

The Quest for Holism in Education for Sustainable Development

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Introduction

“Sustainable development” is a “paradoxical compound policy slogan” (Stables, 1996), of a type rhetorically constructed to appeal simultaneously to apparently opposed interest groups, and is widely recognised to be a contested notion. Indeed, structuralist and post-structuralist theories hold that no terms can have uncontested, stable meanings – even “education”. Notwithstanding, environmental education (EE) has often been associated with a quest for an holistic worldview. This is despite the fact that the monological view of truth implied in such a quest, assuming absolute understanding (and thus enabling total control over nature), has been cited as contributing to the development of the ecological crisis.

“Sustainable development” can, however, remain a regulative ideal for environmental educators, as long as it is acknowledged that it has no absolute legitimation. Human reflexivity remains capable of reworking the cultural traditions which have shaped late modernity with reference to such a regulative ideal, albeit variously recognised.

In *Tintern Abbey* (1798), William Wordsworth writes compellingly of "Something far more deeply interfus'd/ Whose dwelling is the light of setting suns/And in the round ocean, and the living air." The literature of the time, both poetic and philosophical, is replete with a sense of wonder at the sublime grandeur and totality of Nature. We find it in Hegel, in the Kantian sublime, in the natural history of Humboldt, and in Keats' famous dictum that "Beauty is Truth, Truth Beauty;/That is all ye know on Earth, and all ye need to know." "Yes," remarked one of our undergraduate tutors of this Keatsian truism, "but what does it *mean*?"

High Romanticism, very much a Northern European, perhaps particularly an Anglo-German phenomenon, as, it might be argued, was the Green movement of the latter years of the Twentieth

Century, was the expression of a cultural and historical moment, no less than was the Industrial Revolution, in opposition to which it found its *raison d'être*. It speaks to us powerfully now, not only through its legacies, including ecology and respect for the human condition, but because we live still in a world riven, to a large extent, by the sometimes conflicting consequences of a scientific technology that "murders to dissect" (to use another phrase from Wordsworth) and of its counter-forces of intuition, mysticism, community and a sense of wholeness. We shall argue that an appeal to holism in sustainable development education (hereafter SDE) is currently rendered problematic on three fronts: first, that the serious intellectual quest for holism was never itself sustainable; second, that there are no stable conceptions to which holism can be attached; and, third, that "sustainable development" is itself highly ambivalent. In place of a naïve cross-curricular approach to SDE, we shall argue for disciplined environmental literacies, in the sense of a series of reflexive critiques of the human-nature relationship in each of the language-games that the curriculum promotes: in other words, we argue for SDE as within-disciplinary rather than cross-disciplinary concern.

Our first contention is that we cannot undo the historical process that led, particularly during the Nineteenth Century, from Humboldt's idealistic vision of the unity of Nature and the mind of Man to the post-Darwinian specialisation of the disciplines. In fact, a desire to understand the workings of Nature by means other than the intuitive has, of course, characterised the whole of the Western project, and has equally and, it would seem, inevitably been characterised by epistemological conflict. If there is much in Hegel which takes from the idealistic rationalism of Plato and has informed Arcadian visions through three millennia, there is also much in Darwin and the whole enterprise of Western science which is owed to the empirical bent of Plato's most famous pupil, Aristotle. Holism vs. atomism; rationalism vs. empiricism; faith vs. doubt. If modern humans rest their Being in such dualities, then it must also be the case that blind faith is always undesirable: while the quest for holism may remain a regulative ideal, the way to attaining it can never be clear. A post-structuralist view holds that we can transcend the dualisms of logocentric thinking, but not through adherence to anything with a clear or fixed referent meaning.

