

Bridging the gap between academia and practitioners: training coastal zone managers

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Abstract

This article describes how a Masters Coastal Zone Management (CZM) course has been designed to ensure the gap between academia and practitioners has been bridged to develop students who are well-equipped for the workplace. The course has a robust underpinning of science, but it is strongly vocational to ensure students develop a wide range of knowledge and skills. The MSc CZM in Bournemouth has been guided by practitioners in the field, including placement hosts and employers, to ensure that skills development is embedded into the curriculum. Existing best practice is discussed and evaluated with a view to providing recommendations for postgraduate level courses requiring a fine balance of academic content and vocational relevance.

Introduction

Masters level training for coastal zone management requires the gap between academia and practitioners to be bridged in order that students on the course are equipped with the skills they need to enter the workplace after graduation. Whilst debates questioning the nature of 'postgraduateness' and postgraduate skills development continue (e.g. Knight, 1997; O'Reilly, 1996), the strong message from industry (O'Brien and Hart, 1999; Owen, 2001) is that students need to have experience of the workplace. In essence, students need appropriate skills to communicate across disciplinary and institutional boundaries in order to be effective in their careers. But how can skills be defined as 'Masters level' and how should they be embedded into Master's level curricula?

What is 'postgraduateness' and what are postgraduate skills?

In the context of MSc CZM, the 'worthiness' of a Masters course can be achieved by a strong underpinning of science (or academic content) which is specialised and applicable to the workplace i.e. it is vocational. According to QAA (2001):

'Much of the study undertaken at Masters level will have been at, or informed by, the forefront of an academic or professional discipline. Students will have shown originality in the application of knowledge and they will understand how the boundaries of knowledge are advanced through research. They will be able to deal with complex issues both systematically and creatively, and they will show originality in tackling and solving problems'.

If students are to gain the qualities needed for employment not only does the academic focus of the course have to be suitable, but also, transferable skills need to be developed beyond Level H (Honours) to ensure critical awareness, initiative in complex and unpredictable situations, originality and creativity, self-reflection and personal responsibility (SEEC, 2003; QAA, 2001).

Units within Masters courses need to be constructed in such a way as to ensure the academic focus is applied, practically-oriented and specialised yet often (though not always) interdisciplinary in approach and perspective. Transferable skills are ultimately what the employers want and need (Owen, 2001),

hence vocational Masters degrees must be focused to provide the skills their students will need in the workplace.

There are many existing examples of embedding skills development into taught programmes. Broadly speaking, this can be achieved through the teaching of skills either as a 'stand alone' taught unit or embedded within and throughout the curriculum. Furthermore, skills development is enhanced by the inclusion of teaching staff with industry experience, the addition of visiting speakers, other good contact and input from relevant professionals and the opportunity to undertake work-based learning e.g. 'live' projects, work experience or placements.

Skills for Coastal Zone Management students

Coastal managers rarely manage the physical processes of the coast. Instead, they have become facilitators, project managers, consensus-builders and even marketers for the coast, interacting with specialists and non-specialists from a wide range of disciplines and backgrounds. This challenging role requires the ability to communicate and interpret information from and for a variety of audiences together with general management abilities in costing, timing and running projects.

In the case of CZM, one of the most important skills to develop is the ability to communicate across the many groups involved in CZM. One of the most widely known divides is between academia and the CZM practitioners.

Traditionally, this divide continued to be reinforced by the inability of academics to communicate effectively to the practitioners, largely due to inappropriate use of language (academic or scientific jargon), unnecessary depth of message and an incorrectly assumed scope of understanding. Therefore, in order to train CZM students, they need to understand the challenges of communicating to different audiences in different ways, but prior to this, they need to be made aware of the problems that exist in their chosen career path. The role of the Masters course must be to ensure students understand the science, realise the context and appreciate the importance of appropriate communication and messaging of that knowledge.

