
Review of *Environmental education: some South African perspectives*. Pretoria. 194pp.

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This book sets out to provide a set of introductory readings for South African students of environmental education at tertiary level. It consists of eight chapters written by different authors who are all academics at South African universities.

Environmental education in South Africa has undergone a series of paradigm shifts. Before 1994 it was the domain of conservation bodies and non-government organisations and was neglected in formal education. Its focus was the natural world with social and political issues generally excluded. Post-1994, the right to a healthy environment was enshrined in the Constitution, but environmental conservation was rejected in favour of “sustainable development of the environment” (DEAT, 1998). Education policy described environmental education as a “vital element” for all educational levels and programmes with the purpose of creating “environmentally literate and active citizens” (DOE, 1995, p.18). Environmental justice is one of the principles of the National Curriculum Statement and infuses the curriculum statements of all subject areas (DOE, 2003). Thus environmental education moved into the formal school curriculum, not as a subject, but rather as a theme to be included across all subjects. This makes environmental education the responsibility of every teacher.

Current thinking in environmental education has shifted from educating learners about the environment i.e. giving them knowledge *about* the natural environment and educating learners *in* the environment (experiential learning in the natural environment) to a new approach: education *for* the environment (Fien, 1993) based on socially critical and constructivist paradigms oriented towards action for social change.

The first chapter of this book provides a background to the current environmental crisis by examining environmental issues. This is a good place to start as tertiary students often have scant general knowledge and as an educator, I relished the idea of a clear and comprehensive review of the issues from a South African perspective. The chapter addresses biodiversity, waste, global warming, the ozone hole, the nuclear threat, pesticides, overpopulation, urbanisation, depletion of natural resources, health hazards, desertification, deforestation, pollution and poverty. However, the categories need further refinement in order to avoid overlap and repetition. The reliance on grey literature rather than primary or peer reviewed research leads to shallow analysis and little exploration of causes, implications or possible responses to issues. While later chapters critically explore concepts such as ‘progress’ and

‘development’, this chapter does not problematise these crucial concepts which underlie the environmental crisis.

Chapter 2 on the history of environmental education in South Africa reflects the various tensions that have played a role, but does not take a partisan view. I enjoyed reading about the roots of environmental education with its references to writers, philosophers, sociologists, educators and naturalists. At times, however, I felt this chapter would be beyond the reach of tertiary students, and further explanations are needed.

The multi-authored Chapter 3 (*Paradigms, Ethics and Religion*) is uneven in quality. The explanation of different philosophical positions provides a useful framework for students, but the section on different educational approaches might leave students confused. Although the environmental philosophy section shows a more in-depth knowledge of the subject, I was disappointed by the skirting-around of more radical environmental approaches and the exhortation that one should not dismiss these philosophies out of hand. I was left wondering whether the author would tend to do just that. The chapter then moves onto religion, where a different author, relying heavily on internet sources, presents a jumbled discussion in which some religions appear more important than others.

Chapter 4 (*Education for Sustainability*) provides a useful discussion around the topic of sustainable development. As the phrase has come to mean all things to all people, it would have been useful to explore how the concept varies according to the interests of the user. While the authors argue that all meanings of sustainability should be kept in the discussion, environmental educators need to critique whether the meanings are *for* the environment (or not). The fuzziness of sustainable development has led some environmental educators to focus on the concept of “sustainable living”, a useful concept in environmental education, which enables teachers and learners to critically explore their own roles in the environmental crisis. The recipe for “ecological, social and spiritual sustainability” was unsatisfying, and unlikely to have much meaning for 21st century readers. How about some meat? I agitated, how about some stories of real people? The eight case studies at the end of the chapter were superficial, with no explanation about how they represented sustainable development or sustainable living.

Chapter 5 (*Curriculum Development, Teaching and Learning for the Environment*) can be seen as the core of the book, poised to answer the vital question: How should a teacher set about environmental education? I waited in anticipation for wisdom from the fray of South African schools. I found decontextualised information on curriculum theory and curriculum development and another set of educational paradigms (different to those in

Chapter 3). Search as I may, I could not find the real-life issues that confront the South African teacher. There were ideas for a generic school with no recognition that South African schools range from state schools with few resources and 80 learners in a classroom to private colleges with their own farm, village, chapel and theatre.