There is no single concept which can serve as the focal point of some new integrated discipline. As Rom Harre and others have pointed out (Harre *et al* 1999) the discourse of "Greenspeak" is prone to the most unprincipled borrowings from conflicting traditions: for instance, in the crude mixing of notions of palaeontological, cultural and personal time in the generation of a sense of imminent ecological crisis. Even "Nature" is inherently unstable. To Shakespeare, human or divine Nature served as the touchstone for understanding all other forms of life: in *The Tempest*, the half-man, half-monster Caliban is described as "a born devil, on whose Nature nurture can never stick"; in contemporary vernacular, "nature"

generally refers to the non-human elements of the biosphere (though we still speak of "human nature", in other contexts); in the "natural sciences", specifically the physical sciences, nature can escape the organic entirely and becomes the play of abstract forces. However, at least the disciplines, by attempting to be true to themselves (though forever prone to change), enable some degree of clarity of thinking.

Our final objection concerns the phrase "sustainable development" itself. While various commentators have given this phrase a single and universal meaning, and while others have taken it upon themselves to castigate some of us for the "wrong" use of the term, it remains the case that "sustainable development", like many other terms used in education, has no fixed role within any disciplinary structure; there can be no established meaning for the phrase, since it exists as a rhetorical device in an avowedly democratic political debate. Critical discourse analysts, such as Norman Fairclough (1995) regard compound terms such as "sustainable development" as "nominal compounds" with high "ambivalence potential"; one of the authors of the present paper has called such terms "paradoxical compound policy slogans" (Stables, 1996). The argument is that, in democratic societies, politicians must find ways of appealing to previously diverse interest groups; to do this, they resort to the creation of compound terms which embrace what are otherwise opposite aspirations: "parity" and "esteem", "multicultural" and "society", "equality" and "opportunity", "sustainability" and "development". Of course, one can argue that the new compound distills the best from each contributing element; certainly, one must acknowledge the various forms of good that have been done by those committed, in their own ways, to such regulative ideals as these. But regulative ideals, in the sense used by Richard Rorty, they must remain: there can never be any total consensus about how "sustainability" can be married to "development", though there can certainly be lively debate both around theoretical ideas and around explorations of sustainable development education. The gap between policy sloganising and policy implementation is very great, as politicians and educationalists forget to their peril, as at each stage those implementing a policy have their own "secondary elaborations of belief" (Corson, 1988). "Sustainable development" can never be pinned down without losing all its rhetorical power.

However, while regulative ideals cannot withstand too much scrutiny, they remain essential to us as rallying cries. There is nothing wrong with SDE as long as we remember that there can never be one correct way of doing it.

The development of disciplined environmental literacies

There being no "one correct way of doing it" is not tantamount to a rejection of any means of making sense of how humanity - non-human nature relationships can be studied within each discipline. We have argued elsewhere (e.g. Stables 1998, Stables and Scott, 1999, Bishop and Stables, 2001) that a disciplined view of environmental literacy, taking a broad view of text to include everything with which we engage semiotically, provides a useful framework for curriculum planning that valorises the potential diversity of curricular responses to the environmental and ecological crisis. As with print literacy, we can conceive of different levels, or types, of environmental literacy, such as functional, cultural and critical, and can examine how each of these might apply to the study of any particular subject without compromising or distorting it. In history, for example, students can learn about the transformations of landscapes and their regional, national and global implications pre- and post-industrial Revolution, and about how previous societies experienced and coped with their own crises of sustainability. While much historical work does not focus on societies within their natural contexts in this way, some does, notably the French *Annales* historian, Fernand Braudel, who distinguishes "event time" from the "*longue duree*" defined, most markedly, by changes in climate, to which human beings have responded with various degrees of technological success.(For summary, see Lechte, 1994.) More recently, Simon Schama's *Landscape and Memory* (1995) charts changes in landscapes which have long had important roles in European and American culture. In literary studies, students can look at how natural setting and character are mutually implicated in works of poetry and fiction. There is a growing corpus of ecocriticism. Lawrence Buell, for example, has produced criteria for classifying nature writing, considering issues such as the implication of setting in the development of character (1995, p6-7). The study of biology can examine how changes in our understanding of the natural world, from before Darwin to the mapping of the genome, can be associated with our changing views of the nature of humanity; in chemistry, students can learn about the implications of the laws of thermodynamics for energy usage; in physics, the same can be done with reference to our place in the universe, and the cultural shifts associated with, for example, Galileo, Newton and Einstein.

