

FEATURE ARTICLE

Evaluating the 'postgraduateness' of vocational taught Masters environmental courses: student perspectives

Lindsey McEwen¹, Rob Duck², Martin Haigh³, Steve Smith⁴, Liz Wolfenden⁵ and Katie Kelly¹

1. University of Gloucestershire, 2. University of Dundee, 3. Oxford Brookes University, 4. Coventry University, 5. Farnborough College of Technology

Abstract

A survey of students on taught vocational courses finds that the student group is diverse, in terms of prior learning and cultural experiences, and in terms of expectations and priorities. There are high levels of student motivation and engagement, and staff time needs to be used differently than on undergraduate programmes. The most frequent student expectations of a postgraduate taught programme are that it will increase their personal 'commercial capital', specialist knowledge and transferable skills. Others include satisfaction and self-esteem. Postgraduate taught provision can be strengthened by exploring areas of commonality with staff perceptions of 'postgraduateness' and skills development.

Background, context and rationale

Strong drivers exist for postgraduate level taught course developments within Higher Education Institutions (HEIs) in the UK (McEwen, 2005). These include the target to grow overall student numbers despite the UK Government's cap on undergraduate student growth; to develop advanced training in line with regional economic needs; and the need to be proactive in meeting rapidly-evolving student markets. Many HEIs that possess undergraduate geography, environment, earth science subject areas are therefore working to develop new vocational postgraduate degrees as an important area of potential expansion or are revalidating/ updating existing programmes to make them more attractive and vocationally relevant. There are, however, a number of tensions that require resolution.

While there is significant guidance on programme development and benchmarking at undergraduate level (see Jenkins, 1998; Quality Assurance Agency (QAA) Benchmarking documents), there is currently very little guidance for those embarking on course development at postgraduate level (see Knight, 1997; Thorne, 1997). Presently subject-based benchmarking statements pertain to undergraduate courses rather than to postgraduate level. In any case, the interdisciplinary focus of much postgraduate provision mitigates against the easy use of such statements in course planning. There are, additionally, on-going debates as to what Masters (M) level means in the context of more vocational postgraduate taught programmes and courses that 'convert' at least in part as well as 'extend'. Extending the spatial scale of reference, the Bologna Declaration (1999) requires a harmonisation of EU higher education systems and a European credit transfer system that includes postgraduate level provision and hence comparability in levels of endeavour.

Within this context, this paper reports outcomes from a GEES Subject Centre small-grant funded project that has focused on the development phase of postgraduate taught vocational courses from different stakeholder perspectives. The project is multi-institutional (with partners from University of Gloucestershire, University of Dundee, Oxford Brookes University, Coventry University and Farnborough College of Technology) and uses feedback from the HEA GEES/HERG swopshop (July 2004) to contextualise the survey beyond these

institutions. The project team capitalises on the experience of colleagues that have recently been involved in developing and evaluating postgraduate taught environmental programmes with a vocational flavour within HEIs of differing size, location, strategic setting and funding contexts. The overall project aim was to identify, debate and disseminate good practice in the development of vocational postgraduate taught courses in geography, earth and environmental sciences.

Part I of the project involved a student survey that was designed to explore taught postgraduate students' expectations of postgraduate learning. Part II analysed the motivations for postgraduate course development from other stakeholder perspectives (e.g. development team, development team leader, external reviewers etc.) and debated the special attributes of a postgraduate taught course that mark it as 'postgraduate' and 'vocational'. This article focuses primarily on Part I, the learning experience from a student perspective.

A questionnaire was developed to investigate student perspectives on the postgraduate taught learning experience. The questions were a mixture of closed and open questions around five inter-related themes: (a) comparison between current learning experience and previous course of study, (b) experiences of postgraduate study, the special attributes of a vocational taught programme that make it (c) 'postgraduate' and (d) vocational; and (e) student views on to what personal benefit/outcomes they expect to have on graduating. The survey was distributed to current students in taught postgraduate environmental/geographical courses across the five institutions. This paper outlines the results and evaluates the implications for the development of postgraduate taught provision in environment/geography.

Eighty current students across the five institutions responded to the survey (Table 1) and the varied composition of the respondents mirrored the heterogeneity of the postgraduate student group. 65% were UK-based, 10% European and 25% International.

