UKCLE Law Subject Survey – Environmental Law

Final Report

Stuart Bell, Don McGillivray, Andrea Ross-Robertson, Sharon Turner on behalf of UKCLE

Acknowledgements

Our first debt of gratitude is to all those colleagues who have given valuable time in replying to questionnaires, undertaking interviews, and participating in workshop discussion. It goes without saying that this report would not have been possible without what, as borne out by the response rate to our survey, has at all times been the active co-operation and enthusiasm of the environmental law teaching community across the UK. It must also be stated, if only for the avoidance of any doubt, that the conclusions drawn in this report are those of the authors.

The authors are extremely grateful to Tracey Varnava at UKCLE for her encouragement and guidance throughout the undertaking of this report. We would also like to thank Colin Reid, Convenor of the Environmental Law Subject Section of the SLS (formerly SPTL), for the opportunity to present our preliminary findings at successive meetings of the Subject Section at Birkbeck College, University of London and at De Montfort University in May and September 2002 respectively, and the School of Law at Birkbeck College for its generosity in hosting the first of these gatherings.

UKCLE and the authors are also grateful to Eversheds, Solicitors, for assistance in this survey.

Acknowledgements	. 3
1 Introduction	. 7
What Do We Mean By 'Environmental Law'? The Emergence of Environmental Law as a Subject Area Existing Reflections on Teaching and Learning Environmental Law Teaching and Learning Literature: UK Gaps and L Experience Aims and Objectives of the Subject Survey	7 8 JS 8
2 Methodology	12
3 Environmental Law Teachers	16
Gender 'New' and 'Old' Universities	17 17 20 21 21 22 23
4 Environmental Law Courses	25
What Do We Call Our Courses? What's In a Name? Start Dates for Courses. Start Dates for Course Characteristics. Start Dates in Numbers. Is there a 'typical' environmental law course? Start Dates in Numbers. Is the course offered every year? Start Dates in Numbers.	26 28 31 32 33
5 The Challenges of Teaching Environmental Law	36
Rapid pace of change in law and policy Selection of the appropriate course content Interdisciplinary dimension to the subject Polycentric nature of the subject Transitional nature of the subject Level of detail Need for prior knowledge of a wide range of law subjects Student expectations about the subject Student idealism and cynicism Other challenges	 37 38 38 39 39 40 40
6 Course Content	42
Typical (taught by at least 20 respondents) Common (taught by between 10 and 19 respondents) Rare (taught by less than 10 respondents) Integrated topics	42 43

Thematic Teaching A Core Curriculum? Conclusions	45
7 Factors Influencing Course Content	47
Length of course Integration of parts of the course into the whole Type of student	48
Personal interest	48
Nature of the course Availability of teaching and learning resources Topicality	48
Textbook availability and coverage Student preference and feedback from previous courses	49 49
Contents of pre-existing course	
Relevance to practice	50 50
Others	
8 Teaching and Learning	52
Description and categorisation of results	
Lectures	
Group work and research projects	
Role Play Other TLMs	
Transferable Skills	57
Non-Use of Methods	
Conclusions	
9 Electronic Resources	61
Results	
Websites	
Discussion Space	
Conclusions	66
10 Assessment	68
Description and categorization of results	
Coursework and Exams	70
Correspondence between coursework and exams	
Altering assessment methods between law and non-law students	71
Student Performance	72
How Many Methods per Course?	
Gravitation Towards 'Easier' Assessed Courses?	
Assessing Transferable Skills	
Innovation	

Conclu	isions	74		
11	Course Evaluation	76		
12	Where Now?	77		
Practic Furthe The Pc	cal Support for environmental law teachers? r lines of inquiry? otential Impact of the RAE	77 77 78		
Bibliography				
Appendices 8				
Appendix I UKCLE Subject Survey - Environmental Law				

1 Introduction

What Do We Mean By 'Environmental Law'? The Emergence of Environmental Law as a Subject Area

1.1 Environmental law is a relatively new subject area in the UK. Prior to beginning the survey, we thought¹ that the first courses had emerged in one or two institutions in the late 1970s with a few more courses coming on stream in the 1980s, probably followed by a relative rush of courses in the early-mid 1990s in response to what has been described as the 'second wave' of interest in environmental issues in modern times.² A number of these courses, however, undoubtedly evolved from courses in town and country planning law.³ At the very least, a significant number of the more senior environmental law academics had cut their teeth in planning law in the 1970s. Other courses had probably developed from related courses such as the law of ecology⁴ or public health law.⁵

1.2 We felt confident, however, that there were now ample courses in 'Environmental Law' - as against, say, 'Planning and Environmental Law' - to make for a viable subject survey. Yet pinning down the boundaries of the subject remained (perhaps inevitably) elusive, an experience shared with the development of the subject in the US law schools:

The vast sprawl of the environmental law field makes it a bemusing and confounding puzzle even to those who pursue it as their primary academic vocation. The amorphous breadth and intricate depths of environmental law present special challenges to anyone who tries to navigate the field... Ultimately, the field of environmental law is so amorphously vast that it is not clear why we even regard it as one field.⁶

1.3 Despite such existential concerns, however, a notable feature of the US writing is how little academic industry is now engaged in justifying or defending environmental law as a component of the law school curriculum. Its coverage of natural resource law and pollution law, although undoubtedly vast, has provided a more or less settled area of study. This contrasts quite sharply with UK experience, which until very recently has still seen academic justification (or, perhaps, promotion) of environmental law as a discrete legal subject area.⁷ Relative to the US, therefore, the emphasis in the UK has tended to be in

⁵ One of the Respondents to the questionnaire taught on such a course in the late 1960s

¹ First hand knowledge took us only so far – all the authors are still under 40.

² Two main 'waves' of interest are generally identified; the first beginning in the late 1960s, the second beginning in the late 1980s. Whether it is appropriate to describe these as cumulative moves towards greater environmental interest is debateable. Both 'waves' reached a peak with major international conferences, at Stockholm (1972) and at Rio (1992). See further discussion of start date for teachers and courses at paras. 3.10 and 4.10 below.

³ Sanders, A. and Walton, W. The delivery of environmental law in UK planning education: a critical hiatus or an unimportant luxury, Paper presented at *XI Aesop Conference*, Nijmegen, The Netherlands, 28-31 May, 1997

⁴ Anecdotal evidence suggested that such a course was taught at Southampton University in the late 1970s. In addition the early version of the United Kingdom Law Association (UKELA) was known as the Ecology Lawyers Association.

⁶ See Plater, Z., Environmental law and three economies: navigating a sprawling field of study, practice, and societal governance in which everything is connected to everything else *Harvard Environmental Law Review*, 23, 1999 p.359 (part of a symposium on environmental law: trends in legal education and scholarship). See also Lazarus, R. Environmental scholarship and the Harvard difference *Harvard Environmental Law Review*, 1999: 23, p.327 (part of a symposium on environmental law: trends in environmental law: trends in legal education and scholarship).

⁷ See e.g. Reid, C., Environmental Law: Sifting Through the Rubbish, Jur. Rev. 1998: 4, pp 236-255.

arguing that the component parts of 'environmental law'⁸ coalesce into a 'proper' subject for teaching and research.⁹

1.4 A central aim of the present study, therefore, was to try – free from any disciplinary defensiveness - to identify what is currently being taught as 'environmental law' in the UK. We recognised that it would not be feasible to do this first, and then gather information and experiences about how the subject is taught. There is scope for a wide range of views about what might legitimately fall within an environmental law course – indeed, some courses are styled 'Law of the Environment' or 'Law and the Environment' in a conscious attempt to demarcate them in differing ways – and every teacher will have a different slant on subject content.¹⁰ The inevitable consequence is that the subject survey is a survey of three things - what we, as law academics, teach in relation to the environment; how we do so; and what we think about our teaching – conditioned by what it is we actually teach.

Existing Reflections on Teaching and Learning

1.5 A key driver for the subject survey was the apparent deafening silence coming from the literature – and from research - in relation to teaching and learning in environmental law. Doubtless a factor in this, as noted above, was the academic emphasis until very recently on justifying the area as a discrete subject of study. Nevertheless, there was an apparent lack of any systematic survey of environmental law teaching, either in law schools or elsewhere.

1.6 Regrettably, teaching and learning in environmental law seems not to have received any significant scrutiny at environmental law meetings. Since 1995 there has been a subject section of the Society of Public Teachers of Law (SPTL) (now, Society of Legal Scholars (SLS)) on environmental law, but since its inaugural meeting there has been little consideration either of 'what is environmental law?' or of current or possible teaching and learning methods. Nor, it is believed, has the ad hoc Socio-Legal Studies Association (SLSA) subject section considered these issues in any great detail. The United Kingdom Environmental practitioners and generally shows little desire to engage with teaching and learning issues.¹¹ Nor do bodies of environmental lawyers at the European level (the European Environmental Law Association; the Avosetta Network) appear to have been active in these areas.

Environmental Law Teaching and Learning Literature: UK Gaps and US Experience

1.7 In the absence of any published work in relation to the teaching and learning of environmental law in the UK,¹² US sources were reviewed to suggest

⁸ By comparison with the US, natural resource conservation law has never featured prominently within UK environmental law, the emphasis being on pollution control. Certain natural resources, e.g. marine resources, have tended to be taught as aspects of international law rather than mainstreamed within environmental law.

⁹ Later work has tracked trends in the evolution of the subject, see Reid, C. and Jewell, T. Environmental Law in David Hayton ed. *Law's Future(s)*. Oxford: Hart Publishing, 2000.
¹⁰ See further para. 6.1 et seq.

¹¹ There is an annual student moot, which perhaps emphasises the link between the subject area and practice.

and practice. ¹² Though see, on specific teaching methods, Evans, T. and Jewell, T., Simulating an environmental regime in multidisciplinary undergraduate courses, in D Saunders ed. *The Simulation and Gaming Yearbook Volume 3: Games and Simulations for Business.* London, Kogan Page 1994; Poustie, M., Engaging Students and Enhancing Skills: Lessons from the Development of a Web-supported

possible avenues of enquiry. The leading source here is Sax.¹³ This stimulating paper gathered qualitative data from a survey of listed teachers of environmental law in the US, the author merely posing the question: "Since our students will not only be the practicing lawyers of 1990, but will be in their professional maturity in 2020, what is it you want them to take away from your courses?" and inviting qualitative responses. Obviously, as the question indicates, there is much greater stress in the US on environmental law teaching as a prelude to practice. But this made the responses all the more remarkable. In particular, environmental law teachers stressed the daunting breadth and depth of the subject matter:

Bewilderment and frustration were the most common themes. This subject seems to have overwhelmed us. Virtually every law teacher - however broad his or her overlook - wants to introduce students to the specific materials in the field, and to provide some experience and familiarity with it. Yet, every such attempt is an encounter with statutes of numbing complexity and detail.¹⁴

1.8 Later research suggested that little changed over the following decade:

The sheer volume of material makes it impossible for any professor, even one using the best of methods, to teach the diverse, distinct, and overlapping universe of substance the subject provides.¹⁵

1.9 We had, though, to bear in mind at least six key differences between the US and UK:

- the traditional predominance in the US of the case method of instruction¹⁶ and the particular difficulties in relation to environmental law that have been attributed to this method of teaching and learning. The response of Robertson and others tackling a complex, multi-dimensional and multi-party problem over a semester in a simulation was therefore quite a common response.¹⁷ Her argument, therefore, is that it is the environmental law system that needs study and understanding, and that this can be done by what Richard Lazarus has termed 'deep dives'¹⁸ into a limited number of substantive areas, showing how these work in practice and providing students with transferable skills.¹⁹
- the extent to which this approach is influenced by the more professionally-geared postgraduate US law degree.²⁰ For example, many US courses have a significant clinical orientation or component, while

International Environmental Law Conference Simulation, *International Review of Law Computers and Technology* 2001:15(3), pp.331-344.

¹³ Sax, J., Environmental law in the law schools: what we teach and how we feel about it. *Environmental Law Reports*, 1989:19, p.10251.

¹⁴ Ibid. p.10251.

¹⁵ Robertson, H., Methods for teaching environmental law: some thoughts on providing access to the environmental law system, *Columbia Journal of Environmental Law*, 1999:23, p.240

¹⁶ Ibid, citing Wakefield, J., (1991) Attitudes, ideals and the practice of environmental law UCLA Journal of Environmental Law and Policy, 1999: 10 p.169.

¹⁷ Sax, J. Op. cit.

¹⁸ Plater, Z. Op. cit. p.361.

¹⁹ This may be linked, however, to the more practice-oriented nature of US environmental law teaching, see para. 7.17 below for a discussion on the impact of UK practice on the course content of UK environmental law courses.

²⁰ On teaching styles in the US see also Corcos, C. et al, Teaching a megacourse: adventures in environmental policy, team teaching, and group grading, *Journal of Legal Education*, June 1997, p. 224 and Wirth, D., Teaching and research in international environmental law. *Harvard Environmental Law Review* 1999, p.423.

the work of student environmental law clinics has also been notable in the evolution of the discipline.²¹

- linked to this, that in the US environmental law is a major area of commercial practice. Necessarily the whole dynamic of the students and academics involved will be coloured by this fact. By contrast, although environmental law practice is common in the UK, it may still be perceived as a 'specialist' area, even amongst the biggest law firms.²²
- as alluded to by Robertson, semester-based teaching in the US must be assumed to have an impact on curriculum content and teaching style.
- there is probably a greater 'all-rounder' culture in US law schools, by which we mean a much greater blend of the academic and of practice (linked, no doubt, to the professional-orientation noted above). This might be contrasted to the more socio-legal or contextual orientation of the typical UK environmental law scholar.

Aims and Objectives of the Subject Survey

- 1.10 The Environmental Law Subject Survey had the following aims:
 - to identify, where possible, the history of the development of the subject area
 - to establish what is being taught under the banner of environmental law
 - to establish to whom such courses are being taught
 - to establish how the courses are being taught and the factors which influence teaching and learning strategies
 - to establish whether there are distinctive approaches to teaching the subject within different jurisdictions.
- 1.11 The objectives of the survey were therefore:
 - to provide the first quantitative and empirical benchmark for environmental law
 - to provide an overview of teaching and learning methods in environmental law
 - to inform law and non-law teachers of teaching and learning methodology in environmental law
 - to identify and disseminate innovation in teaching and learning in environmental law.

²¹ That US environmental law academics are more concerned with real-world engagement such as clinical activity than publishing scholarly articles is a conclusion reached by Lazarus op. cit. pp 350-4. The emphasis on the use of clinical legal education, particularly in the context of Citizen Suits has led to a certain amount of controversy with threats made and action taken against Environmental Law Clinics in terms of cuts in funding and changes in professional rules to exclude students from acting in sensitive 'political' environmental cases, see Joy, Political Interference with Clinical Legal Education: Denying Access To Justice 1999:73 *Tulane Law Review* 235 Kuehn, Denying Access to Legal Representation: The Attack on the Tulane Environmental Law Clinic 2000:4 *Washington University Journal of Law and Policy*, p.33 and at <<www.wulaw.wustl.edu/Journal/4/ Kuehn.pdf>. In contrast, the findings of this survey suggest that there is no environmental law clinical activity in any of the Law Schools surveyed.

²² The main guides to the Legal Profession, Chambers and the Legal 500 have recommended practitioners in Environmental Law in most regions of the UK, but the numbers are relatively small.

- 1.12 In addition we hoped to analyse:
 - whether the subject has increased/decreased in popularity over time ²³
 - whether the existing resources used in teaching and learning are suitable $^{\rm 24}$
 - whether alternative methods of assessment are successful in this subject area
 - whether the challenges of teaching environmental law are inherent or external.

1.13 We should stress that the survey did not aim to identify more or less 'successful' courses. 'Success' which is related to the effectiveness of the teaching and learning experience can only be assessed subjectively by the teachers and students concerned. There may be certain objective indicators of effectiveness such as grade average, popularity (in terms of increasing student numbers) and even attendance. The survey only asked about the bare trend in student numbers, and was not concerned with any of these other factors. Therefore we have not sought to equate rising student numbers with more 'successful' courses (though doubtless those teachers involved will do so on their CVs and promotion applications!).

²³ Measured solely in quantitative terms of increasing or decreasing student numbers.

²⁴ With hindsight, the better question would have been to ask whether existing resources were effective or sufficient and thereby identify if there are any gaps. This would enable us to identify any need for new resources.

2 Methodology

2.1 The survey was designed to identify the broad nature of environmental law teaching in the UK in accordance with the stated aims and purposes of the research.25

The adopted methodology was designed to help us to identify all 2.2 teachers of environmental law across the country even where the courses were not run within a law department (this title covers a range of bodies including Law Schools, Law Faculties or even groups of Law Teachers within another faculty/department) or by a Law Teacher. Using our methodology we identified institutions in the UK where it was possible that environmental law might be taught. Not all of those institutions had law departments and we cast our sampling net far and wide to ensure that we included institutions where the subject might be taught outside conventional law departments.

2.3 Although we wanted to capture a much better picture of environmental law teaching outside the law schools, this was complicated by the diffusion of courses - and teaching within courses - covering different aspects of what falls within 'environmental law'. Therefore, given the nature of the survey, it was not possible to guarantee that every single environmental law course was covered, and there may be occasions where we have missed pockets of teaching. For example, in our initial search we identified a number of institutions where environmental law or some hybrid of the subject was being taught on a single course within that institution across all departments and courses.26

2.4 The project was divided into four main phases.

The first phase involved drafting the quantitative survey (sometimes 2.5 referred to in this report as the 'Stage 1 survey') and identifying recipients for the survey. The quantitative survey was a refinement and expansion of the existing UKCLE subject survey template,²⁷ but taking into account the specific aims and objectives of our survey. The survey was piloted to four respondents and refined further in the light of the responses received.

During this period, we also drew up our list of recipients for the Stage 1 2.6 survey. This was done firstly on the basis of our own prior knowledge of environmental law teachers and researchers in the UK. This was then supplemented - both with personal contacts with non-environmental law staff in other institutions, and with detailed web searches - to identify further environmental law teachers.