The development of such environmental literacies (please note the use of the plural) does not, of course, guarantee the saving of the planet from ecological destruction, but nothing does. While the emphasis in much environmental education to date has been narrowly teleological, we argue that really useful education, at least in the Western tradition, never accepts a monological view of the truth and the clear end-points one can associate with it, and that real personal change (which may, indeed, help to save the planet from ecological destruction, directly or indirectly) can only be effected through an education that problematises and acknowledges multiple voices. Paradoxically, education for the whole child requires an acknowledgement that there is no whole truth.

This begs the question of how teachers can be prepared to develop such disciplined environmental literacies.

Over the last twenty years or so, there has been no shortage of advice and direction to teachers and teacher trainers about the nature of the professional development needed to prepare teachers and schools to deal with the, often vaguely expressed, environmental and ecological crises facing society. Inevitably, most of this has been set out under the heading of *environmental* education with only recently the notion of sustainable development (sustainability) becoming a significant factor – and even then without the concept's being problematised. Most of the work on teacher training within environmental education stems from Unesco's International Environmental Education Programme (see, for example, Hungerford et al., 1988) arising directly from the imperative that teacher education in environmental education should be the "priority of priorities" (re-emphasised in Unesco-UNEP, 1990). For historical reviews of these developments, see Tilbury (1992) and NAAEE (1994); for an analytical critique of their limitations, see Oulton & Scott (1995). The OECD's ENSI (ENvironmental Education in Schools Initiative) has also been significant in generating both theory and practice in relation to environmental teacher education (see, for example, Kyburz-Graber & Robottom, 1999). In a previous paper, Scott (1998) has attempted to draw these developments together. In other recent work linking sustainability and teacher professional development, (see, for example, Shallcross et al., 2000) there continues to be a tendency to address sustainability issues from within an environmental education framework, implicitly seeing education related to sustainability/sustainable development as an extension of environmental education and, as such, as being conceptually relatively unproblematic, although administratively, of course, it remains complex.

But much of the complexity derives from attempts to develop a cross-curricular or multi-disciplinary approach in contexts which are either dominated (in secondary schools) or heavily influenced (in primary/middle schools) by structures which are organized conceptually, managerially and temporally around single disciplines. Whitty *et al.* (1994) have developed a critique of recent attempts within the UK to promote cross-curricularity. We have already set out a number of reasons for a within-discipline approach to environmental literacy so that reflexive critiques of the human-nature relationship can be made with maximum clarity in the discipline-structured curriculum in order that a useful framework for curriculum planning, that encourages a diversity of responses to the environmental and ecological crises, can be provided. There is another, pragmatic reason, which is that to do so is to work with the grain of school life and teacher professional development. Teachers, especially in secondary schools, are nurtured at school, in higher education and in teacher training through disciplines, and their work is

similarly structured. It is what they know and profess. If this needs to evolve, it had better be approached from within the confidence of the discipline.

It might be argued that for a discipline to embrace a critical environmental literacy, a suitable framework of ideas is necessary; that is, an interpretation of sustainable development as a regulatory ideal is required. We have already suggested, through examples, a number of different issues which might be explored from within disciplinary bases. Is there need for a structure which will allow teachers to explore these issues for themselves? This might not be definitive or even broadly accepted; indeed, given the field, a degree of tentativeness adds to usefulness as it encourages critique and acknowledges, and thus valorises, the possibility of plural perspectives. We shall now consider two approaches, the first less radical than the second. In the first, a framework is provided which can be used differently within disciplines; in the second, no such generic framework is considered appropriate.