Table 1: Summary characteristics of respondents (gender broken down by age)

	20-24	25-29	30-39	40-49	>50
female	12 (15%)	7 (9%)	6 (8%)	6 (8%)	3 (4%)
male	14 (18%)	19 (24%)	6 (8%)	3 (4%)	4 (5%)

Previous qualifications varied from HNC through European Diplomas to PhDs. 57% of respondents graduated with their first degree in 2000 or later and their median level of previous work experience was 3.5 years but ranged from 0.3 to 46 years. The group included full-time international students, part-time students from the workplace, 'returners to learning' and recent graduates extending their studies.

Table 2: Differences between postgraduate taught study and previous learning experience

<i>Theme</i>	<i>Detail</i>
Level of knowledge	much deeper; more demanding; faster pace, more intense
Academic focus	more applied and practical
Teaching and learning styles	more reading, more discussion and group-work; more independent work
Opportunity to participate	increased; environment better for participation; encouraged to lead sessions
Peers	different level/ background in fellow students
Coursework	less of it/ more of it; ability to focus; emphasis on coursework (cf. examinations); course work more research-based than lecture-based.
Combining work with study	organisational skills and dedication.
Increased development of personal skills	confidence and personal skills
Work experience	opportunity to develop vocational skills
Relevance	'linked to real world of industry/ business/ government much more than previous degree'
Student personal motivation	higher; 'more engaged, interested and eager to learn'
Nature and quality of staff contact	less formality; more contact time; 'expected to be 'friends' with lecturers; 'real support from staff with a great wealth of knowledge'
Differences in educational culture	Multicultural learning experience

Table 3: How does your current learning experience compare with that of your previous course of study? Selected quotations

'smaller class means more discussion as opposed to lecturing. More hands on with practical techniques. Access to guest lecturers and presentations from people working in related fields'.....

'utterly different - much more coursework, group work, much heavier work load'.....

'it is much more intense, with a large amount of assessment work involved. It is a much smaller contingent which allows a lot more scope for group discussions and people feel less threatened about speaking out.'

'I find that compared with my BSc I am far more engaged, interested and eager to learn. I find the research very rewarding and because I have more self confidence and experience I am able to give back more.'

Results

Comparison with previous learning experiences

In assessing the differences with their previous learning experiences, students identified a number of distinctive elements (see Tables 2 and 3). These included an increased emphasis on the 'vocational' within the course, a steep learning curve in skills development as well as knowledge acquisition, the increased active nature of the learning environment, the different (less formal) nature of staff-student relationships, the changing nature of the staff and student rôles in the learning process and the additional value of prior cultural and learning experiences brought to peer group engagement.

Nature of the learning experience

Students were then asked to provide five keywords that best described their learning experience within the taught postgraduate course. Table 4 groups the main responses by

Table 4: Nature of the postgraduate vocational learning experience

<i>Category</i>	<i>Detail</i>	<i>Frequency</i>	<i>% total responses</i>
Rewarding	enjoyable, fun, enriching, fulfilling, satisfaction, achievement, stimulating, inspiring, goals	50	12.5
Challenging	demanding, burden, scary, hard work, taxing, difficult	49	12.3
Interesting	engaging, stimulating	37	9.3
Team work	communication, participation	24	6.0
Vocational	applied, broadening, practical experience	23	5.8
Negative	irrelevant to practice, repetitive, inflexible, anti-social, isolation	17	4.3
Stress	pressures, tiring	16	4.0
Time-consuming	more studying, large workload, busy	16	4.0
Intensity	sustained	15	3.8
Specialist	knowledge / skills	15	3.8
Opportunity to specialise -		10	2.5
Discipline	time-management, deadlines, organisation	9	2.3
Autonomy	independent	9	2.3
work environment	intimate, informal, relaxed	9	2.3
Money	expensive, costly	8	2.0
Focused	relevant	8	2.0

theme. The words used were disparate but with 'reward', 'challenge', and 'interest' as key themes. The majority of words reflected positively on the postgraduate learning experience; there was, however, a small amount of negative feedback where expectations were not fully met.

