earlier interpretations, could be understood in relation to broader ideas about "education." Nevertheless, Harvey's largely descriptive definition soon became prescriptive. In 1983, Hungerford, Peyton, and Wilke assert that environmental education "does have definition and structure," "the premises on which the goals are based are sound," and that the same old questions about definition "should have been laid to rest once and for all!" (p. 1-2) Not only do they assert the validity of their definition, but they also discourage further critique.

It is interesting to note, however, that Hungerford and Volk (1984) observe that environmental education is "neither pervasive nor very persuasive" (p. 5). They later claim that the ultimate goal of environmental education, their interpretation of Harvey's (1976) work, "is either being ignored by practitioners or perceived as something that can be met through awareness education" (p. 6). The explanation given for the latter claim is that educators most likely lack understanding about what is required to achieve environmental literacy. The possibility that their definition does not make sense to practitioners is not consistent with broader understandings of "education," and that it may not be conceptually sound are not entertained. Thus, a definition which had its origins in largely descriptive research has been given a positive valuation and become prescriptive.

### An Australian Example

In Australia, a pattern of events remarkably similar to the American experience was unfolding. In 1979, Arthur Lucas sought to clarify ambiguities and misunderstandings in the field of environmental education. He proposed that these misunderstandings could be overcome by characterizing program goals as being "in," "about," or "for" the environment (p. 45). As he pointed out in a recent seminar, "for most environmental activists, the *for* component [as in education for the environment] acted as a *defining* characteristic, as it reflected their concern to act, to act in a way that would enhance or preserve the environment" (1995, p. 1). However, these originally descriptive categories have, as in the previous example, become prescriptive.

For example, Linke (1980) asserted that only "education for the environment—or any combination including this class could be classified environmental education" (p. 36), and similarly Greenall (1980) declared "we can talk about education in the environment, education about the environment, education from the environment and education for the environment, but only the last can be called environmental education" (p. 5). This conception of environmental education has also been persistent. As Gough (in press) points out, "there has been little questioning of the categorisation of environmental education as education in, about and/or for the environment." These characterizations have become "common slogans of the environmental education movement."

Similarities with the American example continue. In spite of assertions from the academic community of the primacy of "education for" the environment, this interpretation of critical environmental education is rare in schools (Gough, in press; Spork, 1992). Again, it is possible that defining environmental education as "education for" the environment is at odds with understandings of "education" (Jickling & Spork, 1996), and/or that it does not adequately account for the practitioners' theories about "education" or their workplace constraints (Walker, 1996).

#### An Educational Critique

Both examples describe attempts to define environmental education, and in both cases the actualizing or implementation of

the definition has been less than expected. There are undoubtedly numerous contributing factors, many of which cannot be examined here. However, I can bring attention to some of the conceptual difficulties inherent in these two prominent definitions. And, in so doing, I also encourage us to think in a different way about the very idea of defining complex terms.

As education is an inherently difficult idea, it will be helpful to have a framework that maps out the conceptual ground upon which "education" rests. If such a framework can help us to chart the range of meanings ascribed to "education," we can then use it to review definitions given for environmental education. Paddy Walsh (1993), a British educational philosopher, has developed what he terms a "geometry of education," or a matrix for thinking about education which captures the term's essential fluidity and its contestability. He suggests that uses of "education" divide into three different ranges of possibilities or three dialectics.

The first of these distinctions (see Figure 1.) is described as a dialectic between *formal* uses of "education" and uses of "education" in a much *wider* sense. In the formal sense, Walsh suggests "education" is used in reference to structured learning that

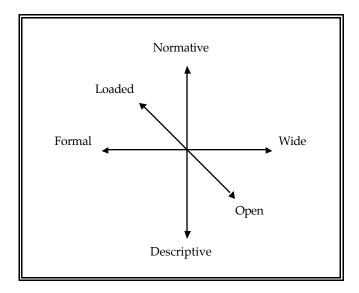


Figure 1. A geometry of education (after Walsh, 1993).

