

Chapter VI

Engaging with Environmental Management: The Use of E-Learning for Motivation and Skills Enhancement

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ABSTRACT

There is an inherent antithesis between environmental management as professional practice and as concept or philosophy. Not only does this antithesis pose a problem in teaching environmental management, but also learners often have difficulty with the broad-based, multi-disciplinary nature of the subject and the value-laden nature of many environmental management decisions. Furthermore, field experience is an inherent part of environmental management and fieldwork is thus a necessary component of most environmental management modules. E-learning offers a mechanism through which to address these potential problems, through virtual practical experience and by serving as a virtual management laboratory. In this chapter, the undergraduate focus of a module on Upland Catchment Management and on environmental management is compared with e-learning for postgraduate delivery (a module on GIS for Environmental Management). The differing styles of delivery highlight the flexibility of e-learning as a vehicle for acquiring skills and knowledge, and underpin the claim that the result is an enhanced engagement with the practice of informed management.

THE CHALLENGE OF TEACHING ENVIRONMENTAL MANAGEMENT AS A DISCIPLINE

Environmental management is a discipline that seeks to co-ordinate development so as “to improve human well-being and mitigate or prevent further damage to the Earth and its organisms” (Barrow, 1999). Environmental management emerged as an academic subject during the 1970s and 1980s in response to a growing awareness of environmental degradation. The scope of the discipline is contested, with some arguing that many environmental management courses have a rather technocentric and state-led focus that should be broadened to consider human interactions with attitudes to the environment more generally (Bryant & Wilson, 1998). Others (Diduck, 1999) have argued that the discipline should facilitate public engagement with the environment, enabling both empowerment of local communities and social action in response to emerging environmental problems. In this chapter, we follow Barrow’s definition of environmental management, but paying particular attention to the different perspectives on the environment of the public, environmental managers, business, and other stakeholders.

Within geography, environmental management is being increasingly recognized within the discipline as an area of importance and is considered by some to be the third category of geography, incorporating the interactions between the physical and human elements (QAA, 2000). As a subject within geographical education, environmental management is seen as a potential means of enhancing the employability of geography graduates, as well as meeting a growing student interest in issues of sustainability. Clark (1998), for example, describes the use of student work placements involving environmental auditing of different companies as one means of boosting employability.

However, teaching and learning in environmental management presents several discipline-specific challenges, namely:

- The difficulty of teaching an inherently practical, applied subject such as environmental management;
- Providing effective fieldwork as a necessary part of an environmental course;
- The breadth of understanding required by students, because of its multi-disciplinary nature;
- Enabling students to appreciate the value-laden nature of many environmental management decisions.

We will consider each of these challenges in turn, before exploring some of the e-learning solutions developed in three case studies.

Environmental management in the three case study modules described here is a practical subject, since it focuses on solutions to specific environmental problems such as identifying an appropriate location for siting wind turbines. It should be noted that some have contested the practical, pragmatic element of environmental management, for its over-emphasis on compromise and inter-organizational collaboration (Prasad & Elmes, 2005). Nonetheless, in this context, all three case studies entailed students working towards the solution of environmental problems and there is an inherent contradiction in trying to teach this within the classroom. How can the “real world” problems and decisions be brought into classroom activities? A constructionist approach has generally been adopted within the development of learning materials for environmental management where the main focus of unit development is to ensure that environmental management learning is embedded within “realistic and relevant contexts” (Honebein, 1996, p. 11). However, ensuring workplace relevance in environmental management education remains a significant challenge.

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