Why not education for the environment?

Education for the environment?

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Introduction

At the inaugural national conference of the Australian Association for Environmental Education in Adelaide (October, 1980), it was clear that multiple interpretations existed of the key descriptor 'environmental education'. At that conference, at earlier international conferences (e.g., Tbilisi, 1977) and in recent Australian curriculum materials (e.g., The Curriculum Development Centre's (CDC's) Environmental Education Project), the terms education *about* the environment, education *in* the environment, and education *for* the environment were and have been used to capture the various interpretations of environmental education. An explication of these terms is offered in the Environmental Education Project (CDC, 1981), and in Fensham (1979).

These terms seems to embrace the various facets to emerge in discourse about environmental education — they can, perhaps, be taken as representing the accepted dimensions of environmental education.

It is argued that it is the characteristics of 'Education *for* the Environment' that distinguish environmental education from other programmes associated with education *in* and *about* the environment approaches. Fensham (1979) lists these characteristics as follows:

- EE is oriented towards a problem
- EE is concerned with realistic situations
- EE aims to elaborate the alternatives that exist for situations and the skill of choosing between them
- EE includes action as an integral component
- EE uses the real environment of the school and its surrounding as a context
- EE involves the clarification of values
- EE aims to manifestly increase the mastery students have over their own environments.

Programmes that do not include these characteristics are not environmental education. Hall (1977) makes the claim that "the unique contribution of environmental education should be in the area of problem solving and associated decision-making, which in turn should lead to a willingness to act. This problem solving is not scientific in nature. A basic ingredient is the capacity to deal with people rather than scientific objects."

The view that the essence of environmental education lies in its education *for* the environment dimension is endorsed by the project team of CDC's Environmental Education Project:

> We can talk about education *in* the environment, education *about* the environment, and education *from* the environment and education *for* the environment, but only the last can be called environmental education.
>
> ... it is only when education *for* the environment is the intention that environmental education is actually taking place ... (CDC, 1981).

However, environmental education in practice seems to be characterised by a preponderance of education *about* the environment and a distinct lack of education *for* the environment. Some evidence in support of this statement comes from experiences with the Environmental Education Project mentioned earlier. Because of the particular model of materials development adopted by the Project Team, and because of its contemporary nature, these experiences offer a useful "window" into environmental education in this country.

An attempt was made in this Project to produce materials by tapping tried and true examples of environmental education in practice. The intention was to assist teachers to write accounts of already-existing environmental education programmes and to present them as concrete exemplars of the view of environmental education endorsed by the project team. The project team had human resources — a project director, and a liaison officer from each state and territory, several of whom claimed the support of a network of regional consultants — and financial resources, allowing the offering of small grants to contributing teachers. Project Co-ordinator, Annette Greenall, made these reflective comments a year after the project team wound up its activities:

The Environmental Education Project operated through offering small grants to teachers for them to describe their programmes or their position on a particular topic. The submissions received met neither the expectations nor priorities of the Project. They revealed that much of the environmental education that was happening in Australia, that was believed to be such or was put forward, was mainly nature study and field studies ... Very few of the submissions had either action or overt "for the environment" (affective) components, nor involved more than one or two disciplines. This phenomenon is reinforced by Lucas (1980) who remarked on the preponderance of "in" and "about" the environment programmes, many of which are science-based, which pose as environmental education in schools. (Greenall, 1981).

If studies of attempts to develop environmental education programms reveal a general preponderance of education about the environment, then in terms of the prescriptions emanating from Belgrade and Tbilisi, and more locally from the Environmental Education Project, environmental education could be termed a failed innovation (see Maher, 1982). The intention in this paper is to proffer a tentative explanation of the strength of the commitment to education about the environment in terms of taken-for-granted presuppositions about teaching and curriculum.

Why education about the environment

A prime consideration in attempting to explain the strength of the commitment to education *about* the environment is the fact that we all hold, often uncritically, a number of presuppositions about curriculum and classroom practice which tend to influence or constrain our education-related actions. This set of presuppositions constitutes what has been called a "practical theory of teaching" This notion, and the relationship between the practical theory and actual teaching

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practice, have been articulated by Elliott and Adelman (1976), and Henry (1981). In explicating the practical theory perspective, Henry points out that "the educational theory which directly impinges on classroom practice, is the theory held in the minds of teachers, and which develops from the experience of teachers. This is the educational theory which specifies appropriate teaching behaviours and strategies in the context of the school and the classroom". Put simply, then, the notion of the "practical theory of teaching" suggests that teaching patterns are determined by privately (and usually subconsciously) held presuppositions about curriculum and classroom practice, and further that these presuppositions are the result of experience gained as a learner and as a teacher; these presuppositions are the result of a socialisation process that is constantly being reinforced by the context of institutional education. To draw attention to these presuppositions when discussing curriculum issues in environmental education is simply to particularise a general phenomenon: that the presuppositions associated with current practice necessarily become a relevant consideration in any curriculum innovation involving new patterns of curriculum and classroom practice. In a discussion of curriculum issues in environmental education, it seems appropriate to start by attempting to identify the sort of presuppositions which constitute a practical theory of teaching, and then to consider the relationship between these presuppositions and the characteristics of environmental education.