2.7 The aim at this stage was not to identify all potential teachers of environmental law, but simply to identify the/a principal teacher of environmental law within all the law schools and departments. Our focus was then on this teacher and their main undergraduate environmental law course (which was usually but not exclusively taught from within the law school/department), and on this teacher supplying us with basic information about other environmental law teaching that they were aware of in their

²⁵ See paras 1.10-1.12 above.

²⁶ For example, we would expect to find undergraduate degree programmes on land management teaching some conservation law, or certain engineering programmes dealing with some law relating to contaminated land, but selecting a manageable and representative sample from the vast array of such teaching was not feasible. ²⁷ Available at www.ukcle.ac.uk/about/template.doc

institution.²⁸ Environmental law teaching at graduate level was not therefore within the remit of the subject survey other than in relation to Q3, i.e. basic details about name and length of courses, teachers, law component, and type and number of students.

2.8 We carried out this initial 'sieving process' to narrow down the sample by excluding various institutions. The first group were excluded after a process of contacting law departments and making enquiries as to whether environmental law was taught and the name of the relevant teaching contact. In addition we searched on the web for environmental law courses at each institution.²⁹ In cases where there was an existing law department where environmental law was not taught we excluded that institution from our survey.

2.9 If there was no law department our searches generally indicated where such a course was being taught across other departments.³⁰ This allowed us to exclude institutions where it was clear that environmental law was not being taught at undergraduate level within the law department (although the subject may have been taught at some time in the past) or where law was not taught at all.³¹

2.10 There were other institutions where the subject had been taught in the recent? past but for some reason (e.g. study leave or longer leave of absence) the course was not currently being offered or we couldn't contact the relevant teacher.³²

2.11 This could be broken down further into sub-categories

- institutions where, although environmental law appeared to be offered as an option on undergraduate programmes, when further enquiries were made we could not find out who actually taught these courses. One explanation for this may be that the information was a legacy of past courses and teaching staff may have moved on or that teaching staff had other, newer, priorities.³³
- institutions where the subject may have been offered within the last three years but there had not been sufficient student take up to run the course.³⁴

²⁸ See Appendix 1, Stage I survey, Q3.

²⁹ This process of cross checking also gave some indication of the amount of environmental law teaching generally. Searching against the term 'environmental law' across institutions as a whole gave us some indication of the range of courses which were being taught, particularly the amount of such teaching outside law departments or on non-law courses. Even on a 'rough and ready' check it was clear that the number of courses outside law departments was so large as to make any meaningful study of these courses unfeasible. One interesting side effect of this general review of courses on the web was that when survey respondents supplied information on other environmental courses taught at their institutions, there was often a significant discrepancy between the information given by the law teachers (as found in Box 1, See Appendix I) and the general information available on the web. There are a number of potential explanations for these discrepancies but at the very least they indicate that in many cases, teachers of environmental law within law departments were not fully aware of other environmental law courses taught within their institutions.

³⁰ We did, though, miss small pockets of environmental law teaching to law students, e.g. at Bath Spa University College and Lincoln and Humberside University.

³¹ Bath, Birmingham, Bradford, Brunel, Central England, Derby, Glasgow Caledonian, Heriot Watt, Hertfordshire, Hull, Imperial College, London, Leicester, Liverpool John Moores, London Guildhall North London, Paisley, Robert Gordon, Royal Holloway, St Andrews, Teesside, Thames Valley, Ulster and UMIST.

³² Leeds Met, City, Glasgow, South Bank, East London, Cardiff, Southampton.

³³ Leeds Met.

³⁴ East London.

- in some institutions, the relevant law teacher was away on study leave or otherwise absent during the period of the survey.³⁵
- at some institutions, the subject had been taught within the last two years but the main teacher had left and we could not get any other response.³⁶ By contrast, in similar circumstances where there were other institutions where a teacher had left within the past two years and the subject was no longer being offered, we subsequently managed to get a response from the original teacher notwithstanding the fact that they had left for another institution/post.³⁷
- in some institutions, staff absence meant that the subject was being taught by Law Teachers from neighbouring institutions either as service teaching to non law students or to Postgraduates.³⁸

2.12 This left 59 institutions where the available information suggested that environmental law was being taught at undergraduate level in 2001/2 or had been taught within the preceding two years. The survey was piloted in October 2001 in the form of a written questionnaire sent to four known teachers of environmental law.

2.13 Where we could, we e-mailed the relevant documents to course contacts in October 2001.³⁹ The e-mail contained a copy of a questionnaire with a covering letter explaining the aims and purposes of the survey.⁴⁰ Hard copy of the questionnaire was sent to those who requested this or for whom we could not identify an e-mail address.

2.14 The **second phase** of the project involved collection of the Stage 1 returns, including chasing recipients by phone and email where returns were outstanding.

2.15 Forty-five of those surveyed responded.⁴¹ Out of these, three were excluded from the aggregated data because teaching was only at postgraduate level or there was no evidence that undergraduate teaching had taken place within the last two years.⁴² There was no significant under-representation in the returns in relation to any key variable – for example, as between 'old' and 'new' universities - although it was slightly regrettable that, for various unconnected

³⁵ City, Glasgow.

³⁶ Cardiff, Southampton.

³⁷ Aberdeen, Nottingham.

³⁸ Glasgow.

³⁹ We e-mailed the survey to cut down on the use of resources as well as to save time and money. One interesting side effect was seeing how user friendly such a survey was and how respondents coped with filling out the questionnaire electronically. A significant number of respondents requested a hard copy although those that responded electronically seemed to have no problems filling out the forms.

 ⁴⁰ The detailed questionnaire can be found on the UKCLE web site at www.ukcle.ac.uk/about/environment.html
 ⁴¹ Aberdeen, Abertay, Aberystwyth, Belfast, Birkbeck, Bournemouth, Bristol, Buckingham, Central

⁴¹ Aberdeen, Abertay, Aberystwyth, Belfast, Birkbeck, Bournemouth, Bristol, Buckingham, Central Lancashire, Coventry, Cranfield, De Montfort, Dundee, Durham, East Anglia, Edinburgh, Glamorgan, Greenwich, Kent, King's, Lancaster, Leeds, Liverpool, LSE, Luton, Manchester, Middlesex, Napier, Newcastle, Northumbria, Nottingham, Nottingham Trent, Reading, Sheffield, Sheffield Hallam, Southampton Institute, Stirling, Strathclyde, Sunderland, Surrey, Sussex, Swansea, UCL, Westminster, Wolverhampton.

⁴² These were Cranfield where the courses were largely postgraduate science/management/ technology based and where no undergraduates had been recruited since 1999. Glamorgan which taught environmental law on the postgraduate Legal Practice Course only and Nottingham where the return appeared to suggest that only postgraduate courses were taught (although it was clear that undergraduate courses had run in the past, there was no clear data as to when).

reasons, the response rate from some institutions with longer records of teaching environmental law was somewhat below the average.

2.16 Fifteen of those surveyed failed to respond. Even here, however, the failure to respond did not necessarily affect the validity of the aggregated data. In some cases, the failure to respond came at institutions where it subsequently emerged that no undergraduate course existed.⁴³ Thus, there were only ten institutions where we identified an undergraduate environmental law course being taught within a law department that did not respond to the survey.⁴⁴ On this basis, the response rate was 82%. This is a high response rate given the nature of the detailed questionnaire that was sent out to respondents and ensures that some meaningful conclusions can be drawn from the data (though not all respondents gave useable answers to every question).

2.17 The **third stage** of the project involved the initial analysis of the Stage 1 responses, and the identification of areas for further - primarily qualitative - data collection. On the basis of the initial responses, we identified issues that would bear most fruit through a semi-structured interview (sometimes referred to as the 'Stage 2 interview'). The aim was to gather further information and experiences about environmental law courses and their delivery. In particular, the interviews aimed to identify successful and innovative course content and teaching practice, and the factors that facilitated or constrained such teaching. The interview schedule is reproduced at Appendix II. Interviews with 12 selected respondents were conducted either over the telephone or in person between January and April 2002. To maintain confidentiality, we have not generally identified respondents directly in the report.

2.18 The **final stage** of the project involved analysis of the qualitative data from the interviews, and the integration of the quantitative and qualitative aspects of the survey into this report. We also held two workshops to discuss our results. The first of these was at the SPTL Environmental Law Subject Section meeting on 9 May at Birkbeck College. The second workshop was at the same forum at the SPTL Conference at de Montfort University in September 2002. It is worth stressing that these were exclusively academic gatherings, and that we did not invite practitioners or students.

⁴³ Aston, Cambridge, Oxford and Warwick (although an undergraduate course was offered at Warwick in 2002/03 after a gap of six years).

⁴⁴ Anglia, Essex, Huddersfield, Keele, Manchester Met, Oxford Brookes, Plymouth, Queen Mary, Staffordshire, West of England. Staffordshire subsequently gave a response, but this has not been included in the quantitative data.

3 Environmental Law Teachers

3.1 The first part of the questionnaire was aimed at getting general information about people who taught environmental law. Was there such a thing as a typical environmental law teacher?

Gender

3.2 Figure 3.2 sets out the split between men and women teachers. There were 88 teachers of environmental law identified across the 42 institutions. Of those 53% were men and 47% were women. As Figure 1 shows there were slightly more 'main teachers'⁴⁵ of environmental law who were men but the difference was not significant. These figures would suggest that the teaching of the subject does not necessarily have a gender bias,⁴⁶ nor could we find much evidence of teaching of environmental law from a feminist perspective.⁴⁷ However, the representation of women academics within the subject area is higher than found across Law Schools generally.⁴⁸

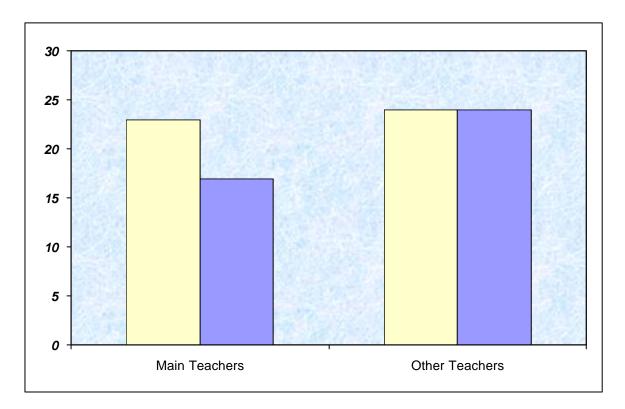


Figure 3.2 – Gender Split of Environmental Law Teachers

⁴⁵ The apparent discrepancy can be explained by the fact that at least one institution supplied more than one questionnaire. Consequently, there was at least one institution where there was more than one 'main teacher'.

⁴⁶ See Burton et al, Teaching Family Law at www.ukcle.ac.uk/resources/Family.pdf at p.22 where there is some discussion of Family Law being perceived as a 'feminine subject'

⁴⁷ There are theories of eco-feminism which may have featured on some courses under the general heading of 'Environmental Ethics'.

⁴⁸ Although this may have more to do with the fact that the start date for teaching the subject suggests that many teachers of environmental law are relatively new, see para.3.10 below) and there is a greater proportion of women at the lecturer level as opposed to more senior staff. In addition the statistics suggest that there are many variable factors that affect the numbers of women teachers on an institution-by-institution basis see McGlynn C., Women, representation and the legal academy, *Legal Studies*, 1999:19(1), p.68.

'New' and 'Old' Universities

3.3 36% of the responses came from the 'New' Universities and 64% from 'Old' Universities. The individual return rate was 70% for all 'New' Universities surveyed and 85% from the 'Old' Universities surveyed. At first glance there did not appear to be any significant differences between 'New' and 'Old' in relation to the parameters we included within our survey.⁴⁹ This appeared to be borne out in the workshops, which were attended by almost equal numbers of colleagues from each sector.

Numbers of Teachers per Institution

3.4 As Figure 3.4 shows, the majority of courses (55%) are taught by single teachers.

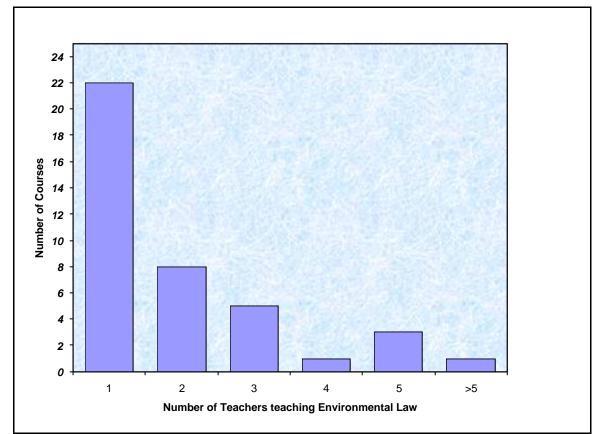


Figure 3.4 - Numbers of Environmental Law Teachers in individual institutions

3.5 In addition, courses that were taught by two teachers made up the next largest group (21%). At the other end of the spectrum there were four institutions where five or more teachers assisted in teaching (although these may have been involved in non-undergraduate course). The domination of single teachers raises a number of potentially problematic issues, many of which were raised in the first workshop:

 lack of teaching cover, for example where the teacher leaves, takes study or maternity leave or experiences other pressures on teaching time. In such cases, being a sole teacher generally means that the course will not run in that particular year⁵⁰ and experience suggests that

⁴⁹ E.g. Course content, challenges.

⁵⁰ See para. 4.40 below.

such courses tend to have greater difficulty in recruiting compared with courses which are always offered.

- possible lack of subject-specific support. By this we mean the inability, within a department, to share or bounce ideas in relation to course content and subject development. (In particular, the workshop identified lack of innovation in assessment method as a particular disadvantage to 'sole teaching'.) The subject survey suggests that the opportunities teachers have to interact at conferences etc has so far not provided a satisfactory vehicle to make up for this kind of isolation.
- lack of flexibility. With more than one teacher, teaching loads can be divided so that each teacher takes, say, one 'half' of the course in a semester. In such cases, it is possible to be flexible and swap sections in order to fit in with changing teaching loads, research pressures and even study leave.
- domination of single perspectives or approaches. In a subject such as environmental law which is strongly influenced by competing ethical views and radical value pluralism a single teacher can offer 'one view of the cathedral' without exploring alternatives. Whilst there is nothing fundamentally wrong with a single perspective it may lead to a failure to consider wider views. The corollary of this is that it is sometimes difficult to maintain thematic consistency when there is more than one teacher taking the course. Thus, there can be a balance to be struck between maintaining a consistent theme throughout a course and avoiding the problems of a subjective perspective. One interviewee said:

we used to try and team teach the whole course between 3 of us but found it didn't work in terms of maintaining themes. We would each end up teaching our own topics and the students just got a list of topics. What happens now is that I teach everything and each year [...] comes in and gives a guest lecture on things that [we] are currently in disagreement about so that the students get a picture of academics actually disagreeing quite strongly and quite clearly about something.

the role of interdisciplinary collaboration. That the majority of courses are taught by individuals suggests that, on these courses, there is no interdisciplinary assistance either with selection of course content or actual teaching assistance. Given that a majority of respondents considered that the interdisciplinary nature of the subject provided a significant challenge,⁵¹ it was interesting to note that there were only two examples of sharing the teaching load across faculties.⁵² In interview, however, some interviewees contradicted the raw data but also alluded to institutional aspirations in relation to cross-disciplinary collaboration.

Yes – there is interdisciplinary collaboration – it is quite restricted to the law degrees and the MSc. I haven't heard much of lots of other collaboration. You always get asked that in your job interview – are you willing to do that.

⁵¹ See para. 5.7 below.

⁵² The Box 1 data suggested that only Dundee and Nottingham Trent taught on a cross-disciplinary basis on undergraduate courses. Cranfield also engaged in cross disciplinary teaching although outside of a law department.

3.6 Other interviewees suggested that there may be institutional hurdles which prevent closer collaboration.

Until a couple of years ago we did used to have close collaboration with the ecology institute but we found that the admin arrangements that existed were impossible so we abandoned the joint taught programme and went our separate ways which was a pity. But the alternative was worse.

There's a group that meets up of academics that are interested in collaboration across the disciplines on environmental issues including environmental law. We have looked at maybe involving students from one unit to the other but have found that it doesn't work out of a host of reasons. We have tried putting together an environment science degree where you have a major – a very clear disciplinary training in one field – with facility to see what environmental issues and particularly environmental law looks like in other fields. A number of us are really keen on that but we have met with an insurmountable degree of resistance from the pure sciences.

3.7 At the first workshop, the issue of the impact of solo teaching on tackling interdisciplinarity was discussed, and a number of practical and institutional hurdles to co-operation identified, including problems of reciprocity, financing, confidence in collaboration, the procedural ease of non-collaboration. Impacts on teaching and learning methods were also identified, it being felt that while the sole teacher might be able to supplement their own experience with guest lectures, there was less scope to do so in relation to seminar discussion. Two impacts were identified:

- A sense of isolationism. Interestingly a number of teachers knew that there were others in their university teaching some environmental law but did not appear to have made any direct contact with them. Some of the returns specifically mentioned other staff that taught on courses across the institution which they had not met.⁵³ Once again this suggests that both inter- and intra-faculty communication was not necessarily good.
- One interview also mentioned being a sole teacher as a 'big' problem in terms of keeping abreast of the rapid pace of change of the subject.

3.8 Finally, it is worth adding that the 'sole teacher' phenomenon, coupled with the fact that virtually all environmental law teachers teach other, probably core, subjects (see below) means that environmental law teaching may be unlikely to survive when existing teachers leave, since the priority is to fill the 'core' teaching. We can think of only a few adverts in recent years that have specifically mentioned environmental law in the job specification.

3.9 It should be stressed, however, that workshop discussion identified both positive advantages (and sometimes double-sided qualities), to sole teaching, including autonomy in administration and course content, marking and specialisation.

⁵³ E.g. at Birkbeck.

Start Date for Teachers

3.10 In asking about when teachers had started teaching, the intention was to identify whether the subject was being taught by teachers new to the academy. As Figure 3.10 shows, the relative 'newness' of the subject is reflected in the start date for the majority of teachers.

