

## Mapping the Environmental Education Curriculum - from the inside

My current task in the Victorian education bureaucracy is to lead the mapping team in environmental education, one of the National Collaborative Curriculum Projects. I am active in the subject associations, the Victorian and Australian Associations for Environmental Education. Thus I may be called on privately to criticise what I am doing professionally. My strategy must be to argue within, defend without. I am here to describe the national collaborative curriculum projects in general and in work in environmental education in particular.

I was heartened recently to hear a speaker describe the project of the National Curriculum Council of Britain in mildly approving terms. He was not so sanguine as to claim that all was sweetness and light, but that, insofar as schools have been provided with well argued curriculum advice, they are better off than before. While content might be specified, classroom delivery could not be, so teachers exercise their profession as always. There are certainly some unfortunate attachments, but they are political in nature rather than curriculum. There will always be the possibility that curriculum work on whatever scale, system-wide or nation-wide, could be directed by any government, but then that is true of almost any work. The work should proceed, for it is worth doing. Therefore it is worth doing carefully, basing it on existing practice, involving all major players and consulting widely.

It is only in the words "national curriculum" appearing in the title of these two projects that there are similarities. The work is different in process, and certainly in result. Where the the National Curriculum Council requires its work to be implemented in schools, these collaborative curriculum exercises will provide guidelines for schools to consider when designing and evaluating courses. They are not syllabus statements nor course outlines, and a system may wish to opt out of the collaboration. They are certainly not intended to replace school-based curriculum development in Victoria.

These national collaborative projects are based on the National Goals for Schooling, the modestly (sic) titled Hobart Declaration, which was launched at a school adjacent to an air-base, to underscore the efforts of the federal government to cater for our peripatetic service personnel. Greater certainty that students could follow a sequential and consistent program, despite moving across the nation, was seen to be a good thing. Whether curriculum mapping, to be followed by the development of a set of Statements of Principle and Student Profiles will guarantee this desired education program is a moot point.

Federation doesn't seem to sit easily with eight suspicious education bureaucracies, each one convinced that they have the true way of educating our young. One player in the collaborative work observed that it may be conceptually easier to abolish the states than develop an agreed national curriculum. Straitened times, the rise of bureaucrats from teaching in the liberal 70s to positions of sufficient seniority to express their commitment to collaboration, or simply a set of

similar views of curriculum; all may provide reasons for involvement in these projects.

The following results are expected for these exercises. Through the consultation and public debate that is an integral part of the work, there will be wider agreement on curriculum. Smaller states, with problems funding detailed and precise curriculum development will have opportunity for involvement in such work.

These were confirmed by the AEC at their April, 1991 meeting, as the curriculum areas for which national collaborative work will be carried out.