The steps to curriculum design were based on unrealistic assumptions such as whole school involvement. Aspirant environmental educators would gain more from stories about how different schools and teachers have included environmental education in their teaching with a focus on the achievements of individual teachers, and themes shared by groups of teachers as well as the more unusual whole school involvement. I was left with the impression that the authors would be hard-pressed to design and implement an environmental learning programme for a real school in South Africa.

The authors cast a dismissive gaze at the value of education *about* the natural environment. One senses it is out of vogue, and that the flavour of the month is indigenous knowledge and rural women's projects. It is worth stating that education *about* the environment forms a necessary part of education *for* the environment. If we do not educate learners towards an understanding of natural ecosystems and our relationships with them, we may as well ditch the idea of environmental education altogether. This attitude is linked to recent misconstructions amongst some environmental educators of O'Donoghue's model of the environment (1995). O'Donoghue made a necessary point after 1994, that social, political and economic forces impact on the natural environment. A recent trend amongst environmental educators to address social, political and economic topics as isolated topics, divorced from the natural environment, is highlighted by the claim that "everything around us is part of our environment – natural and human-made" (p.145). Does this make the shopping mall a worthy area of study for environmental education? I suggest that we consider Rosenberg's (2004) view that the term environmental education be reserved for processes that focus on the interrelatedness between the social and ecological dimensions of life.

Prior to 1994, NGOs were the drivers of environmental education. Chapter 6 focuses on environmental education in the non-formal sector. So why not tell us some of the stories? The story of Thor chemicals? The Save St Lucia Campaign? The struggle for recognition of wilderness? The Save the Rhino Campaign? The many, many other environmental battles fought by South African citizens against toxic waste, air pollution, nuclear power, asbestos, whaling, and river pollution amongst other issues?

Instead we get recipes, shopping lists and collections of non sequiturs. There is a recipe for community development and one for a situation analysis; there

is a list of obstacles to community development. Although the EDA (*Environmental and Development Agency*) is included in the reference list, their work with rural communities in the Eastern Cape is not described in the text. There is little to sink our teeth into. The author concludes with a platitude: “It is important to realise that both the formal and non-formal education sector should combine forces and work jointly towards solving environmental issues” (p.160). I am unconvinced that this section would be useful to environmental educators in the non-formal sector.

If environmental educators are to tackle the environmental crisis, it means addressing the significant environmental impacts of industry. While the author of Chapter 7 (*Environmental Education and Training in Industry*) problematises the basic premise on which industry is based: “[the] unprecedented expansion in production and consumption often remains unquestioned” (p.163), I question her assumption that creating environmental awareness and using participatory educational methodologies within industry will lead to better behaviour. This is naive. The bottom line for industry is to produce more and to persuade people to consume more in order to make a profit. Environmental concerns are likely to be superficial, amounting to little more than ‘greenwash’. This chapter does not examine the plethora of environmental laws that have been passed in South Africa since 1994, nor their limited impact due to a lack of political will. A focus on environmental law, the role of local and regional government as well as the rights and responsibilities of ordinary citizens is necessary if we are to achieve greater environmental justice.

In Chapter 8 (*Environmental Education Research*) the author covers the main approaches to research, but the concepts are poorly explained and there are better South African texts on research available. The chapter contains little about research in environmental education, and refers to environmental audits which are conducted as part of environmental impact assessments. There is little explanation about the purpose of environmental audits and there are vague statements such as “each audit must be designed for the purpose for which it is intended”. (p.185). The sample audit presented in the text could have served better as an illustration of how *not* to go about research, with its lack of clear purpose and context, and its closed questions feeding the ‘correct’ answers to interviewees.

This critique serves to highlight a number of issues around the state of environmental education in South Africa. Just as Dempster (2005) bemoans the state of biology education: “in the drive to legitimately democratize the inherited fascism of our past educational system we allow the weakening of the boundary strength of powerful knowledge structures to reach the point of banality”, so too do we need to discuss what environmental education is and

what it isn't, and whether it should become a catch-all for every social issue. We need to discuss the rules of this discipline. Do environmental educators have their own language, practices and concepts, and if so, what are they? Where are the experienced environmental educators? What fora are available for the sharing of knowledge with the broader community of educators? We need to look at the shape of environmental education in schools. If it is meant to run across the curriculum and be the responsibility of all teachers, is it a priority for any teachers? The discipline is not strong, the only regional *Journal of Environmental Education* is published infrequently, few specialist environmental educators are being produced, and few teachers have training in the discipline. We need to explore the dangers described by Rosenberg (2004) – Environmental education: Everywhere – and nowhere?

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