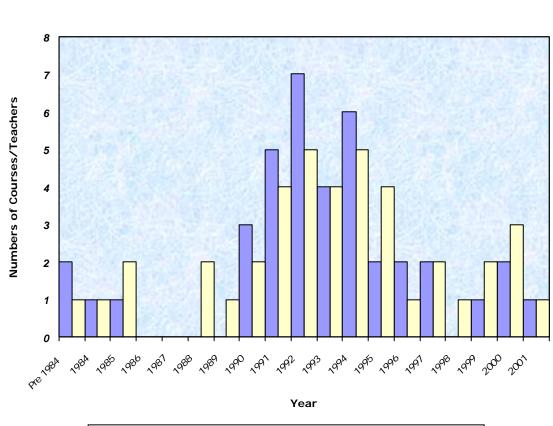


Fig. 3.10 Start Dates for Environmental Law Teachers and Courses

Start of Environmental Law Course D Start of Environmental Law Teaching

3.11 Although there are a few teachers who began teaching in the 1960s and 1970s⁵⁴, there is a significant 'spike' in the middle of the 1990s. This coincides with the impact of the second 'wave' of interest in environmental issues and the range of possible explanations for an increase in courses taught and the desire of certain teachers to start teaching courses.⁵⁵ We did not find that the relative youthfulness of teachers (or, at least, new to teaching) had any noticeable impact on things like the use of new technologies,⁵⁶ but it did seem to mean that these teachers would have considerable scope to put on bespoke courses tailored to their individual interests (unlike many long running courses that may be adapted over the years through incremental change).⁵⁷ Weighed against

⁵⁴ Prior to 1988, there were examples of environmental law courses and teachers at certain institutions but they were so small and sporadic as to be almost meaningless in terms of the development of the subject as a recognised academic discipline. For the sake of complete ness, the survey responses suggested that there were four environmental law courses starting prior to 1988 (1968, 1975, 1984 and 1985). Similarly, the survey suggested that there were only four environmental law teachers started teaching environmental law prior to 1988.
⁵⁵ Possible factors range from factors specific to the subject area (the enactment of significant

⁵⁵ Possible factors range from factors specific to the subject area (the enactment of significant pieces of environmental legislation and institutional reforms; greater availability of textbook coverage; greater student interest in the environment) to more general factors (the general expansion of higher education; greater scope for more optional courses; semesterisation.

 ⁵⁶ See Section 9 below.
 ⁵⁷ See further para. 4.9 below.

this, however, is the possibility that young teachers, in seeking to find their feet with their own departments, might be less inclined to make inter-disciplinary links or, as one respondent noted, links outside of the academy.

Teaching in other subjects

3.12 Here we address, first, what other courses environmental lawyers teach, and whether there is any degree of coalescence between environmental law and these other teaching areas; and, second, whether environmental law is integrated into other courses. It was hoped that our findings would reflect two sides of the same issue – whether there was any connection between environmental law and other identified subjects. If so could it be exploited for the benefit of environmental law teachers and others? If not, were there any identifiable hurdles to closer integration that could be addressed?

What other subjects?

3.13 Just one respondent only taught environmental law. Figure 3.13 shows the other areas in which environmental law teachers work. The 'other' category comprises a range of courses taught by only one respondent.⁵⁸ Figure 3.14 shows the number of undergraduate courses, other than environmental law, taught by environmental law teachers.

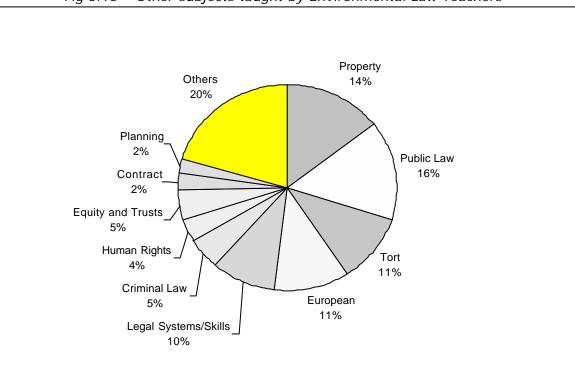


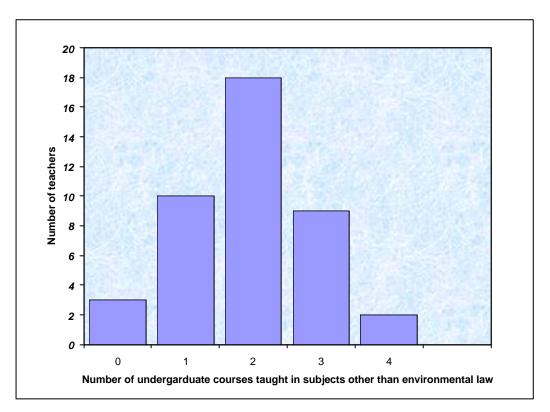
Fig 3.13 – Other subjects taught by Environmental Law Teachers

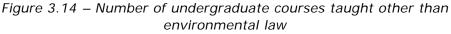
3.14 The most common subjects taught were the 'foundational'⁵⁹ subjects: Property Law, Public Law, Tort/Delict, European Law and Legal System.⁶⁰ Given

⁵⁸ These included: Public International Law, General Business Law for non lawyers, Law and Economics, Law and Ethics, Financial Services, Regulation, Insurance Law and Regulation, Company Law, Law and Regulatory Frameworks for Community Health and Environmental Protection, Plant Quarantine, Sustainable Pesticide Management, Housing Law, Child Law, Water Policy and Water Rights, Welfare Law, International Maritime Law and Energy Law.

⁵⁹ The phrase 'foundational subjects' is used in this context to refer to those courses that are common to all courses. These also reflect the so-called 'core' subjects that are required for

the dominance of 'core' subjects, not least in relation to recruitment, and the demands that such subjects place upon teaching staff in terms of contact hours, this comes as no surprise. Nor was it surprising that environmental lawyers tended to teach those foundation subjects with the greatest overlap with environmental law, especially property law, tort/delict, public law and European law.





Integrating environmental law into other courses

3.15 We were also interested to find out whether environmental law was taught as an aspect of any other law subject taught within an institution, and asked whether environmental law was taught on any other law course either by way of thematic example⁶¹ or as an integral component of the other course.⁶²

professional courses. In England these include the mentioned subjects and contract. The Law Society for Scotland requires the following subjects: the Law of Obligations (includes contract and delict), Scots private law (includes Family Law, Trusts and Succession), Legal Method and Systems, Criminal Law, Commercial Law, Public Law, Evidence, Revenue Law, Property and European Community Law. The Faculty of Advocates also requires Roman Law and International Private Law (Conflicts). In Northern Ireland the 'core' subjects are the English subjects plus Evidence.

⁶⁰ Legal System is not a core subject in the 'pure' meaning of the phrase but it is nevertheless incorporated into the vast majority of undergraduate law degrees under some guise or other. The titles of the courses used in the quantitative analysis do not necessarily reflect the various names given to the subjects at individual institutions. For example, Property includes Land Law and Public Law includes not only Constitutional Law and Administrative Law but also specialist courses such as Administrative Justice and Civil Liberties. We recognise therefore that these general titles are simply convenient and may not reveal distinctive subjects.

⁶¹ E.g. 'environmental crime' as a theme for a criminal law course or 'environmental liability' as a theme for a tort course.

⁶² E.g. international environmental law as part of international law.

3.16 What we found was a lack of any real integration between environmental law and the other subjects that respondents teach. The questionnaire asked whether environmental law was used as an example in the teaching of other courses. Only 11 of the respondents said that it was, with International Law (4), Tort (3) and Property (Land) Law (3) being the most common courses. For example, Environmental Liability was used as a theme on some Tort courses and European Environmental Law was considered in detail on some European Law courses.

As discussed in the first workshop, there may be many reasons why it is 3.17 not possible to 'use' environmental law as a thematic example on many courses. For example, the environmental law teacher may not be directly involved in designing the structure of the course (which might be attributable in part to the relative youth of environmental law teachers, and hence a factor that may alter over time); the other course, most likely being a foundational course, may be team taught, making the integration of one individual's interests difficult; there may be historic factors making integration of new topics difficult; inadequate textbook coverage of the integrated topic may be an obstacle; or professional requirements may be interpreted strictly so as to stifle integration. The workshop did find a majority of participants, however, using examples drawn from environmental law (e.g. environmental law cases) in their other courses, though this was recognised as falling short of substantial integration.

Having said that it does seem as if there might be some scope for 3.18 investigating 'crossover' areas and developing teaching material that could be used to illustrate environmental law thematically within the context of other core courses. At the theoretical level, this has been done successfully in the case of feminist perspectives in law, ⁶³ and theoretical and practical issues in integrating human rights across the law curriculum have been addressed.⁶⁴ Further efforts are already planned in relation to environmental law, ⁶⁵ which might also include reflections on integrative teaching practice.

Self-identification as 'environmental lawyers'?

In interview, after asking respondents how much of their time was spent 3.19 teaching environmental law, we asked whether they would describe themselves as environmental lawyers, our aim being to try to gauge the relative importance of the subject for teachers. We found a range of responses. Some teachers described themselves, without qualification, as environmental lawyers even where environmental law made up less than 50% of their teaching. Other teachers described themselves as 'environmental and ...' lawyers (e.g. environmental and tort, environmental and public etc) without seeming to weight their environmental teaching either above or below their other commitments. A minority, however, queried what it meant to be 'an environmental lawyer'. For some this was simply one way of querying the contested boundaries of the subject, but for others the concern was different. Hence one respondent, in reluctantly conceding she was an environmental lawyer, went on:

⁶³ See e.g. the series of books published by Cavendish Publishing which started with Bottomley, A., (ed.) Feminist Perspectives on the Foundational Subject of Law, London, Cavendish 1996. ⁶⁴ Whitty N, Buss D, Mansell W, Millns S and Bell C (2002) *Teaching Human Rights*, 2nd ed,

Warwick, UKCLE, 2002.

⁶⁵ Two of the Project team are currently working on the early stages of a project looking at environmental perspectives on core and non-core legal subjects.

It's a very, very broad subject and I wouldn't like people to assume I have expertise in areas that I simply don't have expertise in. And people often do assume a certain political perspective which sometimes I share and sometimes I don't. I'm not uncomfortable with it, its more the breadth that assumes that bothers me.

A typical environmental law teacher?

3.20 Whilst it is invidious to classify a general category of environmental law teacher into 'typical' and 'atypical', there are certain aspects which apply to a majority and therefore could be said to be 'typical' characteristics. Thus, a 'typical' environmental law teacher:

- was relatively new to teaching (i.e. within the last 8 years)
- was teaching a relatively new course (i.e. started within the last 8 years)
- was responsible for starting the course
- was responsible for teaching the subject on their own
- taught two other subjects
- was most likely to teach one out of Property, Administrative, Tort/Delict, European or Legal Systems

3.21 No other 'typical' characteristics arose out of the responses to the questionnaire. Thus, there was an equal division of men and women and seemingly there was no significant distinction to be drawn between teachers at 'old' or 'new' universities.

⁶⁶ As Figure 3.14 shows, there were 18 teachers who were surveyed who taught two undergraduate courses in addition to environmental law.

4 Environmental Law Courses

4.1 The second aspect of the first part of the questionnaire was aimed at identifying typical characteristics of environmental law courses.

What Do We Call Our Courses? What's In a Name?

4.2 One of the most significant challenges presented in the process of preparing the methodology for the project and the questionnaire was defining the boundaries of the subject area in terms of the name given to courses.

4.3 As the results subsequently demonstrated, respondents taught on a diversity of courses which could fall within the definition of environmental law but which nevertheless were given differing titles.

- 4.4 These could be divided into courses:
 - with similar content and different titles e.g. Environmental Law,⁶⁷
 Environmental Law and Policy⁶⁸ and Law and the Environment⁶⁹
 - with similar titles and very different content e.g. Environmental Law and Law of the Environment⁷⁰
 - with differing course content taught at different levels e.g. Environmental Law I and Environmental Law II⁷¹
 - with different titles but overlapping content e.g. Environmental Law and Environmental Issues⁷²
 - with differing proportions of environmental law content e.g. Planning and Environmental Law⁷³
 - dealing with different aspects of environmental law e.g. International Environmental Law⁷⁴ and European Environmental Law⁷⁵

4.5 The use of these different titles, and others,⁷⁶ presented a number of methodological challenges. The questionnaire was implicitly slanted towards the teaching of single domestic environmental law courses.⁷⁷ Where people taught on a range of œurses some of which covered either international or European environmental law it was difficult to give a response which was aggregated over the differing courses. Nevertheless some respondents endeavoured to include information about more than one course where it was

⁶⁷ See e.g. Abertay, Aberystwyth, Birkbeck, Coventry, Kent, Lancaster, Middlesex, Northumbria, Nottingham, NTU (LLB), QUB, Reading, Sheffield, Southampton Institute, Stirling, Strathclyde, Sunderland, Sussex, Swansea, UCL.

⁶⁸ E.g. Buckingham, East Anglia, Kings.

⁶⁹ LSE.

⁷⁰ Westminster.

⁷¹ Napier (Environmental Law I, II and III).

⁷² E.g. Bristol.

⁷³ E.g. Bristol, Dundee, Manchester, NTU (BSc).

⁷⁴ Wolverhampton.

⁷⁵ E.g. East Anglia (2 courses: Environmental Law and Policy and European Environmental Law and Policy); Liverpool (Law and Transnational Environmental Issues and British Environmental Regulation).

⁷⁶ E.g. Fundamental of Environmental Law (Durham); British Environmental Regulation (Liverpool); Principles and Policies of Environmental Law, and Pollution Control (Wolverhampton).

⁷⁷ Insofar as course content included EC and international environmental law as possible course components.

possible.⁷⁸ In addition there was the problem, which is implied in the above list, of identifying whether the differing titles of the courses actually reflected any substantive distinctive features. In some cases there seemed to be little to differentiate the course from others with different titles. But in some cases the title was chosen to reflect a very specific approach to the course. As the course guide to the course on Law of the Environment noted:

Why not 'Environmental Law'? The dfference is crucial: Environmental Law deals with the legal discipline that attempts to integrate environmental considerations into already existing legal structures. 'Law of the Environment', on the other hand, examines things from a slightly different perspective: that of the environment. So, in this course we will not only try to understand how the law works for environmental protection but also how the 'laws' of the environment influence our perceptions of legal rights and wrongs.

4.6 It is axiomatic that when undertaking a subject survey it is essential to survey broadly similar courses. Unfortunately, environmental law may incorporate a larger diversity of courses than in other areas of the legal curriculum. In turn that means that direct comparisons of courses are much more difficult to achieve, at least in a quantitative sense.

4.7 In the end we decided that the best people to make the decisions about such difficult matters were the respondents themselves. Therefore we suggested that the questionnaire⁷⁹ be completed in respect of their 'main environmental law course'. Thus there will be data in the quantitative analysis which will have been submitted in relation to different types of courses which are taught under different titles. In some of the sections below, however, we have considered it appropriate to include data in relation to more than one course per institution, on the basis that the difference in, e.g., teaching methods or assessment is revealing and worthy of analysis.

Start Dates for Courses

4.8 One of the aims of the survey was to identify where possible the history of the development of the subject area.

4.9 In the context of teaching the subject we identified isolated examples of environmental law teaching dating back to the 1970s.⁸⁰ In our survey we identified three courses that commenced before 1980.⁸¹ Two of these courses were based strongly on planning law⁸² and it is not uncommon to find environmental law courses having evolved out of courses in planning law.⁸³

⁷⁸ Of course there was basic data on all courses which was included within the responses to Box 1 of the questionnaire.

⁷⁹ other than the data in Box 1.

⁸⁰ see para. 3.14

⁸¹ As there is no information on the actual content of the courses, it is difficult to draw any conclusion on whether they were the first *environmental* law courses. This raises the issue of what name is given to environmental law courses (see above) and whether that is a material factor. Indeed from the respondents' comments, it would appear as if they were either courses on Environmental Health law (Napier) or Planning courses which featured an element of Environmental Law (Manchester and Bristol). In all three of these cases we have sought to distinguish such courses from Environmental Law courses for the purposes of the questionnaire.

⁸² Personal knowledge suggests that other institutions started from a mixed planning and environmental law basis from the late 1970s early 1980s e.g. East Anglia and Sheffield.

⁸³ See Sanders and Walton op. cit n.3. Whether, when taught as planning courses, these had a strong element of environmental law to them, and were in effect rebranded as planning law lost some of its cache, is open to question.

Some joint planning and environmental law courses persist;⁸⁴ others have become 'full' environmental law courses.⁸⁵ The balance of the environmental law and planning law in current courses is one of the factors that could have affected the quantitative analysis of the results. Some courses called Environmental Law featured major elements of planning law⁸⁶ whereas other courses featured planning as a relatively small illustrative component⁸⁷ and others did not feature planning law at all.⁸⁸

4.11 As can be seen from Figure 3.10, the bulk of environmental law courses began between 1992 and 1995 with 'twin peaks' in 1993 and 1995. The start dates of these courses corresponded largely to the teacher's start date at the institution and the teacher's start date of teaching the subject generally.⁸⁹

4.12 Taking all of this data together we can suggest two main conclusions:

as the courses appeared to start with the arrival of particular members of staff, this might suggest that the person was recruited to teach the subject (though only one interviewee suggested this: "My institution wanted to set up a course in the area"). More likely,⁹⁰ a personal interest in the subject triggered the offering of an option on the law degree:

there was no pressure on me to start the course, I wanted to teach it as I was interested in the subject area...it seemed exciting and there is general encouragement in the department to set up new courses where we have a personal interest.

A chance to marry the personal and professional.

We also found examples where courses were taken over by existing colleagues, suggesting departmental support for the subject as a teaching area. One teacher who had taken over a largely planning course expressed this as:

I'm an accidental environmental lawyer.

the 'twin peaks' reflect a close connection between the second wave of interest in the subject area and adoption of environmental law courses across UK institutions. The period of growth of environmental law in terms of new legislation and professional interest dates to the late 1980s and very early 1990s. The first of the 'newer' courses commenced in 1990-1992.⁹¹ There may then be something of a 'ripple effect' where students taking those courses were graduating and getting jobs in the mid 1990s. Having studied the subject at undergraduate level, interest levels remained high and may have been

⁸⁷ E.g. Manchester, Dundee.