Special attributes as 'Postgraduate'

When students were asked about the special attributes of their course that made it 'postgraduate', there were again a number of recurrent themes (Tables 5 and 6). These included the greater depth of engagement, the approaches to learning (e.g. problem-based; research-linked; active; student-focused), the increased inter-disciplinary focus and differing staff rôles/ attitudes in learning. The strong applied nature of study (linking theory to application) was also considered to be part of the 'postgraduate' package.

Only one student responded 'don't know' and the sole negative comment indicated that 'modules were relevant but some very general'.

Special attributes as 'Vocational'

Students also identified a large number of special attributes of their course that made it 'vocational'. These included: the subject focus combining theory and work experience; utility 'degree is useable'; and practitioner links (guest speakers who work in the

field/ 'real world'). Other important attributes identified were the distinctive approaches to learning (case-study analysis) and course work that mimics the expectations of the workplace, e.g. 'writing of reports as would be expected in employment'. The flexibility of topics negotiated for assignments was considered to force students to reflect on personal interests and long-term career paths throughout the course. Skills developed were perceived as matching the needs of the workplace, for example the aim to train problem solvers; 'relevant methods used in proper jobs'. Students also commented positively on the personal approach to guidance with 'personal interest by tutors on each and every student' extending to more formal career planning. Practical elements were also rated highly - doing fieldwork and carrying out real life studies (see Table 7).

Outcomes from taught postgraduate study

Increased personal commercial capital/ vocational outcomes are major expectations as outcomes from taught postgraduate study (74% of students), with 20 students putting up to 2-4 responses in this category (Table 8). There are, however, other important drivers at an individual level including personal skill development, knowledge acquisition (a range in specialism and breadth), personal capital and transferable skills. Formal accreditation of courses and hence student membership of professional bodies ranked much lower as a key student outcome.

Table 5: Special attributes of a taught postgraduate programme that make it 'postgraduate'

<i>Theme</i>	<i>Detailed comment</i>
Depth of engagement	level of academic maturity; intensive; assumed higher level of knowledge
Subject matter	more specialised; emphasis on matching theory to applications; more current; more closely aligned to the 'real' world and the workplace
Personal skills	greater emphasis on analytical skills
Problem-based learning	anticipating situations and solving problems; 'see through' situations
Perspective	more interdisciplinary
Staff attitudes	'greater expectations and greater respect from admin and lecturing staff!'
Individual tailoring	'designed so you achieve what you personally want to achieve'
Student responsibility	for subject matter – higher; greater freedom of choice for negotiating topics in assignments
Resources	access to more facilities
Time-management	more and better than undergraduate programmes
Approach	course taught on more personal level; more emphasis on the individual
Skills	attention to vocational and transferable skills; communication skills
Teaching and learning	more student-led; more independent study

Table 6: Special attributes of the course that made it 'postgraduate', selected quotations

'Different level of thinking, i.e. research methods was challenging in terms of philosophy and new terminology introduced.'

'Geared to individual choice, allows choice to suit own needs...'

'The in-depth level of each aspect that makes it "postgraduate". It requires a level of academic maturity that continues to grow. It also helps me to see through a situation or policy etc. and enables me to see the next question / anticipate next aspect / clarify area of working/academic life more than I did in my previous degree i.e. instead of learning facts, I now think about these facts in depth'.

Table 7: Special attributes of the course that made it 'vocational' - selected quotations

'Illustrates applied learning in real-life situations with imperfections of information, people, understanding, conflicts of interest.'

'Emphasises more professional attitude to project work and presentation. Also covers subjects relevant to work place and current practice/issues. Combines theory and work experience.'

'Emphasises more professional attitude to project work and presentation. Also covers subjects relevant to work place and current practice/issues. Combines theory and work experience.'