In terms of the first approach, it might be considered that such a framework is provided by the work of the Higher Education 21 initiative (HE21, 1999) which sets out seven key sustainability concepts, a series of process values (Crick, 1999) supporting 'sustainability solutions', and three sets of draft learning outcomes relating to 'effective sustainability teaching'. The key concepts are:

- Interdependence - of society, economy and the natural environment, from local to global
- Citizenship and stewardship - rights and responsibilities, participation and co-operation
- Needs and rights of future generations
- Diversity - cultural, social, economic and biological
- Quality of life, equity and justice
- Sustainable change - development and carrying capacity
- Uncertainty and precaution (acknowledgment of the limits of our knowledge: not to act unless the impacts are known)

The issue is not so much whether these *are* the key concepts, or whether there are *seven* of them; rather, it is whether the framework which they provide can act as a starting point for the development of within-discipline interpretations of a functional, cultural and critical environmental literacy.

Our more radical approach holds that a within-disciplinary approach should not be based on any such outside framework as, almost by definition, the imposition of such a framework alters the primary agenda of the discipline. After all, the humanity-nature relationship is already explored in many ways in

curriculum subjects; we have already cited examples of what does, and what easily could, happen with respect to this. Members of the Culture and Environment Group at Bath, along with colleagues from Belgium and Portugal, have already done a little more work in this area. As part of the EU-funded project, *The Development of Environmental Awareness Through Literature and Media Education*, Andrew Stables and others developed five foci, with a view to developing environmental awareness through literature and media education methods such that what emerged was “good literature/media teaching” *as well as*, as opposed to *in the service of* environmental education; in other words, we did not wish to reduce the role of literature to one of the expression or clarification of either ecological or their related social issues (Bishop *et al*, 2000). The foci were developed from an analysis of the ways in which good literature and media teaching interrelate the ideas of *text*, *human interests* and *nature*. The foci were as follows:

(i) *The development of understanding of environmental issues through the study of literary and media texts*

(Teachers provoking thinking and discussion of environmental issues as part of the study of both classic literary texts and media texts, such as feature films, reflecting a broad cross-section of European traditions, whether or not these are principally texts overtly concerned with what we might call "environmental issues");

(ii) *The study of literary and media texts specifically concerned with the environment*

(Developing teachers' ability to address such texts critically, in order to enable students both to compare and contrast the treatment given to issues in differing texts and to evaluate such texts in terms of their effective handling of the issues);

(iii) *The creation of literary and media texts relating to environmental issues*

(Providing help for teachers in enabling students to produce good quality texts about environmental issues, and helping them to evaluate their and others' work critically);

(iv) The study of aspects of the environment itself as text

(It is possible to adopt a very broad definition of text which incorporates, at the very least, crafted landscape features such as parks and gardens, and which, in its extreme form, can even be held to include purely "natural" landscapes);

(v) The re-creation and enhancement of the environment with reference to aesthetic considerations

(As an extension of (iv), examining ways in which environmental conservation, repair and improvement can be carried out with reference to aesthetic considerations as well as to the notion of the environment as a cultural and social construct).

According to our first approach, frameworks such as those provided by the Panel's key concepts, the work of the HE21 project, or, for example, by the Learning for a Sustainable Environment project (UNESCO, 1997), are useful in helping teachers and others to think through what amounts to the reinterpretation of their disciplines in light of a sustainable development agenda. Here, a teacher development priority must be the generation of means whereby teachers can begin to engage with ideas which will very likely lie beyond their experiences of working within their disciplines. However, the arguments underpinning the creation of frameworks such as those to which we have referred are rarely spelt out in policy documents. It might be argued that only the most highly motivated teachers and teacher-trainers will make the effort to come to grips with frameworks from outside their disciplines which have apparently been imposed upon them with clear explanation of their rationales.

To follow this line is to move towards arguing for our second approach in preference: that what we should be about is examining, in a vaguely Foucauldian way, the various ways in which each discipline construes, and has construed, the human-nature relationship. Such an approach is uncertain, but, we would argue, no more uncertain in its outcomes than the first approach, which assumes a false consensus regarding sustainable development.

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