⁸⁴ E.g. Manchester, Dundee.

⁸⁵ E.g. Bristol where environmental courses are now separated from planning courses.

⁸⁶ E.g. Nottingham Trent where Environmental Law I features a significant proportion of planning law with Environmental Law II featuring mainly pollution control matters.

⁸⁸ E.g. Bristol.

⁸⁹ A warning note needs to be sounded here. The responses on this topic may simply reflect the respondent's own knowledge rather than any objective evidence. For example, one of the responses suggested that the start date of an environmental law course at a particular institution was 1992. This was incontrovertibly wrong as one of the survey team was responsible for teaching an environmental law course at that institution in 1988, taking over from another teacher who started in the early 1980s.

⁹⁰ Not least, perhaps, due to the impact of the RAE on aligning research and teaching interests.

⁹¹ There may be a diversity of possible factors behind this, ranging from factors specific to the subject area (the enactment of significant pieces of environmental legislation and institutional reforms; greater availability of textbook coverage; greater student interest in the environment) to more general factors (the general expansion of higher education; greater scope for more optional courses; semesterisation).

transferred into teaching interests.⁹² New courses have continued throughout the 1990s up until 2001.

General Course Characteristics

4.13 In addition to asking specific questions about the characteristics of environmental law courses we gained an overview of other issues by asking respondents to fill out 'Box 1' in the Stage 1 questionnaire on information about all the environmental law courses taught at the institution.⁹³

4.14 'Box 1' asked respondents to provide a range of data concerning the teaching of environmental law. First, the range and nature of environmental law teaching within their own department at undergraduate and postgraduate levels; secondly, the range and nature of environmental law teaching in non-law departments within their institution.

4.15 43 questionnaires were completed for Stage 1. Four of these, however, provided data that was significantly incomplete. At a more general level, the data provided for Box 1 was sporadically vague. In other words, a significant number of respondents provided almost – but not entirely - complete data for Box 1. The missing data varied between respondents; consequently, some sections of the analysis provided below include data from all respondents whereas other sections only reflects the position in the majority of universities that responded.

4.16 It was particularly evident that colleagues in Law departments were largely unaware of, or were uncertain as to the nature and range of, environmental law teaching in non-law departments within their institution. As a result, the survey team conducted a further survey of university web sites in order to ascertain the level of environmental law teaching beyond the Law Schools in the universities surveyed in Stage 1.

4.17 This survey identified a significant amount of environmental law teaching in departments such as geography, science and engineering that had not been reported by colleagues in their response to Box 1.⁹⁴

Stage at which the course is offered

4.18 Box 1 returns suggested that a majority of environmental law courses were offered at 'Level 3' which equates to final year students.⁹⁵ Figure 4.18 sets out the relevant results. We did not ask further about this, and the most likely explanation is that optional courses for law students tend not to be offered until the final or penultimate years of study, and (to some extent) the need for pre-requisite courses to be passed. That there may be a greater preponderance of courses only offered to final year students, however, was mentioned by some interviewees, who usually cited a preference for teaching more able / advanced students. It was not clear, however, whether this was because of the difficulty of the subject, or simply a personal preference for more able students.

⁹² Unfortunately the quantitative survey did not ask whether teachers had ever studied environmental law and we did not pursue this in the workshops.

⁹³ See Appendix I.

⁹⁴ E.g. Dundee, Nottingham.

⁹⁵ Including undergraduate level 4.

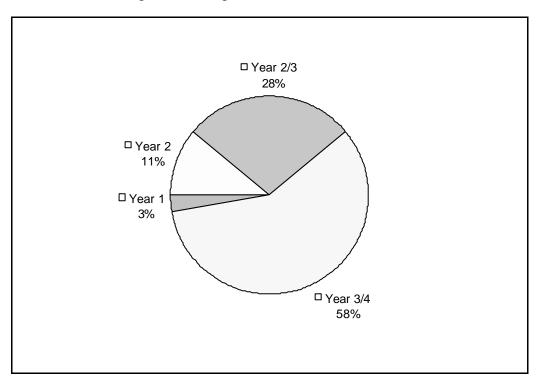
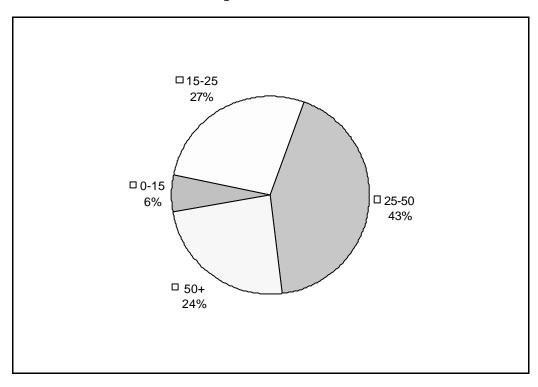


Fig 4.18 – Stage at which courses are offered

Class size

4.19 Thirty-nine respondents provided the class sizes for undergraduate students taking an environmental law course on a law degree. Figure 6 sets out the breakdown of these figures.

Fig.4.19 – Class Size



Law/non-law student split

4.20 Environmental law is a subject that appears to be popular with non-law students. Many of the respondents found that environmental law was at least as popular and in some cases more popular with non-law students than it was with law students. More than one respondent observed that the number of non-law students was increasing while the number of law students was either static or decreasing. As noted by one respondent

[environmental law] was definitely one of these courses that non-law students are least likely to shy away from because they are in the law department.

4.22 Box 1 provided some information on the split between courses taught to law students alone and courses taught to mixed law/non-law classes. 38 respondents responded to that part of Box 1. Accordingly 63% of environmental law courses taught within law degrees are delivered to classes comprised of all-law students (24 out of 38 Law Schools); whereas 37% taught environmental law to mixed classes of law & non-law students (14 out of 38). We found one instance where separate courses are taught to law and non-law students.⁹⁶ Although one interview remarked that his LLB students resented the presence of non-law students, most interviewees who taught mixed classes found the experience, as one put it, 'very positive':

If anything I think they [the non-law students] are a huge asset because they are coming from somewhere different from the law students.

Its great – I enjoy it. I throw out different kinds of questions to the different groups of students and it works really well

Pre-requisites

4.23 The need for prior knowledge of a wide range of law subjects was identified as a significant challenge when teaching environmental law.⁹⁷ It might therefore be thought surprising that 67% of responding institutions do not impose any pre-requisites for entry to their environmental law courses.⁹⁸

4.24 Of the 33% of departments to impose pre-requisites, the breakdown was as follows:

- five required Introduction to Law
- five required Tort/Delict/Obligations
- three required EC Law
- three required Public Law/Constitutional & Administrative Law
- two required students to pass Level 1 and 2 courses⁹⁹
- one required Property Law

Duration

⁹⁶ Abertay.

⁹⁷ See para. 5.14.

⁹⁸ It is possible, especially for the majority of courses that are taught only to law students, that because environmental law is invariably an optional course offered in the later years of study that there is not seen to be a need formally to make certain subjects prerequisites.

⁹⁹ This could be misleading on the basis that most final year courses would only be able to be taken by students who had passed the necessary courses in the previous years.

4.25 Forty one institutions responded to this question. There was a fairly even split between courses which were run either over an academic year or over two semesters (51%) and those run over one semester (46%).¹⁰⁰ One course ran for 18 weeks.

Is there a 'typical' environmental law course?

4.26 The range of environmental law courses was wide and varied. Of course there were a number of what might be termed 'standard' courses.¹⁰¹ Typically these were courses taught solely within a law department to law students by means of lecturing and some other form of teaching method with formal written exams and one or two other pieces of coursework.¹⁰²

The nature of the variations, from the standard course were notable. These included:

- courses taught by law teachers solely outside the law department where no course existed within the law department¹⁰³
- courses taught in a modular fashion to 150+ students across the whole of a University¹⁰⁴

4.27 If we set aside the thorny question of what title we would give to our 'typical' course, there are characteristics that are common. These include:

- an optional course¹⁰⁵
- courses which are approximately seven/eight years old
- class teaching to a large group (more than 25)
- most of whom are of final year law students
- where there is no insistence on pre-requisite courses¹⁰⁶

4.28 Of particular interest to this survey, however, there are other notable characteristics which, whilst not 'typical', reveal something interesting about environmental law courses:

- a significant number of law courses taught to combined groups of law and non-law students
- environmental law being offered on a significant number of non-law degree programmes¹⁰⁷

4.29 Arguably, the extent of these characteristics may not be sufficiently well recognised, either within the subject or within the law schools. Our findings suggest that there should be greater recognition of the extent of the co-teaching of law and non-law students and the intermingling of courses and students. Environmental law may be a good instance – perhaps even the best example - of an experimental test-bed in relation to the integration of law

¹⁰⁰ This phrase covers courses which ran from 12-15 weeks.

¹⁰¹ The term 'standard' here is used in the sense of most common as opposed to 'a traditional law course' (i.e. identifiably 'standard' regardless of our findings).

¹⁰² On teaching methods and assessment see sections 8 and 10 below.

¹⁰³ Nottingham Trent.

Leeds.

¹⁰⁵ At least on UG LLB/BA/BCL programmes.

¹⁰⁶ But see n.98 above.

¹⁰⁷ Indeed it is a required course for some specialist degrees, e.g., MSc in Environmental Management at Abertay.

teaching across higher education teaching, and of law teachers meeting the challenge of teaching non-law students.¹⁰⁸

Jurisdictional Issues

4.30 One of the stated aims of the survey was to establish whether there are distinctive approaches to teaching the subject within different jurisdictions.

The survey team was made up of one academic from Scotland, two from 4 31 England and one from Northern Ireland. It was clear, however that in certain areas such as course content, there was very little to distinguish between courses taught in the separate jurisdictions.¹⁰⁹ There was some evidence of jurisdictional differences, but these tended to relate to secondary issues such as factors influencing course content and the challenges of environmental law. For example, one Scottish respondent commented that one of the factors influencing the choice of course content was:

The state of the law: Scottish Water Law is in such a mess

which suggested that water law was avoided for that reason alone. Similarly, the Northern Irish Respondent replied that the challenge of teaching transitional laws was 'particularly' an issue in Northern Ireland. 110

4.32 We speculated on possible jurisdictional differentiation in the topics chosen for individual courses. For example we might have expected more emphasis on issues with different significance in the different jurisdictions.¹¹¹ But there was very little which could be identified as being 'Scottish', 'Welsh', 'Northern Irish' or even 'English' Environmental Law. As the effects of devolution work through the legal system, however, this may change and it is certainly something worthy of future consideration and study.

4.33 The Scottish respondents did seem to refer to the English system more often and in more detail. One reason may be that Scottish teachers are likely have to rely on English sources more than the reverse.

I never claim to do any systematic comparison with Scotland.

It's basically an English Law course.

By no means do I ignore England. I try to point out contrasts with England – there are huge contrasts especially with water. This provides a useful basic introduction to comparative law study – challenging but a good thing all round.

The course is not purely Scottish except in relation to water... For waste, air, IPPC it's broadly a UK approach and I emphasise the differences, especially in judicial review and nuisance. [The differences] have to be clear to the students and it's hard when using some textbooks.

¹⁰⁸ The amount of teaching of law to non-law students combines mixed courses (37% of all courses) and dedicated courses to non-law students.

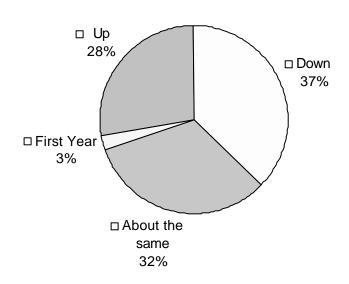
¹⁰⁹ Indeed, the only significant local references we had were from Bournemouth which used a case study based around pollution at a regional beach.¹¹⁰ Northern Ireland has a poor record in terms of late implementation of EC Environmental

Directives, see Turner, S. and Morrow, K. The more things change, the more they stay the same? Environmental Law, Policy and Funding in Northern Ireland, Journal of Environmental Law 1998:10, p.41. ¹¹¹ E.g. forestry, marine fish farming in Scotland.

Trends in Numbers

4.34 The questionnaire sought to identify whether the trend in student numbers was generally up or down. The aim was to ascertain whether, after the anticipated 'honeymoon' period in the early to mid 1990s, there had been any reduction in student numbers – as anecdotal evidence suggested - which might reflect a disenchantment with the subject and if so to explore some of the reasons for this.¹¹² The raw data suggested that there is no consistent picture across all institutions. Figure 4.34 sets out the results.

Fig. 4.34 – Trend in Student Numbers



4.35 These figures need some further explanation. In some cases, where respondents had suggested that the trend in numbers was up, they also suggested that the courses were not run every year because in some years the student numbers were not sufficient to justify running the course. In addition, it became clear from interviews that some respondents took a very broad view of the phrase 'trend' and where numbers had been falling in recent years, they still took the view that numbers were 'about the same' where the numbers over a long period were about the same irrespective of a recent downward trend.¹¹³

4.36 Clearly, some respondents might view the question on student numbers personally. There may be an understandable tendency to equate trends with personal popularity or even 'successful' courses. Hence we suspect that these figures will tend to err on the side of increasing or stable, rather than stable or decreasing, numbers. In interview, however, trends in numbers appear to have been affected by a range of different factors. These included:

¹¹² Ultimately the aim would be to address any reasons for the reduction in numbers as part of an ongoing process resulting from the subject survey which might usefully address the wider issue of the health of the subject; see, e.g. paras. 3.4-3.5 and paras. 4.37-4.39 below.

¹¹³ Thus for example in 1992 and 2001 there were 30 students but in 1996 there were 65 students. On one view this would suggest that the trend in numbers was the same whereas another might view this as a reduction.

• the availability of other courses.

4.37 One interviewee commented when asked to explain the reduction of student numbers:

What else is on offer? It may have been more popular four years ago than it has been in the last couple of years probably because there was less choices for students four years ago. But that's OK. In all of the years I've taught it the enthusiasm of the students that do choose it makes up for it, and its always been able to get between 12 and 15 [students] and I almost prefer having that than 30.

• the perception that environmental law is a 'difficult' subject.

4.38 This may be closely related to the interdisciplinary dimension to environmental law, and the considerable challenge involved in introducing law students to non-legal areas like science and economics.¹¹⁴ One interviewee commented:

Students want to choose the lowest common denominator. The general perception is that environmental law is a difficult course which needs loads of background reading. Of course it isn't but there are complaints when they're given a chapter of the text book to read...they hear that [another course] has little extra work and this then becomes the course of choice.

• the choice of assessment method.

4.39 Interviewees identified the choice of assessment as being a factor in course 'popularity'. One interviewee commented that other modules were assessed by coursework or exam and environmental law was assessed by exam and group research. The interviewee was considering moving to 100% coursework to deal with this. Another interviewee supported this:

Students in my view cynically go through the options book and look for courses where coursework is the main assessment method. Traditional exams are too much like hard work for some of them.

• topicality

[The popularity of environmental law] is cyclical – some years it's very popular, some years less so. It depends upon fads and events in the media.

Is the course offered every year?

4.40 We asked whether environmental law courses were offered every year. We wanted some objective indication of trends in student numbers. In addition, having identified some of the issues surrounding numbers of teachers in individual institutions such as the lack of flexibility or teaching cover we wanted to see whether there was any real impact on delivery of courses. The responses indicated that the lack of teaching cover did have a significant impact on whether the course was offered in any given year.

• 50% of courses were offered every year

¹¹⁴ See para. 5.7 below.

- 50% of courses were not offered every year, the reasons being:
 - o insufficient numbers (20%)
 - o study leave (15%)
 - o other demands on teaching time (10%)
 - the course was offered only every second year (2.5%)
 - o maternity leave (2.5%)

4.41 The lack of sufficient numbers does not necessarily mean that individual courses had become less popular. In some cases there may have been changes in the minimum number of students required for a course to run or an increase in the availability of other courses, and minimum (and maximum) numbers of students per course will vary across institutions.

5 The Challenges of Teaching Environmental Law

5.1 We tried to identify the challenges faced by environmental law teachers (unique or otherwise) and, in interview and in the workshops, to explore how these challenges were tackled. Figure 5.3 displays the findings.

5.2 Respondents were asked to indicate which of the 10 listed challenges applied to their course and to weigh these challenges from 1-5. 1 not a challenge at all, 2 a challenge of marginal significance, 3 significant / material challenge, 4 a very difficult challenge and 5 an insurmountable challenge. They were also asked to specify any other factors influencing course content. Finally the respondents were asked to indicate whether or not they considered any of the challenges listed as unique.

5.3 Not all of the 42 respondents who answered the questionnaire ticked every challenge. Where the sample is significantly less than 42 this is indicated. The percentage should be considered less reliable the smaller the sample.

Challenges of teaching environmental law	Significant (i.e. at least 3) (%)	Very difficult (4) (%)
rapid pace of change in law and policy	81	43
selection of appropriate course content	71	32
interdisciplinary dimension to the subject	76	20
polycentric nature of the subject ¹¹⁵	68	29
transitional nature of the subject	61	20
exploration of detailed procedural laws	66	17
undefined boundaries of the subject	61	15
prior knowledge of a wide range of law subjects	54	27
meeting student expectations of the subject	46	5
dealing with student idealism and cynicism	8	4
others	See below	

Figuro 5 3 -	Challondos	of toaching	environmental law
i igule 5.5 –	Chanenges	or reaching	

Rapid pace of change in law and policy

5.4 The survey reveals that most significant challenge to the teaching of environmental law is the rapid pace of change in law and policy. This can be explained both by the enactment and bedding down of new regimes (such as IPPC or the Water Framework Directive, or the implementation of the Climate Change Convention) but also by the broad and unsettled boundaries of the subject which means, arguably, that a wide range of developments need to be tracked for their possible impact on the subject (e.g. international law developments in relation to the precautionary principle might influence EC or national jurisprudence).

5.5 As two respondents noted:

¹¹⁵ 38 responses.