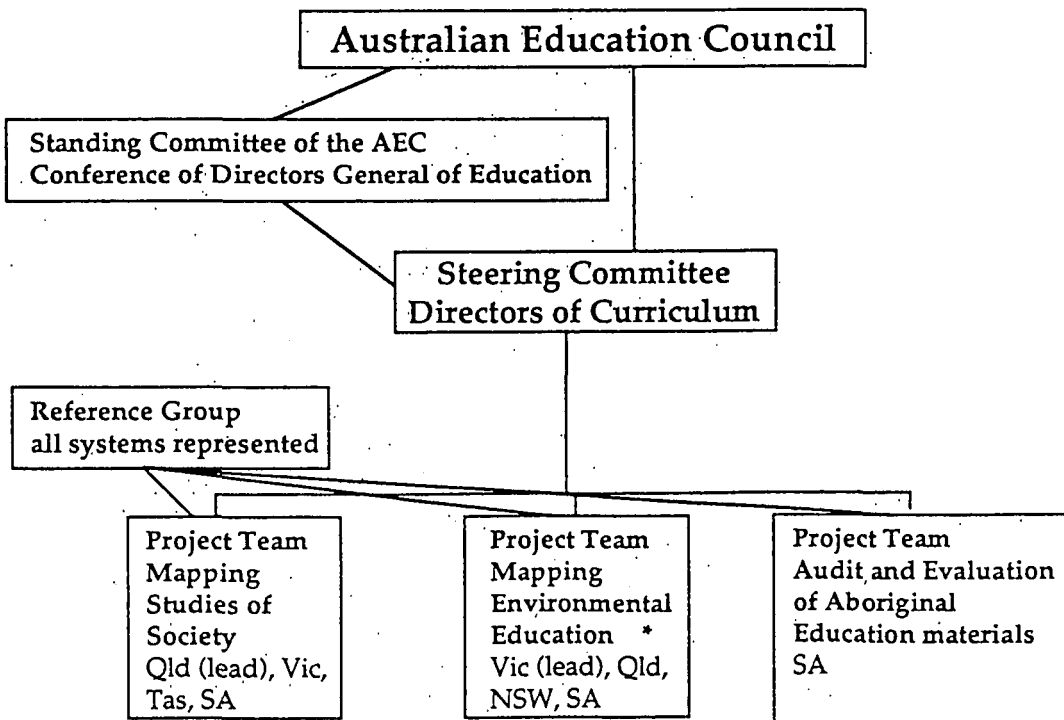
Mathematics	Studies of Society and Environment#^
English	Health*#
Technology# LOTE	
Science#	Art

- \* The generic title for Health, Physical Education and Personal Development
- # The AEC has determined that the cross curriculum nature of environmental education will be reflected in Statements and Profiles in Science, Technology and Health.
- ^ Studies of Society and Environment, at last count, include 19 discipline and theme based subject areas.

In the jargon for national collaborative work, mapping is a description of what "is", the instrument is the questionnaire and survey form designed to discover what is, while systems are the state and territory government education bureaucracies.

The mapping was based on system documents, what systems say they do, with items in the instrument such as, "Quote from the document to give the advice concerning ...".

## Studies of Society and Environment Structure for mapping



\*Audit and Evaluation of Environmental Education Materials concluded April, 1990

A sample from the instrument for Mapping the Environmental Education Curriculum

8 Skills

8.1 In relation to environmental education, quote from the document to give the advice provided concerning the development of:

- (a) Skills of sensory awareness  
using the senses to enhance perceptions of the environment
- (b) Skills of expression  
responding to the environment through language, movement, music and visual arts
- (c) Interpersonal skills  
listening, working co-operatively, communicating points of view
- (d) Skills of problem solving
  - (i) Identifying issues  
includes observation, appreciation, analysis, interaction with others
  - (ii) Researching  
seeking primary and secondary data, including a range of points of view .....

9 Values

9.2 Give statements from the document to identify the values that are promoted and developed.

10 Action

Quote the advice provided regarding student participation in environmental action, eg. energy conservation programs, improving school facilities, etc. in various spheres. Indicate if advice is provided regarding appropriateness of environmental action in particular year levels.

- personal
- school
- community
- other

11 Teaching Strategies, Learning Processes and Sample Activities

11.1 Quote advice given as to whether activities should be teacher-directed, negotiated or student-directed.

There will always be a problem in an exercise such as this, even for a mainstream curriculum area let alone something as problematic for systems as environmental education. Policy statements, and the curriculum documents and course guides that translate policies into practice, are implemented to varying degrees within schools. No matter how persuasive curriculum arguments are mounted in the documents, there is no guarantee that the classroom program will follow.

This is not to say that documents are of no use. Ministries of Education, with the public accountability that necessarily attaches to them, are document-driven institutions. Particularly in such times of financial stringency as these, it would be rare indeed to find a program that is funded without its objectives, performance indicators and evaluative procedures fully documented. Further, the change agents in schools can gain considerable support from exemplary policy documents and curriculum programs in attempting to involve their colleagues in innovation.