occurs both in and outside of schools. Use in the wider sense is akin to Profeit-Leblanc's (1996) preference for thinking about education as accumulated life experiences. The second distinction he makes is between descriptive and normative uses of "education." In some cases we may describe how, in a relatively neutral way, education has come to be used in a particular context. On the other hand, we may attribute a positive value charge to a conception of education. In saying, for example, that a particular sense of education is "real" education, we are giving committed, or normative, meaning to our interpretation. Third, Walsh says, there is a scale which runs from very open, or general, uses to very loaded uses. On the one end, would be a more open or standard use of the term such as, "the sustained systematic induction of people into some substantial proportion of whatever is deemed essential to know" (Walsh, 1993, p. 24). On the other end we may specify that essential knowledge is best represented by the Western literary tradition, or that it is to be found in the Koran. Each case would provided a heavily loaded meaning to the term.

Two additional points need to be emphasized. Uses of "education" do not occur at fixed locations along the continuums described by Walsh's distinctions. Rather, they occur as more fluid interplays, or dialectics, between the twin poles of each range. Meanings are prone to subtle shifts and reinterpretations in response to the complexities of everyday usage. It is also important to note that these three dialectics are interactive. We can, for example, have a descriptive or normative interpretation of formal education, we can have an open or more loaded interpretation of wide education, or we can have a number of other permutations and combinations of these categories. Given the complexity of interactions that occur when we use "education," it seems unlikely that the various meanings will coexist in a discernible equilibrium, nor does it seem likely that some use of "education" will emerge as "the" use. We might also be dubious about the corollary, that some use of "environmental education" will emerge as "the" use.

Not only do these observations cast new light on definitional problems in environmental education, but they also begin to reframe the way we think about defining this, and other, complex terms. Given these possibilities, the next task is to try out Walsh's triple dialectic in a critique of present definitions of environmental education. I will now look at the American and Australian examples using these distinctions as analytical tools.

For the purposes of this paper, I would primarily like to consider the descriptive/normative and the open/loaded dialectics. However, before getting to these aspects of the analysis, it is worth saying a few things about the formal/wide distinction. It does seem a possibility, if not a probability, that notions of formal schooling will change to accommodate "wider" interests. As we probe and prod the boundaries of schooling, we should see fewer barriers between schools and communities. For example, in my own community a local school now offers an after hours environmental education program and makes community resource persons central to the learning experience. And, interest in widening schooling has received attention in our literature (e.g., Weston, 1996b). If this trend continues, we can expect this formal/wide dialectic to be increasingly important in definitional discourses. But for now, let us look more closely at our present examples.

It is interesting that both the American and the Australian efforts to define environmental education had origins which were in at least some measure descriptive. Both Harvey (1976) and Lucas (1979) took, as their starting point, an inquiry into how environmental education was conceived of, defined, or practiced. Harvey looked at existing interpretations. Lucas, in a similar attempt to overcome misunderstandings among practitioners, looked at program goals. In both cases the definitions contrived by these scholars soon came to carry a positive value reflecting the norms of their proponents. The Harvey definition, with slight modifications (Hungerford et al., 1980), expressed, for proponents, the ultimate goal of environmental education. To this day, the educational merit of this definition remains unquestioned by many researchers, and many articles include an assertion like, "the ultimate goal of environmental education (EE) is . . . " (Lane et al., 1995). Similarly, the Lucas category, "education for the environment," became, in short order, the defining quality of environmental education for another group of proponents (Linke, 1980; Greenall, 1980). Like its American counterpart, it too has persisted to the present era (e.g., Fien, 1993) with relatively little scrutiny (Gough, in press).

In addition to a positive normative weighting, both the American and Australian goals became, over time, loaded with

prescriptive meaning. In the American case, the ultimate goal of producing informed and skilled citizens who are willing and able to take action to resolve environmental issues, or promoting the acquisition of responsible environmental behaviour (Sia, Hungerford, & Tomera, 1985/86), has become decidedly loaded with behaviourist predilections (see Robottom & Hart, 1995). For example, responsible environmental behaviour can be properly achieved by applying "behavioral intervention strategies consisted of the employment of some type of behavior modification technique aimed at increasing the incidence of a particular target behavior" and "it may be more efficacious, in the case of certain environmental problems, to manipulate situational factors in order to produce desired behavioral changes" (Hines, Hungerford, & Tomera, 1986/87, p. 6-8). These researchers appear to have no qualms about manipulating behaviour to achieve a desired state. However, it is not clear that such action is educative in the eyes of a broader educational community. For many practitioners, educational achievement should enable individuals to act intelligently and with some measure of independent thinking. People will not think and act intelligently if they have been trained, conditioned, coerced, or otherwise manipulated to behave in a certain way. It would seem that as the American definition has become increasingly loaded with particular prescriptions it may have moved further from broadly acceptable ideas about education.