As a legal subject I think only the tax law lecturer has to amend more material annually

Historically I used to just go round the twist trying to [keep up with the pace of change]. I originally set a very wide curriculum which covered the standard canon – the kinds of things textbooks cover – but I was quite obsessed with making sure it was fully up to date. I made huge revisions and re-writing each year to integrate changes – quite detailed logs of changes – and over the years I have come to the conclusion that that is not actually what I need to teach. What I now increasing teach is at a conceptual level so that I don't have to reflect the latest twist or consultations on the water framework directive for example. I'm looking conceptually at what's going on with water and therefore the changes are not quite as acute.

Selection of the appropriate course content

5.6 Given a potentially endless choice of topics, it is a challenge deciding what to keep in and what to leave out.¹¹⁶ Problems may be especially acute the more students are given a choice of (unlimited) topics to research. One respondent who gave this a '5' noted that he had to give one-to-one tuition on a topic because only one student was interested in exploring it. However, interviews tended to shed little light on what respondents considered was challenging about selecting course content.. More typical was the response that, while course content was a material challenge, it was inevitable that difficult choices had to be made. One respondent said he felt "guilty" about not going into areas like water and waste – that they were "big areas of omission" - but remarked that he was "not keen on overloading" and that his course was "probably meaty enough". However, water and waste were two areas where he was probably going to have to think seriously over the next few years about substituting or adding.

Interdisciplinary dimension to the subject

5.7 The interdisciplinary dimension to the subject was a factor that, while ranked high in the list of factors identified by teachers, emerged especially in discussion as challenging. The difficulty is having to explain and discuss not just other disciplines, but also (as one respondent points out) the theories of other disciplines:

...I always have these doubts about people trying to meddle in disciplines that are not theirs. You can read science materials but you are not a scientist. I can read sociology materials but I'm not a sociologist. So there is always that question mark – you can't be all disciplines at once.

5.8 One obvious solution would be more cross-school collaboration, however, at the first workshop, this was not a popular solution. In addition to practical issues such as time-tabling and intra-school financial arrangements, cost-charging other concerns raised included relinquishing control and differing priorities between disciplines.¹¹⁷

¹¹⁶ See further section 6 below.

¹¹⁷ Some of the challenges of interdisciplinary teaching in environmental law are discussed in Hammer, R., Integrating Interdisciplinarity Perspectives into Traditional Environmental Law Courses the challenges of interdisciplinary teaching in environmental law, *Journal of Geography in Higher Education*, 1999:23(3) p.367

Polycentric nature of the subject

5.9 The concept of 'polycentricity' is a complex one¹¹⁸ but essentially suggests that where decisions are made within a wide context where a single decision has an impact on many others, substantive¹¹⁹ legal control is of little use.¹²⁰ Environmental law – or more accurately the decisions made within the procedural and substantive framework of environmental law - arguably sits near the boundaries of law in the sense that environmental law and decisionmaking is truly polycentric. Whereas many legal subjects are often taught by examining the adjudication of rules relating to bipolar disputes,¹²¹ environmental law concerns itself with the control of decisions or issues that are interlinked within a complex internal system.¹²² One decision can have a knock-on effect on many others.¹²³ This interconnection of interests cannot be fully accommodated within the legal system or any dispute resolution mechanisms.¹²⁴ Accordingly decisions are made within the political arena rather than by way of legal adjudication. Typically, therefore, environmental decisions are made 'in the public interest' or 'on balance weighing various considerations'. 125

Transitional nature of the subject

5.10 Inevitably the law changes over time but a fairly unique characteristic of environmental law is the delayed or staged implementation of the law, often extending over several years. Hence, much of the subject is often in transition especially in regard to European Community law. For example, while integrated pollution control is being phased out, integrated pollution prevention and control is being phased in over a period extending to 2007. Other examples include the EC Habitats Directive and, par excellence, the EC Water Framework Directive.

Level of detail

5.11 Environmental law is made up of a plethora of detailed procedural rules and both teachers and students often struggle coping with the volume of detail. There are difficulties in finding detailed, and often amended, statutory material and for the teacher the challenge is trying to make dry regulatory material interesting (or even just comprehensible).

I'm still looking for the best way to teach these more regulatory procedures – for example procedures for evaluating and remedying contaminated land – the students always go 'oh my god!'

5.12 To overcome this problem, one participant at the second workshop recounted his positive experience of setting his students the task not of poring

¹²² Often likened to a 'spider's web'.

¹¹⁸ Indeed, some of our interviewees seemed to have understood the term in slightly different ways and some respondents left the relevant questionnaire box empty perhaps suggesting that they were unsure of the exact meaning of the term.

¹¹⁹ As opposed to procedural rules which set down a framework for decision making.

¹²⁰ See Fuller, L., The Forms and Limits of Adjudication, *Harvard Law Review*, 1978 p.358.

¹²¹ Typified by small numbers of parties, seeking answers to 'yes-no' or 'more-less' questions. Examples might include tort/delict, family, criminal.

¹²³ E.g. the decision to authorise an incinerator may have local impacts such as an increase in employment and traffic movements but it could also have wider impacts such as reducing the amount of regional waste going to landfill or deterring the creation of national waste recycling facilities.

¹²⁴ Fuller op. cit., suggests that although all issues are polycentric to some extent, the critical question is whether the polycentric element is so significant that it lies beyond the 'limits of law' i.e. beyond the boundaries of legal adjudication.

¹²⁵ Exemplified by planning decisions.

over statutory rules with a fine toothcomb, but rather to get them to appreciate the shape of legislation. This was done by citing statutory material to the students, then setting a number of questions ranging from the general ('How is the legislation enforced?') to the specific ('Who can challenge the grant of a licence?'). Another participant taught a detailed regulatory regime alongside a particular study skill. Students were asked to draw a picture of the regime using a mind mapping technique.¹²⁶

Undefined boundaries of the subject matter

5.13 The potential breadth of environmental law is seemingly limitless.

I try to steer away from, or I don't deliberately try to give a comprehensive overview of environmental law – because it's a topic that changes so much and so quickly and there is not really a 100% agreed consensus of where environmental law ends and where other areas like property and general tort law begins.

Need for prior knowledge of a wide range of law subjects

5.14 Another challenge is that environmental law requires students to have a basic appreciation of a wide range of law subjects. This is especially problematic when teaching non-law students (including BA, B.Eng. etc) mixed classes with law and non law students and is probably one of the reasons that environmental law is usually taught in the third or fourth year of undergraduate study. Several respondents provided non-law students with extra materials on the courts, administrative law, tort etc.

Student expectations about the subject

5.15 While meeting student expectations of the subject came second last in our league table of challenges, a sizeable percentage of colleagues identified it as a significant challenge though few considered it very difficult.

5.16 For example, students may be drawn to environmental law because of the highly topical nature of the wider policy issues raised by environmental law. As one course outline puts it:

As a particularly policy-orientated subject, environmental law also presents students with an opportunity to branch out from traditional legal analysis.

5.17 However, students may be unprepared for the degree of legal detail that teaching the subject may be thought to require.

one difficulty is ensuring the students do not focus exclusively on the policy and social aspects of the course (students take the course in an attempt to get away from black letter teaching).

Student idealism and cynicism

5.18 In contrast to all of the above, the majority of respondents did not find dealing with student idealism and cynicism to be greatly challenging. By this we mean coping with the fact that students quite often come into the course

¹²⁶ Students start by putting the topic in a box in the centre of the page, then draw lines to branch out from it with their main ideas. New ideas which arrive from the main ideas are attached to them. Clusters tend to develop around the main ideas and a structure begins to appear.

wanting to learn about 'saving the whales' (or, indeed, the world) or, conversely, with the view that the law is ineffective.

Other challenges

5.19 Other challenges that respondents identified included time constraints, resource constraints (although with the increasing amount of information on the Internet this is easing) and finding suitable texts. Another challenge that was mentioned was trying to avoid a mere black letter approach and developing critical/ analytical approaches. However, one respondent noted the difficulty of ensuring that students do not focus exclusively on the policy issues. The most commonly cited other challenge was the need to deal with the subject at all levels of control and the difficulty in finding an appropriate balance between national, European and international law.

Uniqueness

5.20 Respondents did not stress the particular difficulties and challenges of the subject.¹²⁷ None of the individual challenges considered above were in general considered by respondents to be particularly unique to environmental law.¹²⁸ Of the 42 respondents, 6 saw the rapid pace of change in law and policy as unique to environmental law teaching, 5 saw the interdisciplinary nature to the subject as unique and 4 considered both the polycentric nature of the subject and its wide boundaries as unique. To quote one respondent:

Environmental law is no different in principle from any other public law related subject.

5.21 However, it is worth emphasising that merely because something is not unique to environmental law teaching does not mean that it should be considered any less a challenge that teachers need assistance in trying to tackle. Indeed many of the challenges indicated exist for other law and non-law subjects.

5.22 In our first workshop, we probed the issue of uniqueness by asking whether environmental law was 'different'. Revealingly, 10 out of 15 participants considered environmental law to be 'different' to other subjects that they taught. Factors that emerged from discussion were:

- the challenge of holism (i.e. of integrating the component parts of the course rather than compartmentalising them)
- reading more statutory materials and less cases
- the range of legal sources (civil, administrative, EC etc) to be covered
- handling less widely-known interdisciplinary concepts
- Nothing . . . is unique to Environmental Law although few other law subjects tend to be taught in such a comparative and interdisciplinary way.¹²⁹
- the 'sole teacher' issue

¹²⁷ Cf Burton et al op. cit. n.46, where there is some discussion of the 'uniqueness' of family law as an academic subject

¹²⁸ It may also be that the almost universal teaching on other subjects (see para 3.12 above) makes environmental law teachers less likely to claim uniqueness for aspects of teaching their subject.

¹²⁹ A factor which may be particularly challenging in relation to assessment, especially examination, see Section 10 below.

5.23 Insofar as teaching environmental law is difficult – and uniquely difficult - it may be that it presents a diverse range of challenges, the cumulative nature of which makes teaching environmental law a different challenge to that faced by other teachers.

Conclusions

5.24 Dealing with student idealism and cynicism was not a major concern to our respondents. In contrast, all the other challenges that were suggested clearly were.

5.25 The biggest challenges for environmental law teachers were the rapid pace of change in law and policy, the selection of the appropriate course content, the interdisciplinary dimension to the subject and its polycentric nature.

5.26 Only a very small minority of respondents identified any of the individual challenges presented as being unique to environmental law, and on balance the survey did not identify any single challenge as particularly unique to environmental law.

5.27 Teaching environmental law may however be exceptional in the number of challenges it presents and it may be the cumulative nature of the challenges which poses the biggest challenge for teachers.

6 Course Content

6.1 We were interested in the content of environmental law courses. Whilst recognising that not all courses are taught in a strictly compartmentalised way, the survey did manage to identify certain topics that form part of the typical course in environmental law. We grouped the topics into three categories. The first group (which we call 'typical') is comprised of topics taught by at least 20 respondents. The second group ('common') contains topics covered by between 10 and 19 of our respondents and the final group ('rare') is where less than 10 respondents included this topic in their course. Some respondents ticked almost everything so we excluded anything allocated less than 5%.

Typical (taught by at least 20 respondents)

6.2 As such, the typical course in environmental law in the UK contains some of the following:

- EC Environmental law (32)
- Integrated pollution prevention and control (30)
- Principles of environmental law (e.g. precautionary principle, sustainable development) (30)
- Pollution of controlled waters (29)
- Environmental impact assessment (28)
- Waste management (27)
- Enforcement of environmental law (27)
- Private law (nuisance etc) (25)
- Town and country planning (25)
- The regulation of environmental protection (e.g. use of standards, differing legal and other instruments) (24)
- International environmental law (23)
- Nature conservation (22)
- Contaminated land (21)
- Access to justice (20)

6.3 From interviews and workshops, a point worth making is that this ordering of topics may not necessarily correspond with the more 'popular' topics amongst students. One or two participants noted difficulties in – or simply a lack of personal enthusiasm for - teaching IPPC because of its perceived dry, regulatory and technical nature ("every year they seem not to like it"), while the European dimension to the subject was described by one workshop participant as the area of her course as getting the worst response ("a culture shock").

Common (taught by between 10 and 19 respondents)

6.4 These subjects are not uncommon in environmental law courses but they are not in the majority of courses:

- Air pollution (19)
- Human rights and the environment (16)
- Access to environmental information (14)
- Countryside protection (11)
- Environmental ethics (11)
- Governmental and non-governmental institutions and organisations (10)
- Noise (10)
- Statutory nuisance (10)

Rare (taught by less than 10 respondents)

6.5 These topics can be considered unusual in terms of coverage in environmental law. They are:

- Environmental politics (6)
- Animal welfare law (5)
- Comparative environmental law (5)
- Environmental economics (5)
- Environmental justice (4)
- Disposal of trade effluent to sewers (3)
- Protection of cultural heritage (3).

6.6 One reason for these topics being rather rare is that several of these (apart from the disposal of trade effluent into sewers), are more likely to be offered in other courses. For example there are specialist courses in environmental economics and politics and the protection of the cultural heritage may be more common in planning courses.

Integrated topics

6.7 We did not expressly give respondents a choice with respect to integral or stand alone topics. This distinction came about solely from the initiative of individual respondents. The number of respondents who chose to give us this additional information makes it significant. There may, however, be more respondents who teach these topics and perhaps others as integral parts of their courses.

6.8 Topics identified as integrated throughout courses included:

- EC environmental law (11)
- Principles of environmental law (10)
- The regulation of environmental protection (9)
- Environmental ethics (4)
- International environmental law (4)
- Environmental justice (2).

6.9 This is not surprising. It makes sense that teachers teach EC and international law as they go through the various different regimes such as water, air or nature conservation. Furthermore, the factors that underpin, shape or explain the law such as environmental ethics, environmental justice, and the principles of environmental law may be illustrated using a variety of regulatory regimes ranging from nature conservation to integrated pollution prevention and control. If anything the figures relating to topics as integral parts of courses figures are low.

Thematic Teaching

6.10 The survey contained a number of questions about thematic and integrated topics. When we talked about 'themes' were intended to cover courses where one or more themes are adopted as a template and individual topics are fitted into the template as an illustration of different policy and legal approaches. As explained above, this approach can be differentiated from an approach which integrates topics throughout a course notwithstanding that a specific focus may not be on that integrated topic.

6.11 Over half of the 42 respondents said they did teach their course using one or more themes. 28 different themes were identified. The most popular of these were:

- Climate change (combined with air pollution) (5)
- Sustainable development (3)
- Trade and the environment (3). •

Other noteworthy 'themes' included negotiations towards a global 6.12 forestry convention and implementation of the EC Water Framework Directive which were both used by the same respondent in simulated environmental fora. Another respondents used the case study model looking at Croyde Bay - a study in nuisance and alternatives and impacts (tourism).

From the responses in the survey and from the subsequent interviews 6.13 there seems to be a trend for teachers as they become more familiar with the subject matter to reduce the number of topics they cover in their course.

I try to focus more on specific areas rather than trying to give a kind of birds eye view that can never be complete.

Initially I tried to be comprehensive – now I realise there is no need. The students need the basic framework – how regulation works and any improvements possible. It's better to look only at one or two topics. The result has been a slow reduction of topics.

It should be pointed out, however, that the responses we received 6.14 indicated that different teachers understood different things by the use of the term 'theme' in the context of teaching environmental law. This uncertainty was a significant topic in the two Workshops and illustrated that we should have been clearer in the questionnaire. As mentioned above when we asked questions about thematic teaching many of the responses dealt with the integration of topics across the curriculum.

One of the reasons for asking about thematic teaching in particular was 6.15 that we thought that it would help to identify certain issues relating to teaching, learning and assessment methods, particularly in relation to new approaches to teaching environmental law. What came out of the survey was the fact that there is very little thematic teaching being undertaken in environmental law.¹³⁰ There were examples of thematic courses¹³¹ where there was a particular focus in a single course but we sought to distinguish these from thematic teaching where a course had more general elements in it some of which were illustrated using particular themes. There could be a number of reasons for the low incidence of 'thematic' teaching, although the possibility that the results were not representative as a result of a lack of clarity about the term cannot be ruled out.132

¹³⁰ Although it should be pointed out that in the vigorous debates at the workshops, there were a number of discussion centred around the definition of thematic teaching in which our view was questioned and/or disagreed with ¹³¹ E.g. Marine Resources Law taught at Dundee could arguably be viewed as an International

Environmental Law Course based around the theme of marine resources

¹³² Indeed, one of the key points which came out of the discussions at the workshops was the distinction between themed courses, thematic teaching and integrated topics was arguably merely a matter of degree

6.16 One of the clearest examples of thematic teaching as we understood the term could be found at Strathclyde.¹³³ Interestingly, this course did present the teacher with a number of challenges in terms of teaching, learning and assessment methods. It is clear from the 'Strathclyde experience', that setting up a thematic element in an environmental law course, whilst rewarding for students has a number of teaching, learning and assessment issues which need careful consideration.¹³⁴

A Core Curriculum?

6.17 In light of the above, at the first workshop we posed the potentially thorny question of whether there was a 'core' or common curriculum in UK environmental law. The intention, it must be stressed, was not to try to impose our own normative model of what an environmental law course should cover. Rather, we hoped to provoke discussion about the present boundaries and 'constitution' of environmental law, and generally to try to give some assistance to anyone working on the provision of teaching and learning support (e.g. by identifying topics that are more likely to be covered).¹³⁵

6.18 One helpful observation that seemed to command widespread support was that, rather than identifying topics which do or do not fall within any 'core', a better approach may be to identify a pool of topics, from which courses would generally include a sizeable proportion of topics. This appeared an appropriate response given that not every course covers any particular topic, yet there are clearly topics that are more widely covered than others. We did not take this issue further, i.e. we did not try to identify what this core pool of topics might be, but some suggestions may of course be gleaned from the above results.

6.19 There is no merit in trying to go beyond this to stipulate a common curriculum, not least because personal interests and personal research agendas will, rightly, play an important role in shaping individual courses.