In the devolved curriculum structure, supported by general policy advice, that exists in Victoria, environmental education has been able to find the broadest range of forms. With a supportive school community, examples of programs which fit the

criteria recommended in Victoria's environmental education policy can be found. Many of these enjoy Victorian Environmental Education Council support. These criteria recommend that environmental education programs:

- are based on real problems
- clarify values
- use both ecological and interdisciplinary skills and concepts
- are socially critical
- are action oriented
- encourage the development of a sustainable environment, and
- involve students working together in groups

There is nothing in these exercises that will countermand that advice.

Other benefits have occurred through the exercise thus far. The framing of the instrument raised issues for members of the project team for wider discussion within systems, and across systems, as members of the Reference Group were involved. It has been intellectually and politically stimulating and has required a fine focus on teaching and learning issues, questions of resource provision, etc. A much more detailed knowledge of the curriculum structure and process across all systems has been gained. There is currently work proceeding in Victoria as a result of the mapping to determine what advice should be given to schools as to how cross curriculum issues could be monitored in school programs. The ACT curriculum documents, where each of the main Frameworks areas has a cross curriculum section, may provide the model to work upon.

As a result of the recognition that environmental education is a cross curriculum area and subsequent nomination of a number of curriculum areas in which environmental education should occur, the Technology statement has been subjected to the scrutiny of environmental educators. Bearing in mind the distinction between curriculum documents and curriculum practice, having strengthened documents is a good start. What remains a problem for me, and no doubt a number of you in the audience, is the limited nature of the recognition that environmental education is a cross curriculum area. Preliminary results from the mapping indicate that the Arts, English, Mathematics and LOTE all have a contribution to make to environmental education, and in turn will receive a contribution from environmental education. No doubt, this limitation will be the subject of continuing activity on the part of the professional associations.

The instrument itself provides a checklist of skills that could be applicable to environmental education programs, a range of headings for suitable teaching activities, etc.

Anecdotal evidence suggests that this has prompted some curriculum workers to assess their own system offerings as being found wanting. A real benefit will have occurred when revisions of such documents see a strengthening of the environmental education advice they contain.

While all aspects of the collaborative exercises are under review, the process at time of writing is as follows. On completion of the mapping, a set of Statements of Principles will be written. These will present the knowledge component of the

curriculum area, arranged in Strands of both Content and Process. The strands are the elements which make this area distinct and which define the field. Throughout the mapping report, issues are raised for attention of writers of Statements of Principles. They point to unresolved matters in curriculum design that should receive further attention.

*It is recommended that Statements of Principle should give clear direction for student action, which involves both personal change and community action.*

This example is taken from the draft report on mapping environmental education policy documents, where it was found that the rather vague term 'appropriate action' was commonly used.

Statements of Principles will be written in response to a brief prepared by Directors of Curriculum and by officers in a system or systems, and will then go to an extensive consultation process. This will include statutory authorities, eg. in Victoria, VCAB, professional associations and tertiary institutions.

The precise detail of the final document is still under discussion, with the possibility of there being course and assessment advice included. It is intended that Statements will be published in two forms; the complete form for system use, and the community document(s), where there may be a number of relevant communities. The system document for Mathematics is in the vicinity of 250 pages. It will be used in Victoria as advice to curriculum developers and for reference in reviewing the Frameworks documents.

The final phase of the work involves the development of Student Profiles. Again, the precise nature of these is under discussion, but the Victorian Literacy Profiles indicate a possible form. These allow the description of a student's progress in the strands. They present a wide range of observations that can be made regarding individual students in various learning contexts to assist the teacher in describing student achievement. These are to be developed in Bands of lower primary, upper primary, lower secondary and post compulsory.

In Victoria, it is intended that there will be consultation days with School Support Centre personnel to gain their support in the developmental process, and for their involvement in implementation activities that will result. In this way the benefits of the immense amount of work that have gone into the process will be maximised.

When the shouting and the tumult has died, however, our education system will consist of much the same teachers in much the same schools under much the same financial climate. Teachers' professionalism and knowledge of their students will determine the classroom dynamic, and if there is more soundly based advice available upon which to base their teaching program, then it will have been worth it.