

THE E.E. ELECTIVE AT THE COLLEGES OF EDUCATION IN BOPHUTHATSWANA

Pat Irwin

The circumstances relating to the development of the environmental education courses offered at the five Colleges of Education in Bophuthatswana are described briefly. An outline of the contents of these courses is given and some initial problems relating to their implementation are mentioned.

BACKGROUND

Since the beginning of 1986 student teachers at the five Colleges of Education in Bophuthatswana have been able to choose a full credit course in environmental education. The origins of this elective go back to 1982 when the then Teacher Education Board of Bophuthatswana first considered a proposal linking teacher education to the overall development of environmental education in Bophuthatswana. The final decision in favour of offering this elective was made in 1985, when the College curricula were under general review, and the first year course in environmental education was prepared for implementation in 1986. During 1986, the courses for second and third year level were developed (the teaching diploma is still a three-year course in Bophuthatswana) and the first year course modified on the basis of evaluation carried out during the year. The second year level was introduced from 1987 and the third year level will be introduced from 1988.

The design, evaluation and examination of the courses is the joint responsibility of the University of Bophuthatswana (Unibo), through its Institute of Education and Department of Educational Studies, and the Colleges. In practice the 'environmental education committee' which does the work is composed of the College staff who teach the courses and university academic staff. It is relevant too that, parallel to this programme, a full semester environmental education elective at the fourth year (final year undergraduate) level was introduced at Unibo in 1985 and a full year elective at B.Ed. level from 1986. In addition the (Government) Department of Education has worked closely with Unibo and the National Parks Board of Bophuthatswana in promoting environmental education at school level. This co-operative venture has ranged from the incorporation of a more significant environmental component in some subject syllabuses to the secondment of qualified teachers to work at the Education Centre in the Pilanesberg National Park.

The parallel developments described have in general had a strong re-inforcing and supportive effect upon the introduction of environmental education in the Colleges. Apart from the benefits of official support for environmental education at the highest levels of government, this approach has allowed environmental education in Bophuthatswana to develop across a broad front, even to the point where an 'environmental education' postage stamp will be issued during 1988. Another very important aspect is that through this structure it has been possible to support teaching staff at the Colleges who were initially not familiar with the demands of an environmental education course *per se*. In-service courses run jointly by Unibo and the National Parks Board have been supplemented by the provision of teaching material relevant to College lecturer's needs.

CURRENT COURSE CONTENT

The overall expressed aim of the three year course is to develop a comprehensive and holistic sense of awareness about the environment and environmental issues in Bophuthatswana, Southern Africa and the World. General objectives are to;

- increase the students' awareness of ecological principles that govern the environment.
- lead students to understand man's social, economic, historical, cultural and physical relationship with the environment.
- increase the students' awareness of the wide range of attitudes and personal values relating to the environment.
- allow students to experience problem-solving and decision-making processes which are applied to environmental management concerns.
- prepare students to teach about environmental issues and to develop environmental awareness in pupils in an interesting and affective way.

Specific aims for the first year of study are to introduce students to environmental education, the resources available for its execution and the ecological foundation upon which it is based. Amongst the aspects covered in the introduction are 'why environmental education?' and 'what is environmental education?'. The former focuses on 'international environmental issues', the concepts of 'quality of life and human survival' as well as moral and ethical imperatives. 'What is environmental education?' at this point takes a broad international overview, looks at terminology in current use and examines environmental education as an approach to teaching. The historical origins and development and the present status of environmental education in Southern Africa and Bophuthatswana are investigated. Identifying and using resources for environmental education emphasises the need for and value of resources for teaching. Students are introduced for example to the Lengau Conservation Clubs of Bophuthatswana, to the use of field guides and methods of collecting information from the media, published material and the local environment.

In the second term of the first year the emphasis is placed on the basic principles of ecology and their relationship to humankind. This includes an examination of 'threats to the environment' encompassing concepts such as 'pollution', 'the energy crisis', 'weld management' and 'urban decay'. The approach throughout is to view the 'natural' and the 'built' environments as parts of an integrated whole rather than separately.

Students are introduced to the concept of field studies and excursions with emphasis on planning and preparation, follow-up and consolidation, and adapting their own experiences to the school situation. This module is progressive over the three years of the course - a minimum of one field outing per term being required - in that students themselves become increasingly involved in the actual planning and execution until by the final term of the third year the entire responsibility for running an excursion and carrying out related fieldwork is theirs.

Practical and project work, which accounts for about a quarter of the course over the three years, is at all stages integrated with the theory. In the first year the emphasis is on the collection, compilation and production of teaching materials and aids for environmental education *across the school curriculum*.