Conclusions

- There is a fairly typical set of topics which feature in most environmental law courses.
- The most common topics are EC environmental law, IPPC and principles of environmental law.
- Certain topics are taught by many respondents as integral parts of their courses. The most common of these are EC environmental law, principles of environmental law and the regulation of environmental protection.
- Several respondents use a thematic approach and many respondents over time have reduced the number of topics they cover to encourage more in-depth, interdisciplinary or contextual study.

¹³³ See Poustie, M., Engaging Students and Enhancing Skills: Lessons from the Development of a Web-supported International Environmental Law Conference Simulation', *International Review of Law Computers and Technology* 2001:15(3) pp. 331-344 and para. 9.14 below.

¹³⁴ Particularly in terms of institutional support and the resources needed to maintain some of the teaching and learning methods adopted. Whilst teaching thematically doesn't necessarily need such a resource intensive approach, there are still remaining issues in relation to teaching a broad topic perhaps in the absence of student texts or other support.

¹³⁵ E.g. by IOLIS software or equivalent. We recognise, of course, that things like textbook coverage are an important factor in selecting course topics, and hence that it may be difficult to distinguish which is the tail and which is the dog.

• It may be possible, through discussion, to identify something that might be agreed as a core pool of topics or basic building blocks of environmental law courses, but there is no merit in trying to go beyond this to stipulate a common curriculum.

7 Factors Influencing Course Content

7.1 Having established which topics and themes are taught in undergraduate environmental law courses in the UK, the next question to address is why some topics and themes are more widely used than others. What factors influence the selection of course content? These factors are particularly relevant in courses like environmental law whose potential subject matter is so wide-ranging.

7.2 Respondents were asked to indicate which of 14 factors listed influence their choice of course content and weigh these factors from 1-5 where 1 is an irrelevant factor, 2 of marginal relevance, 3 significant / material relevance, 4 of considerable importance and 5 a crucial or determinative factor. They were also asked to specify any other factors influencing course content.¹³⁶

7.3 The results have been grouped into categories: factors which were considered at least significant by 75% of respondents; factors considered at least significant by between 65-75% of respondents; factors considered significant by between 50–64% of respondents and factors considered significant by less than 50% of respondents.

7.4 We also asked respondents to provide us with a copy of their course outline, which would have provided useful additional information about the rationale for selecting topics. Only a small minority of respondents, however, did so.¹³⁷

Factors influencing course content	No. of respond ents	espond significant		
length of course	38	84	68	
integration of parts of the course into the whole	36	89	53	
type of student (e.g. non-law students)	26	88	42	
personal interests	36	78	53	
nature of course (e.g. specialist course)	26	77	54	
Availability of teaching and learning resources (text-books, library holdings)	33	79	42	
topicality	24	67	33	
textbook availability and coverage	33	67	18	
student preferences (i.e. students select course content from a range of options)	25	64	28	
feedback from previous course	33	58	17	
contents of pre-existing courses	27	55	19	
personal research agenda	36	53	19	
relevance to practice	29	59	17	
requirements of professional bodies	20	30	10	
Other (e.g. State of the law – Scottish Water law in flux)	0	0	2	

Figure 7.4 - Factors influencing course content

¹³⁶ Because some respondents left boxes blank (where we assume they meant that a factor was not a challenge) the figures given will probably make factors appear more significant than they really are. To counteract this, we note the sample size, since a higher sample brings with it less chance that factors will be weighed too heavily for their significance.

¹³⁷ There may be institutional as well as personal reasons which lie behind this.

Length of course

7.5 The survey found that the most important factor influencing course content was the length of the course. 84% of the sample (38) found this to be a significant factor (i.e. giving it at least a 3) and of these 68% considered it to be of considerable importance or crucial (i.e. a rating of 4 or 5). Indeed, when describing their 'ideal' course several interviewees indicated they would like more time to teach environmental law.

Integration of parts of the course into the whole

7.6 The integration of parts of the course into the whole, in the sense of selecting topics that combine well, was the next most important factor. 89% of the 36 respondents in the sample considered this to be a significant factor while of these 53% considered it to be of considerable or determinative importance.

Type of student

7.7 The type of student (non-law, law or mixed class) was the next most important factor although the sample here is only 26. This likely reflects the fact that many respondents only taught law students. 88% of the 26 respondents considered the type of student to be at least a significant factor and 42% of these considered it to be of considerable or determinative importance. This makes sense as non-law students may need more introductory classes or reading and courses may need to be tailored to the needs of the non-law student in certain instances.

Personal interest

7.8 This factor has a higher sample size and may actually be more significant than type of student. 78% of 36 respondents considered their personal interests to be a significant factor in determining course content. Of these 53% ranked this as a considerable or crucial factor. One respondent, for example, utilised hedgerow protection as a research-based case study in the second term of a two-term course "because of my upbringing on a farm". Personal interests should be distinguished from the separate category of 'personal research agenda', considered below.

Nature of the course

7.9 The nature of the course – specialist (such as nature conservation) or generalist - is the next important factor. Again the sample is small perhaps due to the fact that few respondents teach specialist courses.

Availability of teaching and learning resources

7.10 Seventy nine percent of 33 respondents considered the availability of teaching and learning resources such as textbooks and library holdings to be a material factor in their choice of course content. Of these, 42% considered it to be of considerable or determinative importance.

Topicality

7.11 One of the reasons environmental law is perceived to be such an interesting course is the fact that it is often very topical grabbing headlines in the media. Of the 24 respondents who ticked this box, 67% considered

topicality to be a material factor in choosing course content while 33% of these people considered it to be of considerable or crucial importance.

Textbook availability and coverage

7.12 Given the pace of change in environmental law and the different types of student who take the course, finding a suitable textbook is essential. Thirty-three respondents noted the importance of text book availability and coverage. Of these 67% considered it to be a material factor in their choice of course content and 18% considering it to be of considerable or crucial importance.

7.13 In interview the importance (or otherwise) of text books was reflected in the divergent views of the interviewees. One commented:

When I started out, I shaped the course around the main textbook. In the early days, it was pretty much essential. Now the course is nicely balanced and there's not much need to tinker with the content, particularly when the books are updated reasonably frequently. Obviously, I like to adapt the content to my own areas of interest, but the students like to know that there is a central text they can use...

7.14 On the other hand, some teachers who had developed courses which covered 'atypical' or themed subjects,¹³⁸ found the text book less important:

I make it clear to the students that they cannot rely on the text books. If you take a topic such as Climate Change or GMOs, the text books do not provide sufficient coverage. I also want the students to source the arguments for themselves from a range of materials. Whereas I can understand the need for a basic text book, I'm happier to use that as background or a springboard for further in depth reading.

Student preference and feedback from previous courses

7.15 The responses suggest that the students views play some role in the selection of course content. In some courses, student preference is a factor. Thus the students may be given a selection of optional subjects to study and the most popular is chosen. Such student preference does not, however rank as highly as the personal preferences of the teacher. In addition, there was comprehensive use of feedback from previous courses to inform the selection of future course content and many respondents clearly acted upon feedback received.¹³⁹

Contents of pre-existing course

7.15 When taking over a course, most lecturers will pay some attention to the contents of pre-existing course. In fact, quite often it takes a few years to tailor a course to your own style and interests. It is not surprising then that of the sample of 27 respondents 55% considered the contents of the pre-existing course to be a significant factor in deciding course content and 19% of these people thought it was a considerable or crucial factor.

I took on a course which was already established, I wasn't going to mess around with it too much...if it ain't broke don't fix it.

¹³⁸ See further, Section 6 above.

¹³⁹ See further, Section 11, below.

Personal research agenda

7.16 Of the 36 respondents who indicated personal research agenda 53% considered it to be a significant factor influencing course content. 19% stated that it was of considerable or determinative importance. This supports one of the key arguments for ensuring academics both teach and research; that research informs teaching and vice versa.

Relevance to practice

7.17 Environmental law is not one of the core subjects required to join the legal professions in England, Wales, Northern Ireland or Scotland. Increasingly, law is seen as a good general degree and students are taking law degrees with no intention of entering into the profession. It is not surprising then that the factors seen as least important for influencing course content are the relevance to practice and the requirements of professional bodies. That said, environmental law is a required course for many non-law courses such as environmental management and for some town and country planning courses. Hence, there may be a difference here in the answers of those who teach law students and those who teach non-law students.

Requirements of professional bodies

7.18 Only 30% of a small sample of 20 thought the requirements of professional bodies was a significant factor in choosing course content and only 10% of these people (2) thought it was a considerable or crucial factor. The relatively low response probably reflects the fact that a specialist course such as environmental law does not normally have to meet any requirements set out by the Law Society or Bar Council, particularly in terms of course content. Perhaps it is also a reflection of the lack of clarity surrounding the nature of the work of the typical environmental practitioner (if there is such a thing), or the lack of interaction between practice and academia¹⁴⁰ not to mention the relatively small chance of becoming an environmental law practitioner in comparison to other more mainstream areas of practice such as corporate law, crime or family law.

7.19 It is interesting to note the (possible) contrast with the position in the US. Robertson notes¹⁴¹ conflicting opinion amongst US environmental law professors as to whether introductory environmental law courses should be broad surveys of the major statutes of the discipline, or whether fewer topics should be covered in more depth. While this was explicable in part by how broad or limited a law school's environmental law curriculum was, the impression is that the demands of practice play a factor in the perceived need, at the introductory level at least, for breadth over depth.

Others

7.20 The survey raised two other factors as influences on course content. First, the state of the law in an area is a factor. One respondent noted that the state of Scottish water law (a mess) made it difficult to include in a general environmental law course. On the other hand, an interviewee specifically chose to deal with Scottish water law precisely because it was complicated and in need of reform. Another respondent considered level of student to be a factor in choosing content.

¹⁴⁰ See the comparison of US and UK environmental law academics above at para. 1.9

¹⁴¹ Robertson, op. cit.

7.21 One interviewee remarked that

[My course] is very much modelled on pretty much what every other person does.

7.22 However, they went on to say that how others approach their courses has just been gleaned anecdotally, or by limited discussion with other academics.

Conclusions

- Most of the factors mentioned seem to influence course content.
- The most influential factors are: the length of course, the integration of parts of the course into the whole, the type of student, personal interest, the nature of the course and the availability of teaching and learning resources.
- In contrast, the least significant factors were the requirements of professional bodies and the relevance of content to practice. This may be due to the fact that environmental law is not a core course for the legal profession and many students now taking a law degree have no intention of practising law.

8 Teaching and Learning

8.1 Another aim of the research was to identify teaching and learning methods (TLMs) within the subject area. In particular we sought to establish whether environmental law teachers used traditional TLMs and also to identify the nature, scale and impact of innovation. The Stage 1 survey therefore asked teachers to indicate which TLMs they used and, as far as possible, what percentage of overall teaching and learning each method comprised. These were then explored further in interview. Only a minority of teachers, however, supplied us with course outlines and beyond these we did not enquire directly about learning outcomes and objectives (other than in asking interviewees about the structure of their courses).¹⁴²

8.2 Before describing, categorising and analysing the results, a few provisos need to be stated.

8.3 The first relates to the ambiguity of some of the terms used in the Stage 1 survey. In asking teachers to identify the use of seminars (which we described as 'large group teaching') and tutorials ('small group teaching'), definitions of 'small' and 'large' inevitably varied. For example, one respondent considered 15 students to be a small group and therefore a tutorial, whereas most respondents thought this was a seminar. With hindsight, a stipulation about threshold numbers would have been useful.

8.4 Secondly, we did not use a watertight distinction – if this were possible between TLM and assessment methods. Hence, the use of reflective reports was suggested as a possible learning method but also as an assessment method. (Of course, all forms of assessment, including essays and exams, are learning methods, being integral to the learning outcomes of a course, and the section below on assessment must be read with this in mind.)

8.5 Thirdly, although we asked about the relative time given over to various methods that might be used with students, it was evident that some respondents interpreted the question as relating to student time engaged (other than in simply reading for class). In one course, for example, particular stress was placed on experiential observation prior to the class, and this was reflected in the return. However, while the following sections tend to rely on student contact time - since this is what we were generally told about - we recognise that this may mask what is more important for present purposes, i.e. the variation in teaching and learning methods used, the rationale for this and experience gained. This includes variation within methods such as different approaches to lecturing (e.g. more or less Socratic). The absence of a bright line divide between a 'lecture' and more discursive methods is especially the case where students are directed to read in advance of the lecture, for example where the 'lecture' forms the introductory part of what is otherwise a discursive format, a method used by a number of teachers.

8.6 Finally, an opportunity may have been missed by focusing primarily on internal and subject-specific influences on teaching, and hence not asking about external stimuli – especially TQA/QAA – on teaching and learning approaches and especially innovation.

¹⁴² We concede that this was a missed opportunity, but resources (and interview time) only stretched so far.

Description and categorisation of results

8.7 We found, perhaps unsurprisingly, a preference for the more traditional TLMs in higher education, lectures, seminars and tutorials being the most frequently used methods. We also found, however, a significant amount of group work and research-based projects and, to a lesser extent, role play (including classroom-based and e-based simulations¹⁴³) and video. We found only one instance of clinical or other 'live client' work, and no use of progress files (see generally Figure 8.9 below). It must be stressed, however, that the difference between courses based on traditional or other methods may mask notable variations within these basic models. For example, a course that relied almost exclusively on lecturing was also followed up with a six-week student placement. Hence, traditional and non-traditional teaching methods are certainly not mutually exclusive.

8.8 In general we found little evidence of different TLMs being used for mixed groups compared to law-only groups, and little to suggest any particular difficulties teaching to mixed groups of students.

8.9 Nor did we find much evidence that specific TLMs were required, by university or departmental rules, for environmental law courses. As with assessment, we generally found norms that could, as appropriate, be varied, but in some cases the fairly heavy hand of tradition was discernable.

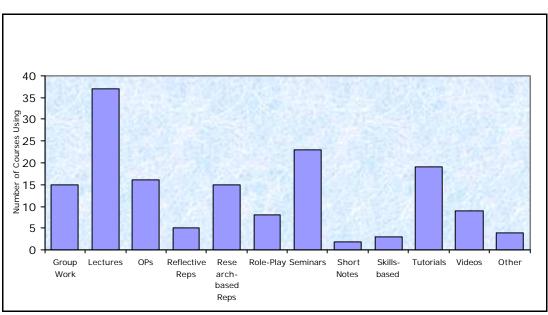


Fig 8.9 – Teaching and Learning Methods Used

8.10 In describing the findings of this part of the survey, we rejected as unhelpful the temptation to categorise courses according to various models based on the main methods used. While this might have provided crude data about the returns received, the real interest here is in the application (or nonuse) of TLMs and, as noted above, variation between and within TLMs. Moreover, courses invariably combine methods and it is often difficult in practice (and in any event questionable pedagogically) to try to identify with any accuracy the amount of time devoted to various TLMs. As one respondent noted, while her course was seminar-based, it included lecturing, seminar and tutorial discussion, group work and oral presentations.

¹⁴³ The e-based aspects are described and discussed more fully in the section 9 below.

Lectures

8.11 Only three or four courses appear not to use any lecturing, though interviews suggested that at least some of these courses nevertheless used 'mini-lectures' of 20 minutes at the start of a seminar to set the context for discussion. The amount of lecturing varied from 5% to 85% but, where used, lecturing accounted on average for around 50% of contact time.

8.12 How do we view lectures? From the interviews, there were considerable differences of opinion about the value of lecturing, some of which were subject-specific. One interviewee nicely captured the ambivalence of lecturing:

I use lectures. I quite like doing those – I don't personally approve of giving lectures, but I enjoy giving them.

8.13 In similar vein, another longstanding teacher considered lectures: "a kind of necessary evil".

But why do we lecture? Especially for the more self-consciously contextual courses, lecturing was often used to spark student thinking or to cover issues not sufficiently dealt with in the textbooks. They may provide the foundations for more active learning.

We tried teaching the course purely by seminars and the students really didn't like that. Particularly with the thematic approach, they found that textbooks didn't necessarily give them the conceptual overview that they wanted - they wanted some guidance about the themes.

8.14 For others, the value of lecturing was as much to give a real-world slant on the subject:

In theory the students could learn about environmental law from reading textbooks, but they prefer to come along to lectures – they probably find lectures more interesting than reading. I do occasionally slip in anecdotes or say silly things that add interest. I'm not just reading notes, in fact I don't actually have any lecture notes, I just give the same list of cases and statutes and other bits and pieces that I have for the seminars – so the lecture is pretty spontaneous.

8.15 A number of respondents – those who taught exclusively or primarily by seminar, it must be said – noted perceived limitations of lecturing in environmental law specifically:

environmental law is quite a complex area and a lot of the complexity of it only becomes apparent once you start talking and engaging in discussion with your students. A lot of issues in environmental law are rather counter-intuitive and while certain approaches - while on the face of it might seem to produce environmentally superior outcomes - when you actually analyse more closely it becomes rather questionable. These are the kinds of things that students retain so much more easily if you apply a more socratic methods rather than just tell them – because the complexity will not hit home.

8.16 In general we found little evidence of different TLMs being used for mixed groups compared to law-only groups, and little to suggest any particular

difficulties teaching to mixed groups of students. The following response was typical of the integration of students from different disciplines:

It's definitely not the case that the law students will ... perk up when there are more black letter issues to be addressed and that the other students will perk up when there are contextual issues addressed. That's definitely not the case. In fact, if you are teaching [a mixed] class and you don't know, it's very hard to say which ones are the law [students] and which ones are not.

8.17 Where environmental law was taught exclusively to non-law students, however, at least one respondent preferred to use lectures alongside seminars, rather than rely wholly on the latter as she did when teaching her class of law students. This may simply be a variation on the theme of lecturing the legal basics to non-law students in mixed classes (for example, in additional sessions at the start of the course), which appears to be quite commonplace.

Seminars and tutorials

8.19 Although nearly as commonplace as lecturing, lesser use was made of seminars. The range here was from 25-100%, though the average was about 30%. Similarly, tutorials ranged from 10-100% but the average was between 25-30%. Most courses that used seminars or tutorials also employed other TLMs such as oral presentations, group work or role-play, suggesting a variety of student engagement in seminar-type sessions. However, the question as asked didn't allow us to get a handle on the extent to which these formed separate batches of contact time, or were more generally integrated into seminars and tutorials.