For our CZM students to enter a competitive job market and begin to undertake such a complex role on completion of the course, there is a need to ensure that their people-management skills are developed. Interactive group work, using problem-based learning lends itself to the task of training to produce independent learners and practitioners. 'Live' issues and the involvement of relevant practitioners ensure a highly motivated environment where students can build their skills through fact-finding (workshop facilitation, interviewing, literature searching), group work and role-play, and reporting (oral and written).

Course 'relevance' to students will be guided by two drivers:

- (1) The skills CZM students require need to be driven by an understanding of the workplace. Therefore, the curriculum needs to shift to reflect changes in the industry and the specifics of the workplace.
- (2) The students need to gain a wide range of skills specific to CZM but which are broad enough for them to enter employment outside the coastal sector or to enter a career

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outside the remit of environmental management.

Skills development within MSc CZM at Bournemouth

Vocational skills are considered critical to the training of CZM students. The CZM programme benefits from the feedback of visiting practitioners, course reviews and placement experiences, ensuring that it continues to evolve as the needs of the market place change. Moreover, staff involvement and membership of local and regional coastal fora and other coastal networks ensure advances in the field are reflected in the programme. All taught units are constructed to enhance the ability of the student to further develop their skills. For example, many assignments and field work activities require group-work or collaboration amongst peers. The mode of assessment is varied to ensure communication skills are developed in the written, visual and oral form. Guest speakers are used to ensure students are exposed to leaders in the field (both academic and practitioner), and many projects are simulated or real live projects to develop the sense of 'reality and relevance'.

One unit entitled 'Aquatic Pollution and Contingency Planning' utilises a simulated event to develop academic knowledge and practical skills. To inject realism into an operational issue such as contingency planning, it was considered beneficial for students to become actively involved in a simulated emergency oil-spill event. Emergency planning is particularly relevant to students studying coastal zone management. There are a number of potential hazards at the coast including landslide, flood, oil spill and terrorist attack to name a few. Within lectures, the students discuss the academic context for contingency planning before preparation for the simulated event commences. The simulated event itself is a day in length and is held in the emergency planning office of Dorset County Council as if it were a live event.

The oil spill event is simulated to affect the Dorset coast, which holds multiple (conservation) designations including its recent recognition as a World Heritage Site, as well as the busy ship-to-ship transfer zone in Lyme Bay. Dorset County Council already have a detailed oil spill contingency plan and an emergency response for oil pollution incidents. The simulated exercise with students offers the Council an opportunity to refine their training courses for emergency planning officers and hence there is mutual benefit in the exercise being undertaken.

The strengths of the exercise include:

- (1) Realism of the event – students have to think on their feet, work as a team, communicate with other teams (across the disciplinary divide), continually synthesise new information and disseminate it to relevant departments in an unpredictable and high pressure-high stress situation.
- (2) Student interaction – students must work with each other, their tutors and the council officers.
- (3) Learning by doing – improving knowledge in the area of emergency planning and skills which are transferable.

Weakness of the exercise:

- (1) Time consuming – planning for each year's activity is time-consuming for staff and involved practitioners. A number of staff are also involved throughout the activity.

Evaluation of current practice

Students and tutors involved in the simulated exercise are consistently enthusiastic: 'It is fun, hard work and a huge learning curve'. Practitioners are involved at all stages and together with the lead tutor, the practitioner refines the procedure each year.

Student feedback via unit evaluation forms over a number of years includes comments specific to this activity. The students see the simulated event as a challenge and, hence, an extremely useful learning experience.

Recommendations

The involvement of practitioners through projects/exercises is enormously beneficial to the course as it enables an injection of realism to the subject. Moreover, collaborations such as these often lead to the unexpected bonus of a better working relationship and understanding between practitioners and academic environment. In the case of the above example, the student simulation is useful to the practitioners, as they are able to 'dry-run' an operational training tool used for all practitioners involved in contingency planning. This symbiotic relationship has also been seen in other elements of the course where students undertake short projects or fieldwork to the benefit of their own academic development whilst providing useful information/knowledge to the involved practitioners. Given the competitive nature of the environmental management sector, the building of good working relationships with practitioners develops the opportunities for good student placements and potentially for postgraduate employment.

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