Specific aims for the second year of study are to undertake a comparative study of environmental education and to examine its application in the school teaching situation. An international overview of environmental education includes an introduction to the work of the international organizations involved with it viz. UNEP, Unesco, World Bank, IUCN and WWF.

A study is made of the *World Conservation Strategy*, the *Tbilisi Declaration* and other significant documents, evaluating them for their relevance to Southern Africa. Case studies of environmental education policies, progress and problems in selected countries are also undertaken.

The theory of trails and trail development and an introduction to the theory of 'interpretation' are followed by a detailed study of the actuality and potential of environmental education in the schools of Bophuthatswana. This section, to which 40% of the year is devoted, includes;

- a review of all school syllabuses in terms of their environmental education potential.
- an analysis of government environmental policies and Education Department statements relating to environmental education.
- an examination of teaching methods and models appropriate to environmental education (including gaming and simulation).
- techniques for identifying the environmental educational potential of schools.
- the designing of environmental education programmes (including an assessment of the potential for cross-curricula work).
- an assessment of the potential for informal and non-formal environmental education.

Practical work for the year focuses on two areas; the design, development and interpretation of a trail in the local area and the making of teaching aids and simple instruments for environmental observations and measurement.

Specific aims for the third year of study, to be implemented for the first time in 1988, are to provide students with a rounded-off philosophical basis to environmental education and the skills to produce materials, operate effective programmes with pupils and to understand and undertake evaluation as an integral part of environmental education.

Topics to be covered during the course of the year are;

- philosophies of environmental education.
- the relevance of environmental education in the 1980s and beyond.

- the relationship of environmental education to other disciplines (such as psychology, sociology and ethics).
- the school, community and environmental education, opportunities and constraints governing the development of environmental education in Bophuthatswana.
- design and production of resource material.
- planning of school grounds for effective educational use.
- values analysis and clarification.
- public participation and decision-making on environmental issues (theory and practice).
- evaluation - theoretical underpinnings and practical application in terms of the curriculum, school and other environmental agencies.
- evaluation of the three year environmental education course nearing completion.

Practical work will centre on interpretation of, and production of guides on, the local environments of the Colleges and the development of school grounds for educational use.

HOPES FOR THE FUTURE

No new course such as this can be expected to run without its problems and hiccups no matter how assiduously these might be anticipated. The course described is no exception, the greatest problem to date being the matching of ambitions with a concomitant standard. College staff have faced difficulties most particularly in the integrated nature of such a course and in the demands which it places on them in terms of their own preparation and preparedness. However, as problems, such as what constitutes reasonable academic standards are encountered and tackled, the very act of dealing with them is a developmental factor for both staff and the course itself. The entire three-year programme is subject to constant evaluation in terms of both aims and content. At this stage this is mainly of a formative nature but as data accumulates over the next few years summative evaluation will add a new dimension to what, in Bophuthatswana, is a growing area of interest and commitment.

Continued from p.8

There is unfortunately official suspicion of private youth organizations dealing with 'non-white' children - we had to overcome some flak because someone somewhere thought that the initials E.C.C.O. were too close to E.C.C. (End Conscriptio Campaign). Sounds ridiculous, but it's true. ECCO is an absolutely non-political organization.

Finding sponsors. Each child pays a fee to belong to his/her club, but this is necessarily low. ECCO has to find about R20 per child per annum to function effectively.

THE FUTURE

In a short space of time we have achieved an organization operating in 40 diverse rural communities and serving about 2 000 children, most of them between 7 and 12 years of age.

There are hundreds of thousands more children in this age range who are not involved - but ... we have many more communities wanting to start clubs, and for this financial year we have had to turn them away.

If ECCO can find the financial support, it could reach into almost every rural community in the Cape and beyond - supplying what is not taught in an overcrowded, over-formalised school-system, and bringing environmental education to a very large number of future adult South Africans. We feel that that is worth pursuing. The unending cycle of poverty and environmental ignorance are two of the important factors threatening a stable future for South Africa. ECCO hopes in its small way to help towards ameliorating these factors.

Associate and individual membership of ECCO is available to interested persons at R5,00 per annum. This entitles such members to all publications, newsletters etc. but does not confer voting rights at A.G.M.'s, nor does it entitle such members to material benefits such as subsidized T-shirts etc.

REFERENCES

- KELLMER PRINGLE M. 1980: *The Needs of Children*. Hutchinson. London.
- MARAIS C. 1984: *A Brief socio-economic survey of Proteadorp, Kleinmond*. Kleinmond Child Welfare Society.