8.20 How do we use seminars and tutorials? While courses where seminars predominate tended, naturally, to meet in seminar every week, a fair number of courses were taught through fortnightly seminar or tutorial, usually supplemented by more frequent lectures. There appeared to be only a couple of examples of teaching by fortnightly seminars only. To repeat a comment noted earlier:

We tried teaching the course purely by seminars and the students really didn't like that. Particularly with the thematic approach, they found that textbooks didn't necessarily give them the conceptual overview that they wanted - they wanted some guidance about the themes.

Group work and research projects

8.21 Some care needs to be taken with the figures for group work. What we intended by 'group work' was, for example, students working together in 'law firms' or country delegations, or otherwise representing different interests. Our intention was therefore that group work was something more than simply dividing up students in class to work through, say, different aspects of a problem question. With hindsight we should have made this clearer, and for this reason we suspect that the figure for group work is rather higher than it might have been had we stipulated the meaning of the category with greater clarity.

8.22 Group work and research-based projects were each used in 16 courses. Usage of both methods tended to be of the order of 10-20%, with almost no use above or below this band. This suggested a minimum threshold below which group work will be difficult, but also a reluctance to make group work

anything more than a significant minority component of courses. We found that both methods were used in 14 courses and that there was a broad correspondence between these two methods in terms of percentage usage. This suggested that research-based projects were generally being undertaken in groups.

8.23 Some saw value in project work putting "the flesh on the bones", though in the sense of studying rules in context rather than depth:

we all recognise that this subject is extremely regulated; you could just learn a whole series of regulatory rules which is rather boring. The true motivation is to put the flesh on the bones, to see perhaps the broader topics, to look at law in practice, law in context: 'We've talked here about seeing the context, we've seen the principles, but how does the thing actually work in the real world out there?' That's the real motivation.¹⁴⁴

8.24 Of those teachers interviewed who place greatest reliance on group projects, two required that the reports be submitted as individual reflections on the project; in one case the submission appeared to be a genuinely group effort and assessed as such.

Role Play

8.25 Role play is used in 8 courses, but its usage within these courses seems small. While one course used 20% role play and one 10%, role play was not identified as being used for more than 5% in any other course,¹⁴⁵ suggesting that it is used, at most, as an element of one teaching session.

8.26 One interviewee noted the value of role play in relation to the polycentricity of the subject:

Those kinds of tasks (group work and role play) are particularly useful in order to make those regulatory procedural issues palatable. In role play about contaminated land, for example, we appoint one group as the regulator, one group as the owners or occupiers of contaminated land and one group as the contaminators. They are posed with the problem and each group is asked what they are going to do, who are you going to talk to etc. In this way I'm trying to make it a little more lively.

8.27 At our second workshop, perhaps the most revealing observation was the success of role play. Several participants noted that, of their course content, role plays got the best response (one described it – favourably! - as "a riot"). Of these participants, however, one also remarked that a role play had also got the worst response from his students, suggesting that useful work could be done in identifying the factors that tend towards more successful role play in environmental law.

Other TLMs

8.28 In 16 courses, students are asked to give oral presentations. The greatest use of this method was one-third of a Scottish honours option course, but with a couple of other exceptions presentations generally made up 5 or 10% of contact time.

¹⁴⁴ The interviewee also remarked that, in relation to project work, "[m]edium and good students take to it; poorer students struggle." We wondered (cynically) whether this was not a comment on higher education teaching more generally.

¹⁴⁵ In 2 courses the percentage usage was unknown.

8.29 In interviews there was little discussion of the pedagogy of oral presentations. Aside from the obvious development of transferable presentation skills, however, one teacher thought they had a particular value to the subject, and commented favourably on exploring through oral presentations the recent RCEP Report on Chemicals as a case study on regulatory theory.

[It was] quite useful . . . [it] does get them to focus on one particular element [of a broad topic]. It worked really well, it was a good way to expose the students to probing the central issue of scientific uncertainty. It worked better than if this topic had been dealt with by seminar.

8.30 We came across one instance of student placements being used. This was at the end of the course with the highest lecturing component which, in fact, across the board had cut out seminars. (For the teacher, "with new university students this makes sense".) The 6-week placement (for example, with a local authority), was a type of real-world engagement (the only example of placements, incidentally, that we came across, and notably not through a law school) and provided an interesting example of a traditional TLM existing alongside, and providing the platform for, what might be considered a more innovative approach to learning. It is also illustrative, of course, of the breadth of possible TLMs that exist in environmental law. The 'other' category in the Stage 1 survey revealed the following:

- Short informal tests during lectures
- Problem solving exercises (16.5% within tutorials; 35% use of a problem solving scenario)
- Students expected to consult public registers and report back, and have an IT session
- Workshops for research project work

Transferable Skills

8.31 A central issue in teaching and learning is how teaching methods relate to learning outcomes.¹⁴⁶ This bears upon the central issue as to what we teach, and what we hope our students will learn. Although we only had sight of a few course outlines, we would be surprised if most courses did not seek to develop both subject-specific and generic or transferable skills. The information we gathered suggests that the former far outweigh the latter. Indeed, only two respondents mentioned using skills-based activities such as negotiations (of which one was linked to an electronic simulation). We develop this issue point further in relation to the apparent under-assessment of transferable skills.¹⁴⁷

Non-Use of Methods

8.32 We found no use of a number of potential TLMs. These include clinical practice and portfolio or progress files. The absence of the former might be explained by the dearth of clinical activity in law schools generally (although specific links with environmental practitioners / advice centres may be possible). It might also be related to the relatively low numbers of practitioners working in the environmental law area, limiting the pool of those able to offer legal practice placements – or law centre advice - in environmental law.

¹⁴⁶ See section 10 below.

¹⁴⁷ See section 10 below.

8.33 The absence of the latter is particularly notable, given their potential value in relation to developing student understanding of core concepts, and in helping to reflect on how often disparate aspects of the subject hang together. There are many possible reasons for this. For example, one interviewee had the following concern about the use of portfolios in environmental law.

I use a portfolio for property but would be less comfortable with this for environmental law given the huge number of potential sources (in property the sources are much more limited). It would be much harder to catch dishonesty [if used in environmental law]. Students do like [portfolios] and the marks are high.

Innovation

8.34 Conceivably there is greater use in environmental law of methods like group work and research projects compared to other subjects. That is, methods not uncommonly used in environmental law might be considered less traditional in other subjects. This might be connected, for example, with meeting certain challenges of the subject, such as using collaborative research to explore in some detail the workings of a regulatory regime or using groups to explore multiparty disputes.¹⁴⁸

8.35 The most innovative practices we found – methods such as role play and simulation (we discuss the latter in relation to electronic resources below) – seemed to be used to address, in particular, the polycentric, multi-party nature of the subject. But we also found some scepticism about the value of innovation:

Students don't really see the point in trying to come up with different teaching methods. They simply want to go into the lecture, listen and take notes. I've tried many different approaches but they seem to interrupt the flow of things.

8.36 Although it was difficult to generalise from very little data, there is some evidence that innovation is more effective where the innovative teaching and learning practices are made central to the course rather than seen as a 'light' interlude or a 'bolt-on', and that substantial course restructuring must be backed by significant resources and institutional support.¹⁴⁹ That said, there is some evidence that students continue to value traditional forms of teaching (lectures / seminars) as an introduction to or support for more challenging or active forms of learning.

8.37 There may be an institutional correspondence between innovation and recent exposure to the QAA process.¹⁵⁰ However, we found no evidence that course development is accorded the same priority – in terms of things like leave and assistance – that research is given.

Conclusions

8.38 Linking TLMs and the 'success' of a course is inherently problematic. However we may offer some general observations, and note some correlations:

• Teachers often have a wide discretion in their selection of TLMs, but this is often confined by departmental norms or traditions.

¹⁴⁸ On role play see para. 8.25.

¹⁴⁹ On which, see the Strathclyde experience discussed at para. 9.14 below.

¹⁵⁰ Personal communication between one of the survey team and various Heads of Teaching.

- There is more ambivalence about lecturing than about any other TLM.
- Teachers use lectures for a range of purposes, often to shape their course and steer students towards their learning objectives, or to supplement or deviate from textbook coverage.
- With only one exception we all seem to see value in discursive methods of teaching and learning.
- It may be that group work / project work are more commonplace in environmental law than in other subjects.
- Group / project work may have particular value in making real to students some of the drier, more regulatory aspects to environmental law, but less able students may struggle with this method and need more direction than might be appropriate in terms of skills development
- Certain TLMs notably clinical practice and portfolio / progress files do not seem to be used, though they may be particularly useful in relation to environmental law
- There seems to be a clear preponderance of subject-centred over transferable skills
- Generally the TLMs we use do not vary if we teach law and non-law students together, and experience of teaching mixed groups is generally very positive.

8.39 Finally, a number of more speculative points might be made. Firstly, law and non-law students may differ as regards their reception of more innovative or diversely taught courses. One interviewee, who had implemented quite a radically innovative approach to teaching, offered the view that law students are more conservative in orientation and thus also in their choice of course, and at the first workshop the majority view was that non-law students were generally more open to less traditional teaching and learning methods and modes of inquiry.¹⁵¹ One explanation may be that non-law students have more exposure to teaching methods other than lectures and seminars and are therefore more amenable to what law students might regard as innovation.

8.40 Secondly, innovative TLMs are, inevitably, demanding on resources initially but tend not to be used for whole courses, and may detrimentally divert students from a clear understanding of the structure of a course and engagement with the subject.

8.41 Third, what of the highly contentious issue of teaching and learning methods and the 'health' (judged solely by trends in students numbers) of courses? While recognising the difficulties of reaching general conclusions we did find that courses using a diverse mix of methods, especially less traditional methods, appear to fare less well than more traditionally taught courses. This may link to the finding elsewhere about the difficulties associated with courses perceived as being overloaded in terms of assessment methods.¹⁵² Another explanation, however, might be that very large modular courses will,

¹⁵¹ Especially at Masters level, but also amongst undergraduates.

¹⁵² See section 10 below.

necessarily, tend to be taught by traditional methods like lecturing, whereas smaller classes may provide greater opportunities for innovation.

9 Electronic Resources

9.1 The Stage 1 survey asked teachers to list full details of the main electronic learning and teaching resources they used, giving indicative categories such as datasets, websites and virtual learning environments. Our aim here was to gather basic information about the electronic teaching and learning resources currently used, and in particular to identify courses making innovative use of electronic resources in teaching environmental law. Hence this section is in many respects a continuation of the previous section on teaching and learning methods, though we consider it separately here because of the combined consideration of electronic information resources (such as web usage) and electronic (independent) course delivery and other teaching applications such as discussion space. In interviews, the aim was then to gather information and views about the use of electronic resources (and barriers to their use), and our interview sample consciously included one teacher (Mark Poustie at Strathclyde) who has made extensive use of nontraditional electronic resources in teaching.

Results

9.2 Our sample size here was 42 courses. $^{153}\,$ We grouped the responses as follows: $^{154}\,$

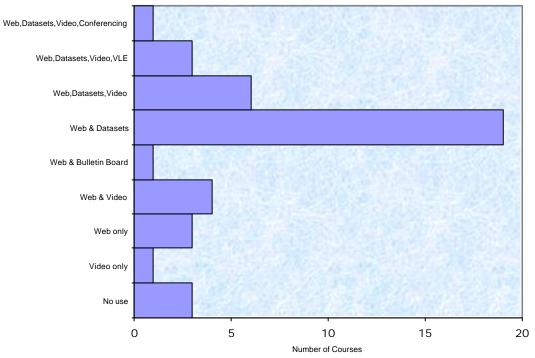


Table 9.2 – Electronic Resources¹⁵⁵

9.3 Compared to other aspects of the survey, our findings in relation to electronic resources reveal greater consistency amongst courses. What might

¹⁵³ We did not count any institution more than once, since we assumed that there would be the same use of e-resources across different courses.

¹⁵⁴ Although the questionnaire asked about the use of web-based course materials, most of our interviewees interpreted this as involving putting course guides and handouts on a website, and for this reason we have not included this category (i.e. we found no evidence of course readings or role-play documentation being put on the web).

¹⁵⁵ 'Web and datasets' includes one response that students were free to consult any available electronic resources; and one response noting that IOLIS was also used for non-law students and for teaching tort etc.

be termed the 'Westlaw and websites' model was clearly the most widely used. (Although other on-line legal information providers were mentioned – in particular Lexis/Nexis and Lawtel - this reflects a far greater number of respondents listing Westlaw).¹⁵⁶ The next most frequently used resource was video (10 courses), but only four courses used virtual learning environments (although VLEs are coming on stream in 2 places (Coventry and Southampton Institute) and are already being used, or on stream, on various PG courses). A number of courses mentioned the use of email or web-based discussion space. We detected no significantly greater preference for or use of resources such as VLEs and 'chat space' amongst younger teachers; the most likely variables seemed to be institutional support for innovation and provision of facilities, and personal enthusiasm.

Websites

9.4 The main use made of the web is primarily for accessing official information; beyond reference to leading environmental NGOs, comparatively little use seems to be made of the web for accessing non-official / critical analysis or opinion.

9.5 In line with the question asked, Figure 9.4 gives an indication of the most frequently used websites:

General Portals	Open.gov, HMSO, LawLinks (University of Kent), US and UK University sites (Cardiff and Keele mentioned specifically)		
Parliaments	Westminster (including Select Committees) and Holyrood		
National Executives and	DEFRA (and forerunners 157), Scottish		
Government Departments	Executive		
National environment agencies	Environment Agency (including EA NetRegs), SEPA, Irish EPA, English Nature, Scottish Natural Heritage		
EC sources	Europa, European Environment Agency, EC Commission, European Environmental Law Homepage		
International organisations, conventions and agencies	UN, UNEP, UN/ECE, UN treaties generally (including UNFCCC, CBD), IPCC, CMS, WTO		
Non-governmental organisations	Greenpeace, Friends of the Earth, FIELD, CIEL, IUCN, Surfers Against Sewage, UKELA.		
Miscellaneous	ENDS, Monsanto		

$\Gamma_{1}^{\prime} = 0 \Lambda$	1100+	Frequently	llaad	Mahaltaa
F(0) $F(0)$	- 10/05/	Frequentiv	USPA	WEDSHES
rigare 7. r	10051	ricquentry	0500	100001100

9.5 Of these, the most frequently mentioned were government departments, the Environment Agency (and in Scottish courses, SEPA) and Greenpeace and Friends of the Earth.

¹⁵⁶ Interestingly, since in overall terms, Westlaw still ranks behind Lexis/Nexis in terms of academic institutions serviced. See Jackson, C., SPTL/BIALL academic law library survey 1999/2000. *Legal Information Management*, 1(2), 28-39.

¹⁵⁷ Interestingly, given its responsibility for planning, EIA and transport issues, DTLR (now ODPM) was never mentioned explicitly.

9.6 The value of the Internet as a resource for primary materials, especially EC and international law, was widely recognised and appreciated. But for many respondents the web also usefully allows light to be shed on the working of key actors:

For a number of classes – for example classes on the institutions - I think it's extremely useful that they can look at a web site and check out the institution itself.

9.7 Two of our interviewees also made specific use of the web in preteaching. For one, "Preparation for the students involves browsing internet sites", while for another the web is similarly used in advance of the first lecture, students being asked to browse the web to gauge pressure group involvement in the area.

Videos and Electronic/Video Conferencing

9.8 This was in part an 'overlap' question since we also asked about the use of videos in teaching and learning generally. Thirteen courses indicated that they used video. Of these, the course at Strathclyde described the use of videoed class simulations being placed in the library for viewing as 'conferencing' rather than as the use of video, but we group these together here since both seem to be about viewing a medium rather than active participation.

9.9 Why is video used? Although we did not get much opportunity to probe this question in any depth, from the list of titles and descriptions given (see Table 9.9) we can divide the use of video into broad categories as follows:

communicating information about an environmental issue (i.e. the terrain upon which law is asked to operate);

communicating information about the working of the law in action; and videoing class simulations.

Table 9.9 - Videos Mentioned by Respondents

Videos on Climate Change, Whaling, Brent Spar, Water						
Pollution Enforcement ¹⁵⁸						
Documentary of NRA Enforcement						
Water pollution / water offences video						
The River Detectives						
A Civil Action						
Videos from English Nature						
Videos from National Park Authorities						
Topical TV programmes						
Contaminated Land						
Videos from Environment Agency (including videos on waste,						
air, liability)						
EIA Video about Twyford Down						
Videoed class simulations ¹⁵⁹						

¹⁵⁸ Our hunch is that 'Water Pollution Enforcement', 'Documentary of NRA Enforcement', 'Water Pollution / Water Offences' and 'The River Detectives' all refer to the same source.

¹⁵⁹ See the section on Strathclyde at para. 9.14 below.

9.10 One respondent noted that the use of video was subject to severe timetable constraints, but we did not find that video was used more in whole year courses than in one term- or semester-long courses.

9.11 Perhaps the most imaginative use of video we came across was the use of a 20 minute 'melange' of cuttings from films from the teacher's personal ("pretty obscure") video library, focusing on moments where nature was involved into the film's making. For him, this was another device through which to introduce his students to the way in which nature is depicted or conceptualised, to get his students to think about nature. In most of the clips though, as he remarked, there was "no nature. . . . Again, a bit flamboyant, but it worked!"

Discussion Space

9.12 The use of bulletin boards or chat space160 was mentioned by a small number of respondents and discussed in a few of the interviews. Although one teacher was sceptical about the added value to be gained from web chat space and did not use available facilities:

How is this valuable if you have them for two hours a week in seminar anyway? Both require active tutor management

Other responses were more positive:

Particularly in doing the group work, we have set up a bulletin board site for environmental law on the faculty intra-net and that has proved very useful. The students are conversing with one another and with me.

Students do tend to use it for asking questions they are sometimes reluctant to ask in class.