The presuppositions constituting a practical theory of teaching were described earlier as privately — and subconsciously — held. They are not to be found in written form; rather they are apparent in peoples' unselfconscious dialogue about their work, and in their practice itself. From experience in talking with teachers and educational consultants, and in observation of teaching/learning situations and inservice workshops operating in the name of environmental education, I believe the following to be generally-held presuppositions about curriculum and teaching practice:

1. About knowledge
   - we obtain knowledge by an objective process of careful observation and insightful generalisation. These generalisations are useful in permitting us to predict future events, and thereby to develop some degree of technical control;
   - worthwhile knowledge is neutral in the sense of being free or able to be freed from the subjectivity of human values;
   - knowledge is naturally organised into certain worthwhile fields or disciplines; discipline-based subject matter is of greater worth than holistic, integrated, opportunistic understandings;
   - the most worthwhile disciplinary knowledge is the factual, informational (propositional) variety; this takes precedence over procedural knowledge (i.e., capabilities in process skills).
2. About teaching
   - it is teacherly to be directive, in the sense of being responsible for the selection, organisation, and graded release of informational subject matter: in short, to behave as an authority-in-knowledge;
   - appropriate sources of informational factual subject matter are texts or sourcebooks; in fact, a measure of the authority of certain subject matter is its inclusion in textbooks;
   - knowing for the student means having information: knowing is demonstrated by reproduction of the language of the text or of the teacher in classroom discourse;
   - teaching means to conduct a large-group, text-based, question and answer recitation (lecture and/or discussion);
   - schooling is about school-oriented and citizenship-oriented socialisation: schooling serves a societal maintenance function.

These perceptions relating to the presuppositions guiding the practice of teachers provide a background for a possible explanation of the strength of the commitment to education *about* the environment. By doing so, it is hoped to shed some light on the apparent lack of commitment (expressed in practice) to education *for* the environment.

To put the explanation at its simplest, education *about* the environment coheres most closely (of the three accepted dimensions of environmental education) with the guiding presuppositions of individuals active in environmental education. Nature trails and field studies so common in primary schools are practical activities which cohere with the view of knowledge that careful observations can produce an objective data-base from which emerge generalisable understandings about the environment. In education *about* the environment in higher year levels, the practical involvement tends to be replaced with the provision to students of the generalisations themselves (e.g., basic ecological principles), with this presentation of vicarious "truths" adding to the impressions of objectivity, absoluteness, and value-freedom. Information *about* the environment tends to be science-related (Lucas, 1980), and thus is legitimated by virtue of its (science) disciplinarity. Furthermore, education *about* the environment tends to tap the substantive, propositional knowledge aspect of the (science) discipline — that is, genuine inquiry is minimal.

Education *about* the environment also coheres with generally-held presuppositions about teaching. By virtue of its informational orientation, it lends itself to teacher direction in the form of selection, organisation, and graded release. The information is gained, either by the teacher or directly by the students, from texts or other sourcebooks, rather than through student-initiated and directed inquiry. The teaching of such information is manageable within the context of conventional teaching, where the teacher acts as an authority-in-knowledge, drawing upon authoritative sourcebooks, and conducting large-group question and answer discussions. Education *about* the environment coheres with presuppositions about knowing: students demonstrate their knowledge (and hence the success of education *about* the environment) by reproducing the language of the authority (teacher or text) in classroom discourse. Finally, and importantly, education *about* the environment coheres with the presupposition that schooling is about socialisation for social maintenance by encouraging the view that technical considerations are paramount in the resolution of environmental problems, and by neglecting the development of critical thinking about the subjective, value-laden, human element in environmental issues.

An anecdote at this point may illustrate some of the claims made above. A teacher in a Geelong high school was considering implementing Walmit Divided, a simulation game published as part of the *Environmental Education Project* (CDC, 1981) materials. Walmit Divided aims, through experiences in simulated environmental issues, to (in part):
"foster the development of empathy and an awareness of human irrationality";
develop "the understanding of the dynamics inherent in decision-making processes" (Walmit Divided non-guide, p. 39).

These aims (there are others) indicate an alignment with the education *for* the environment dimension. The teacher elected not to use "Walmit Divided" because the end of term was approaching, and he felt he had to teach some geography to his students so that that material could be examined in a test in order to supply marks towards a term report. This anecdote illustrates the teacher's presuppositions about primacy of disciplinary knowledge, primacy objective propositional knowledge, his role in selecting information, and forms of testing and accountability.

The preceding paragraphs attempt to explain the preponderance of education about the environment in terms of the coherence of that dimension with the presuppositions guiding the practice of teachers. If we accept this explanation, and acknowledge that teachers' practice is guided by an unexamined set of presuppositions, we can consider the following points:

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- environmental education will tend to be interpreted in practice as education about the environment as long as teachers' presuppositions remain unexamined or continue to be regarded as unproblematic. Such an interpretation is the only way that consonance between practical theory and environmental education practice can be maintained. As long as the existence of teachers' guiding presuppositions remains unacknowledged when we consider educational change, there will be no sustained change at the classroom level.
- the tendency for environmental education project materials to be interpreted in practice as education *about* the environment is fostered by materials development and dissemination activities in which the materials are regarded as a self-contained product to be sold or placed in schools; by ignoring the materials-in-use, such strategies fail to address the discrepancy between the theory underpinning the materials and presuppositions guiding teachers' practice. As long as we adopt a Research, Design and Development approach and assume that successful educational change is just a matter of getting the materials right, we will (in the case of environmental education) continue to have mainly "education *about* the environment."
- only if classroom level Environmental Education is addressed in a way in which recognises that the innovation is influenced by a number of presuppositions for which alternatives exist will perceived constraints which affect the way environmental education is handled be recognised as subjective: this would set the scene for a conscious change in teachers' practice associated with a corresponding change in their supporting theory. This may create the conditions for survival of "education *for* the environment."

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