The Australian definition has also been prone to value loading. When we talk about "education for" anything we imply that education must strive to be "for" something external to education itself. We may argue, in an open sense, in favour of education for citizenship or character development. However, as prescriptions become more specific interpretations of education become more loaded and more problematic for many educators. There are a number of examples of this kind of value loading such as "education for sustainable development" and "education for sustainability" (e.g., Disinger, 1990). Another example of prescriptive loading can be found in Australian John Fien's (1993) book Education for the Environment. Here he discusses a variety of philosophical and political visions of the future based on differing approaches to environmental issues. He also decides, based on the analysis provided, that a particular variety which he characterizes as a "red-green" vision, shows the most promise. He then claims that the desired "red-green" future "lies at the heart of education for the environment" (p. 12).

While it is one thing for an individual to assess the range of available environmental options, it is quite another for a teacher to insert a heavily loaded prescription into anything educational. This raises a number of important questions. 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? Again, we can see that 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 (e.g., McClaren, 1993).

In a slightly different turn, the Australian literature has included another approach. Perhaps in anticipation of the deterministic tendencies embedded in the language, a number of authors have sought to identify defining characteristics of "education for the environment." These include:

- to develop critical thinking and enable problem-solving;
- to examine ideologies which underlie human-environment relationships;
- to criticise conventional wisdom;
- to explore material and ideological bases of conventional wisdom;
- to analyze power relationships within a particular society;
- to engage students in cultural criticism and reconstruction;
- to foster political literacy;
- to focus on real-world problems and participate in real issues;
- to open students' minds to alternative world views;
- to work and live cooperatively; and
- to realise that humans can act collectively to shape society (derived from Gough, in press; based on work of Huckle, 1987, 1983; Pepper, 1987; Greenall Gough, 1987; Fien, 1993).

What is striking about this list is that rather than "a" or "the" definition, we now have attention shifting to the teasing out of defining characteristics. These do, to be sure, give loading to our conceptions of environmental education. However, I suggest that this list of defining characteristics is perhaps less loaded and more

compatible with broader conceptions of education. I shall have more to say about this example later.

## **Emerging Issues**

It has been the purpose of the preceding discussion to identify a number of issues that have a bearing on how we choose to define our field. First, attempts to provide authoritative definitions have become less open to interpretation and more loaded with particular meaning. Also, as definitions of environmental education have become more loaded they appear to have become increasingly removed from more common uses of the term "education." To accept present definitions, and to continue pursuing this approach in defining our field, seems counterproductive to attempts to further integrate environmental education into educational settings.

Second, teachers have their own theories about environmental education, whether explicitly acknowledged or implicitly revealed by their practices (Robottom, 1987; Walker, 1996). They have ideas about what is, and is not, "education." Teachers also function in environments which impose practical and conceptual constraints upon their work (Walker, 1996). Any working definition of environmental education will have to account for these realities. At the end of the day, the definition of environmental education for any individual will be that which squares with their idea of "education" and which is operational in their setting. With our efforts, definitions of education can be reinforced, challenged, or co-constructed. But, practitioners will certainly resist the imposition of alien conceptions of environmental education.

Third, "education" is not a singular or precise idea. Attempting to find a true definition of "education," never mind "environmental education," is inconsistent with the idea that "education" is "flexible, permissive, uncertain, vision-dependent to the extent of being incommensurable in its variants, and, even, an idea for each of us to make up his or her own mind about" (Walsh, 1993, p. 80-81). With this in mind we would do well to be wary of claims to "the" definition of environmental education.