Table 8: Themes from student expectations from postgraduate taught vocational study (ranked in terms of overall frequency)

Category	Details	Frequency	% total
Personal commercial capital	vocational outcomes, career development, employability, contacts, extra qualification in field, future, reward, retraining, professionalism, able to work globally, more potential, increased marketability, managerial, portfolio	78	19.5
Specialist knowledge	in depth, specialist, research skills, specific topics mentioned (disposal, waste, sustainability; legislative background; key agencies, environmental change)	40	10
Transferable skills	meeting deadlines, advanced problem-solving, presentation, writing, visual, multi-skill	36	9
Knowledge	breadth, linkage, up-to-date	36	9
Self-esteem	empowerment, confidence, assertiveness, achievement, self-worth	33	8.2
Experience	work experience, practice, consultancy	28	7
Personal capital	maturity, stretching, vision, completeness, realism, growth, self-improvement, direction, awareness, education, increased personal performance, direction, challenge, advanced, exposure, assessment of strengths and weaknesses, connection with background, knowing new culture	26	6.5
Satisfaction	achievement, good experience, enjoyment, fulfilment	12	3
Personal skills	organisational skills, commitment, focussed, social skills, competency, motivation, insight, accountability	11	2.8
Status	recognition, credibility, influence, advanced, trust, respect	10	2.5
Personal state	happiness, good, freedom, thoughtful, hope, pressure	9	2.3
Understanding	-	8	2
Specialist skills	e.g. computing, remote-sensing, urban design	8	2
Team work	leadership, participation	4	1
Support	friendship, people, colleagues	4	1
Accreditation	Chartered status	4	1
Intellectual stimulation	ideas, interest, theoretical understanding	3	0.8
Language	improvement	2	0.5
Study environment	independent, uninterrupted	2	0.5

Discussion

A number of points arise from a synthesis of these results.

- Prior educational experience both in terms of educational system and subject expertise is very varied and when combined with cultural educational differences, prior learning and life skills cover a large spectrum.
- Although some common themes come out of the survey (e.g. in terms of how the learning experience is summarised), there was frequent diversity in the responses given. Students have the potential to tailor some aspects of courses to their needs and the taught postgraduate experience can potentially have a high degree of individuality. Course development may need to cater for the needs of disparate groups who can learn together in many courses. Such diversity is rarely typical of undergraduate courses.
- Students as individuals generally have a clear perception of the differences between Level III (Level IV in Scotland) and Level M, but taken across the postgraduate group, expectations of postgraduate education are clearly multifaceted.
- The smaller-group research-led, learning experience in postgraduate taught provision shows some similarities to undergraduate learning experiences in the old University sector in the 1970s / early 1980s. However, the emphasis is more on active, problem-based learning, where students' prior learning experiences and more advanced personal skills add significantly to interdisciplinary debates within the learning environment. This provides a different slant on small group teaching where process can be as important as final outcomes.
- Although academic debates have focused around the challenges/tensions in developing a taught course that is both vocational and 'postgraduate', these tensions are not evident in student responses. They see a definite progression from the undergraduate experience but that progression has many tangible and intangible facets, including level and mode of engagement; steepness of the learning curve and the role of peers in the learning process.
- The distinction between conversion and extension courses from a student perspective is blurred, despite the national and international academic debate about M level. One strong theme to come through is the emphasis on skill development (personal, specialist, transferable and practical) as well as specialist academic 'knowledge' per se. No students mentioned learning level descriptors, which suggests that they engage with these implicitly rather than explicitly.
- There are issues about how postgraduate skills levels are perceived by students. Part of the 'vocational' focus of the course can be construed as the development of practical skills but what does practical skills development mean at postgraduate taught level?
- Students make strong links between high quality taught postgraduate provision and: (a) applied course content (the knowledge needs of the 'workplace'); (b) course delivery that simulates external modes of engagement (e.g. team-based activities); and (c) advanced skill development (specific, transferable and personal) that equips for employment.

These are critical in the development of personal commercial capital. Well-integrated practitioner involvement within courses is an important aspect of this provision (see McEwen et al., 2003).

- Increased personal commercial capital is a major driver for study but it is not the only one. There are many other intangibles including personal challenge and satisfaction.
- There is a strong relationship between staff involvement in applied research and consultancy (client-based) and students' perceived quality of the taught postgraduate learning environment (see Healey, 2003; 2005). Students see learning close to the research-teaching nexus as a key element of their learning experience but in a variety of ways, including case-study approaches to learning, active learning, co-learning and networking.
- A strong theme that runs through student responses is the large benefits of what students themselves bring to the learning environment. The notion of co-learning has been explored elsewhere (Le Heron et al., 2005). Co-learning with peers who frequently have different prior learning, disciplinary or cultural experiences adds vibrancy to the learning environment. Co-learning with staff who are active in applied research and consultancy has significant additional benefits.