While education is a flexible and often contested concept, this does not mean that we should abandon attempts to understand the idea and to explore relationships between "education" and

"environmental education." To do so, I propose a variant to Walsh's thesis by adding a fourth vector to his matrix (see Figure 2). This vector would represent the dialectic between a *process* oriented approach to defining education, and in our case environmental education, and a *product* orientation. While I agree with Walsh that to think of our field as "essentially contested," or as being defined by a process-only-model requires caution, the certitude expressed in existing definitions is also problematic.

As Walsh (1993) points out, to think of education, or in our case environmental education, as "essentially contested" and defined only in terms of process, would carry excessively anarchic tendencies and could be characterised as idiosyncratic and relativistic. This, of course, is not consistent with our use of language which depends on some degree of consensus about the meaning of words. Our ability to communicate at all depends on shared understandings of essential characteristics of the words we use. We should not, therefore, shy away from attempts to understand what these common characteristics might be. For

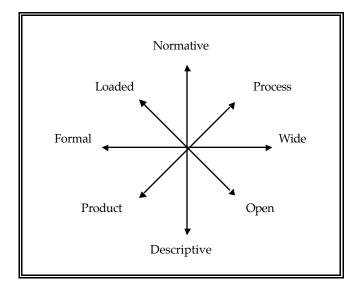


Figure 2. A geometry of education with a process/product dialectic (a variation on Walsh, 1993).

example, we might propose that "education," and hence "environmental education," involves knowing, understanding, breadth of understanding, and applicability and importance in a person's life. These characteristics might be juxtaposed against opposition to indoctrination, coercion, or conditioning. And, as we seek to understand what environmental education can become, we might begin to experiment with varying degrees of loading such as has been proposed through the second part of the Australian example noted above. However, we should do so with a sense of limitation regarding the product end of the process/product dialectic. And, we should do so with a sensitivity to local circumstances and constraints, a decent humility concerning our fallibility, an acknowledgement of the tacit and intuitive understandings of others and of visionary possibilities, and a sense of the inevitability of value disagreement (Walsh, 1993).

When we do advance our interpretations of those defining characteristics, we should not attempt to impose order, our order, on the field, but rather we should advance our ideas with a view to inviting critique, participation, and review when warranted. We may one day achieve a high degree of consensus among environmental educators about the nature of our work, and between environmental educators and the broader educational community about the nature of education. However, environmental education is still a young and emerging field and the possibilities for its development have barely been touched.

#### Conclusion

If environmental education is to make sense for teachers and educational agencies then we had better rethink how we define it. And, if Wade (1996) is correct in predicting that we are experiencing a period of significant reform, then this is an opportune time to renew and revitalize this field—to do this rethinking. Of course history will tell us whether present reforms are significant or just part of the ongoing flux within education. However, there are indicators that we should be particularly attentive at this time. A number of national, provincial, and state roundtables have been formed to look at, amongst other things, environmental education. The North American Association for

Environmental Education is engaged in a "standards" project. In Canada, the Canadian Council for Ministers of the Environment are seeking to harmonize environmental practices between provinces and territories. They, too, are looking at environmental education.

I agree with Wade (1996), that if we are to grasp the present opportunities to shape environmental education and its place in educational systems, we must change our approach. This will involve, as she points out, changes to teacher education, and as I suggest, even more fundamental changes in the ways that we conceive of environmental education. It is also possible, with more emphasis placed on "education," that environmental educators can be participants in furthering educational reforms. To this end, I offer the following suggestions:

- We should stop using emphatic words like "the," "only," and "ultimate" in defining environmental education and its goals.
- We should stop thinking of definitions simply as products, but also as processes in which teachers, administrators, academics, and scholars are all participants.
- We should start putting more emphasis on educational characteristics of environmental education—putting the "education" back into environmental education. To do this we must seek common understandings between environmental educators and the broader educational community.
- And, we (practitioners and scholars) should advance our interpretations of environmental education based on these common understandings, as tentative, or working, definitions and invite others to participate in their adoption, implementation, and/or revision.

These suggestions will not provide an easy answer. However, education, and derivatively environmental education, are complex ideas. We must address this complexity. In attempts to simplify them, through use of highly loaded definitions, we run the risk of trivializing environmental education and thus becoming less relevant in educational settings.

#### **Notes on Contributor**

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