Recommendations

There are several recommendations as an outcome of this study that can feed into postgraduate taught course developments.

These include the need to:

- harness the strengths provided by the potential variety of the student group in peer learning;
- systematically appraise the roles of staff and students in the learning processes. Staff contact time needs to be used differently from undergraduate programmes, including increased facilitation, greater input into debate and dialogue, higher degrees of student-led learning and greater integration of students with live projects and active learning; and
- capitalise on high levels of student motivation and engagement in tailoring the learning environment to the needs of specific groups.

A larger survey would allow further breakdown of student responses by different elements of student character (e.g. age, gender, ethnicity, prior academic and work experience).

Conclusions

The taught postgraduate layer is a diverse student group that reflects a variety of prior learning and cultural experiences. While there is some commonality in the themes that emerge from the student survey, there is also considerable diversity in individual perspectives and priorities. In the development and delivery phases, it is extremely important to engage the student group and get early feedback on different elements of the planned provision. It is also important the students engage with the learning descriptors associated with postgraduate study so there is a shared expectation of the outcomes. Students have universally high expectations about the nature and quality of the learning experience.

The challenge now is to match this evidence with the outcomes of the staff survey (development leaders, course development team, academic and practitioner evaluators; Heads of Quality Assurance) into 'postgraduateness' and skills development. The identification of areas of commonality and

difference in expectation can help aid the development of postgraduate taught provision. Feedback to date from both staff and students indicates that M level courses can be a distinctive and rewarding part of a University's provision, with strong vertical integration of both undergraduate and research elements and strong external links.

I. The courses included in the study were:

University of Gloucestershire: Programme of Postgraduate Environmental Taught Courses (PPTEC) including: MA/MSc Environmental Policy and Management, MSc Water and Environmental Management, MA Tourism and Sustainable Development.

Dundee University: MRes Environmental History (joint with Stirling), MSc Managing Environmental Change, MSc Geo Environmental Engineering and Management

Coventry University: MSc Environmental Assessment and Management, MSc Environmental Management and Technology, MA Tourism and Environmental Management

Oxford Brookes University: MSc Environmental Management and Technology.

Farnborough College of Technology: MSc Environmental Management (FT)/ MSc Integrated Environmental Management (PT).

References

- Healey, M with Blumhof, J. and Thomas, N. (2003) *Linking Teaching and Research in Geography, Earth and Environmental Sciences*.
<http://www.gees.ac.uk/projtheme/linktr/ltringees.rtf>
- Healey, M. (2005) Linking research and teaching to benefit student learning. *Journal of Geography in Higher Education* 29(1) forthcoming.
- Knight, P.T. (1997) Learning, teaching and curriculum in taught Masters programmes In Knight, P.T. (ed.) *Learning, Teaching and Curriculum in Taught Master's Degrees*. Cassell Education, London. pp16-27.
- Jenkins, A. (1998) *Curriculum Design in Geography*. Geography Discipline Network (GDN), Cheltenham and Gloucester College of Higher Education.
- McEwen, L. J., Haigh, M., Smith, S., Steeles, S. and Miller, A. (2003) 'Real world' experiences? Reflections of current and past students on practitioner inputs to environmental taught Master's courses. *Planet* 10, 18-22.
- McEwen, L. J. (2005) Postgraduate taught course developments in geography, earth sciences and environment in the UK: an initial assessment of drivers. *Planet No 14*, 6.
- Thorne, P. (1997) Standards and quality in taught Masters programmes In Knight, P.T. (ed.) *Learning, Teaching and Curriculum in Taught Master's Degrees*. Cassell Education, London. pp16-27.
- Le Heron, R., Baker, R. and McEwen, L. J. with Bradbeer, J. and Jenkins, A. (submitted) Co-learning: Re-linking research and teaching in geography. *Journal of Geography in Higher Education*.

Lindsey McEwen, School of Environment, University of Gloucestershire. Email: lmcewen@glos.ac.uk