9.13 One teacher who had yet to use 'chat space' in environmental law commented favourably on her School's experimentation elsewhere to date:

We have noticed - in the few experiments that have been going outside the environmental law course – very often those students who are very quiet in class are the ones who will be more vocal on the Internet. They seem to have very different personalities. So it is quite a good way of involving that group of students who are naturally rather withdrawn in class. Setting up discussion forum by email is one format for this. If you appoint some people as moderators who will also make a report of the discussion at the end – this might take the place of say an essay.

The Strathclyde Experience¹⁶¹

9.14 Although a couple of places were bringing VLEs on stream, there is so far little use of this tool.¹⁶² However, this learning environment is used at Strathclyde and the experimentation there in using electronic resources deserves particular mention and comment. While it is neither a unique example of extensively using a VLE in undergraduate environmental law teaching, nor the only use of simulation in teaching and learning, it appears to be the course which has sought to make greatest use to date in combining

¹⁶⁰ With hindsight we might have asked about email discussion lists more generally, since a course may use this without having web-space or a full-blown VLE.

¹⁶¹ for full details see Poustie, M., op. cit.

¹⁶² And no use, for example, of packages like Microsoft Project.

these methods, and the reflections of the course teacher are worth discussing at length.¹⁶³

9.15 The Strathclyde course, taught by Mark Poustie, uses a simulated conference assisted by its own web support environment - document and discussion servers – which are available via the Law School website (but password protected). The document server enables students to upload on to the web conference documents such as delegation press releases, while the discussion server enables asynchronous negotiations in the context of simulated conference to continue outwith class time. These negotiations can then be monitored. Sessions of the simulated conference are videoed and indexed copies made available via the Law Library. This aspect of the course makes up between one-third and a half of contact time in a one-semester course and is assessed by a reflective report accounting for 50% of the final mark.

9.16 The first point to make is about the need for institutional support for this type of development in teaching and learning. The University in this case was supportive of innovation and was seen by staff as having a "culture of innovation".

9.17 Another notable feature of the Strathclyde experience is that using VLEs is not just heavily resource-dependent in setting up the materials and in the first year but reliant on continuing support year-on-year thereafter. Thus, in the third year of the simulation, not having web support because of the departure of a web-support colleague resulted in the teacher paying for help out of his own pocket, hardly sustainable or likely to stimulate similar types of innovation.

9.18 As to its use, the theme for the simulation has been changed every year,¹⁶⁴ beginning with a simulated international environmental conference¹⁶⁵ that allowed a good range of issues to be covered. Had there been web support then the simulation would have continued to use an international topic. Because of the wider departmental resource issues, he has had to do something harder than he would have liked, and in the last year used implementation of the Water Framework Directive. But:

I find the teaching once into the simulation, easier and much more fun than other forms of teaching. It's really up to the students to make it work. Once at that stage its great.

9.19 What do the students think? Judged by recruitment in the following year, there was a dramatic dip in numbers of home, law-only students but this was balanced by increased recruitment amongst other disciplines (B.A., B.Eng.) and ERASMUS and international students. While the simulation is seen as one of the best aspects of the course, and the students are enthusiastic, it was felt that "the innovations may put off the LLB students – it may be that the LLB's are more conservative". A further reason advanced was the possibility that the class was seen as having an insufficient law content, a concern the teacher felt

¹⁶³ See further, Poustie, M., op. cit.

¹⁶⁴ In the first year of the simulation, the students attempted to negotiate a biosafety protocol to the Biodiversity Convention. When this was achieved in real life, a new simulation involving negotiating a global forest convention was used. It is assumed that this second simulation was only used once because, in the negotiation, agreement was reached (and videoed).

¹⁶⁵ On this TLM see also Evans and Jewell op. cit. (a paper-based rather than web-based simulation).

was unwarranted and not borne out, for example, by performance in assessment, which increased significantly¹⁶⁶.

9.20 How might this initiative develop? At present the simulation is only undertaken in half of a one-semester course. In this respect, "more time would be nice. But too much time could be problematic, students could lose focus". One possible solution to this would be to create more virtual time using effective web resources. The impression was that extended case studies over a whole semester might be somewhat artificial because of the difficulty in conducting a case study involving all the issues (though see Robertson 1998).¹⁶⁷ But he would be interested in extending the use of simulation to a public inquiry, which he thought might work quite well and, elsewhere, has speculated on the merits of using, for example, a law reform hearing before a Parliamentary Committee.

9.21 As a general remark, however, it was felt that those making the VLE packages did not consult legal academics as much as they should, or at least that legal academics have not pushed their ideas with the programmers or have been very limited in their use. It may be that this kind of structural issue needs to be addressed before we see greater use of VLEs in law teaching. Hence, there was value in seminars with environmental law academics on using the web to go forward in a co-ordinated way. But he was generally optimistic about the possibilities for interactive teaching through tailored courseware.

Conclusions

9.22 These may be stated as follows:

- nearly all respondents use electronic resources to some extent
- the uses which predominate are datasets such as Westlaw and, in particular, use of the web
- the web is widely seen as a considerable aid to environmental law teaching both because of the accessibility of primary materials at national, EC and international levels, and for the light it can shed on the workings of key institutional actors. We did not come across any adverse comment on the value of the web to teaching and learning. A couple of courses assign directed web browsing as an exercise to be conducted before the first class
- the next most frequently used resource was video. This was used to communicate information both about environmental issues and about 'environmental law in action'. One course used video to pass experience of class simulations down from one cohort of students to their successors
- only four courses currently use virtual learning environments (though there is probably more use of this at PG level and new use of VLEs at undergraduate level is expected at a couple of institutions) Experience suggests that, given adequate web support, simulations using a VLE can be a very successful component of courses, but reservations were expressed about teaching a whole course in this way because of the possible limitations on covering key issues and skills

¹⁶⁶ See Poustie, M., op. cit p.342

¹⁶⁷ See Robertson, op. cit.

- a number of courses use email or web-based discussion space and commented very favourably on this
- there appears to be no significantly greater preference for, or use of, eresources such as VLEs and 'chat space' amongst younger teachers; the most likely variables seemed to be institutional support for innovation and provision of facilities, and personal enthusiasm
- a teaching network in environmental law may be particularly valuable at a time when we may be on the cusp of radical developments in teaching delivery.

10 Assessment

10.1 This part of the survey aimed to establish the usage of different assessment methods in environmental law. A range of possible responses was given, with scope for respondents to mention other methods used (including any optional assessment methods). A particular aim of the survey was to identify whether alternative (non-traditional) assessment methods were being deployed, and in interview we looked in particular at how assessment methods were related to the challenges of teaching and to teaching and learning methods. Hence, again, this section is best seen as an extension to the earlier discussion of TLMs.

10.2 In doing so we needed to bear in mind that this part of the survey is not just about methods (problem questions / discursive essays etc) but also about the conditions under which these are employed (exam conditions or otherwise; individually or in groups).

Description and categorization of results

10.3 Figure 10.7 indicates the extent to which various assessment methods were used. We did not set any threshold here, since in most cases usage of a particular method was in excess of 20%.¹⁶⁸ Our sample size here was 42 responses; we excluded one response that did not refer to undergraduate assessment methods, but included the law and non-law courses at the institution which taught these cohorts separately, where significantly different methods were used respectively.¹⁶⁹

10.4 A few points of interpretation. First, many respondents were understandably unable to stipulate the split in exam assessment between problem questions and discursive essays, since this might depend in part on student choice, and so grouped these together under a single percentage. In these cases, we recorded the use of both methods, but this made assessing the overall percentage of usage of any particular method rather difficult. For this reason, and because a number of respondents did not supply percentages here, we have therefore not attempted to indicate, in percentage terms, the weight accorded to the various methods used. That said, we are able to make some observations about the extent of use within individual courses of particular methods. Second, we needed to create a category for 'research project reports', since neither the reflective reports nor group work categories caught the writing up of individual research initiatives. Finally, terms like 'dissertations' may be vague, and may differ depending on such factors as the length of a course (a 45000 word essay may be seen as a dissertation on a single term or semester-long course, but might not be viewed as such with a year-long course).

10.5 Two further points about assessment should be made here. Firstly, to repeat the points made above, there **i**s an obvious linkage between teaching and learning methods used, and assessment. While not, in practice, a strict

¹⁶⁸ The one exception being oral presentations, see para. 10.32 below.

¹⁶⁹ We could have also doubled up in relation to the courses at Liverpool, UEA, Napier and Wolverhampton, where more than one course is offered on the main law programmes, but in each case we took just the primary, UK-law based course.

correspondence,170 both TLMs and assessment methods should ideally derive from, and relate back to, the learning outcomes of any course.171

10.6 Secondly, we found a similar pattern emerging as we did with teaching and learning methods in relation to the relative uniqueness – or otherwise - of the subject area, or at least the need to tailor generally used methods to environmental law. Hence on the one hand was the view that:

I would need to be persuaded of why a subject would require different kinds of assessment methods. I think it's more to do with the outcomes which you have in mind for your particular course and then tailoring your assessment by reference to those particular outcomes.

10.7 In the same vein, the teacher of the course identified below which took an 'anything goes' approach to assessment noted that he was trying to be equally innovative and develop similar skills in other (core) subjects taught.

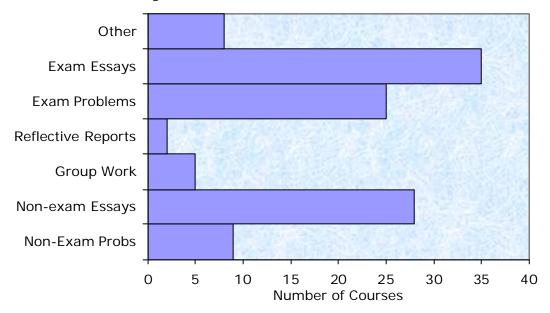


Figure 10.7 - Assessment Methods Used

10.8 The 'other' methods recorded on individual courses were diverse:

- Short notes / seminar reports
- A dissertation
- The option of either a 45% or 100% dissertation
- (Twenty) short questions as a compulsory exam component
- A viva on assessed coursework (though not used every year)
- An optional assessed essay
- Class participation taken into account in assessing the overall mark¹⁷²
- Short research essays on a topic not covered in the syllabus
- An 'anything goes' model, where students have the option to produce any piece of work they want (though the majority of submissions were

 $^{^{170}}$ See, for example, the extent to which TLMs involving transferable skills are not directly assessed, at para. 10.30 below.

¹⁷¹ Because we received course outlines (and hence learning objectives) from only a minority of respondents, there is not much more that can be said here on this.

¹⁷² It was stressed that this was alongside the 'overwhelming' weight attached to exams and essays, but nevertheless a useful way of incentivising participation and for deciding the grades of borderline candidates.

predominantly traditional ($22 \times 5,000$ words essays) with a dash of the avant garde (2 videos and one oral presentation and performance).

10.9 Since what we were looking at here were formal assessment methods rather than preparation for assessment, we do not include unassessed coursework here, though 3 respondents mentioned this.

What Methods are Used?

10.11 It was difficult to identify anything resembling a typical approach to assessment. But there was an evident prevalence of traditional assessment methods, in particular discursive essays and problem questions in exams, and coursework essays. Equally, there was relatively minor use of less traditional methods such as reflective reports or assessed group work and, as mentioned below, no use of certain methods.¹⁷³

10.12 Generally our interviews revealed a freedom to choose assessment methods. Some instances emerged of formal departmental or university constraints, but more usually we encountered departmental norms that had been, or could be, departed from. Where we did find formal constraints, this was often – but by no means always - in favour of a preponderance of assessment by examination.

Coursework and Exams

10.13 Expectations seemed to differ quite widely between institutions. The following two responses are taken from interviews at comparable, longstanding, 'old' universities:

it would be considered odd for a class in the higher level not to include an essay.

Having an essay is quite radical! . . . nearly every course is examined by a three-hour exam only. Only about a quarter of subjects have an essay.

10.14 There were also differing views about the value of exams and coursework. These can be divided between, on the one hand, their value as ways in to the subject or as tools to check the understanding of central issues, and on the other their value in assessing the maturation of understanding of the subject. In relation to the former, for example, coursework found support:

especially with [a] thematic approach, the first thing you want to convey to the students is a way into the topic – a methodology of looking at an environmental problem and coming up with solutions or coming up with analytical way into it. And whether or not they have mastered that is particularly easy to assess in an essay – particularly if they write on a topic that has not been explicitly discussed in class.

10.15 In relation to the latter, however, we found differing views, and value in both coursework and examination:

I like small group work – the smaller the better. I find it really helps once students are starting to write essays. The model of an assessed essay in most universities is that you give them a topic and they go away and

¹⁷³ This might be considered surprising, given the problems associated with interdisciplinarity and the need to master a wide range of concepts and legal system issues.

write it and they hand it in and you mark it. But none of us writes articles like that – we talk to people about it and we share ideas. I find what works really well is that they come to see me once a month with draft essays. Its heavily resource intensive but you can see them changing the way they think and moving up a gear. And I enjoy that.

I don't like what exams make environmental law students do – it makes them be a jack of everything rather than developing an understanding of one thing.

I want them to go into depth in an area . . . which I don't think you can expect from a two hour exam on twenty seminar subjects.

Whereas I don't like exams and I don't like the stress of exams, the students like the essay component, but it's useful to try and get some sense of how much of the course as a whole has really been absorbed and how they've reflected upon it and how they're critical of it. An exam is still quite a useful mechanism for that purpose.

10.16 With hindsight, we could usefully have explored – either in the questionnaire or in interview – what materials (if any) students were able to take into exams, or whether there was any use of take-home, open book or seen exams. This might have provided a useful link to tackling perceived challenges such as working with a largely legislation-based subject.

Correspondence between coursework and exams

10.17 In general terms, there is a correspondence between the use of discursive essays as coursework and also in exams. But there is significantly less resort to answering problem questions in coursework when compared to the use of problem questions in exams. To some extent this may be balanced by the usage, in class, of discussion of – or required answers to – short or extended problem questions but this does raise the question, in a subject where so much usage is made of problem questions in exams, whether students are being given sufficient preparation to do so. It is debatable whether going through problem questions in seminars or tutorials fully captures all the skills required to answer problem questions under exam conditions.

Altering assessment methods between law and non-law students

10.18 We found two examples where different assessment methods were used for law and non-law students. In one instance, both cohorts attend the same lectures but are assessed differently. The non-law students have one essay which is more attuned to interdisciplinary issues (i.e. which gives them scope to bring in insights from their 'home' disciplines and combine these with their knowledge and understanding of law). Similarly, the case study that the nonlaw students must do in their second semester does not require of them the same level of detailed problem solving skills as the law students (though in practice their research effort seems to be just as good). However, for the nonlaw students the module is only worth 10 credits not 30. Hence the aim is not to give all students the same package of interdisciplinarity, but to recognise that students from different starting points will take different things from a course.

10.19 The other example we came across was of a teacher who taught law and non-law students separately, and who used separate assessment methods for each class.

Non-use of methods

10.20 We found no use of quite a number of potential assessment methods. These include portfolio or progress files, or clinical reports. While the latter is, in part, explainable by the dearth of clinical activity, the absence of the former is notable, particular where some of us see exams as the main way of ensuring that a course with often diverse and disparate components has jelled together. We found no examples of e-based assessment (e.g. multiple choice tests via courseware), multiple-choice questions, library-based projects, peer- or self-assessment, or poster presentations,¹⁷⁴

Student Performance

10.21 We did not ask directly about student performance in assessment. However, a number of interviewees commented on this, most often to note the equivalence in performance as between law and non-law students (or, at least, we found no examples where any disparity in performance was noted). Also relevant here is evidence in at least one course that more innovative methods led to significantly improved student performance.¹⁷⁵

How Many Methods per Course?

10.22 The number of methods used per course is outlined in Figure 10.23. The greatest preponderance of methods used is 2 or 3 (13 courses each), with lesser number of courses using four methods (7 courses) and lesser still using five methods (3 courses). No course uses more than five assessment methods. There is no indication that a greater range of assessment methods is associated with innovation, ¹⁷⁶ and some suggestion that a greater spread of methods correlates with courses experiencing declining student numbers (or indeed which are no longer running).

10.23 Five courses are assessed by one method only (three by 100% exam essays; one by 100% dissertation; and one sui generis approach to assessment).¹⁷⁷

Gravitation Towards 'Easier' Assessed Courses?

10.24 At least two respondents commented that declining student numbers were attributable in part to having a perceived 'heavy' assessment load. Thus:

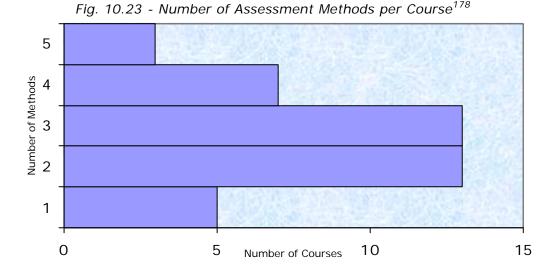
There is a problem with semesterisation/modularity, in that student cohorts sometimes (in my view, although that is obviously not a watertight evaluation) vote strategically for the modules they perceive to have the least rigorous assessment regime – one of the reasons I have identified for the drop off of student numbers at undergraduate level on my courses. A plus to this is generally that those who do access the module are generally motivated and interested.

¹⁷⁴ Though at the second workshop one participant spoke in glowing terms of his use of poster presentations

¹⁷⁵ See further para. 9.14 et seq.

¹⁷⁶ For example, a course might use four methods by have one essay and one problem-type question as coursework, and then an exam combining essay and problem questions.

¹⁷⁷ See Figure 10.23. The last-mentioned, 'anything goes' approach, is recorded under 'other' assessment methods.



10.25 Another respondent noted that his choice of assessment – by group research and exam - was a problem in relation to popularity, since other modules were assessed solely by coursework or by exam. For this reason he was considering moving to 100% coursework.

Students like the subject but not the form of assessment.

10.26 Nonetheless, this still begs questions about the use of traditional assessment methods for a subject like environmental law, given the challenges of interdisciplinarity, multiple legal systems and diverse concepts.

Varying Assessment Methods

10.28 While we did not assume that assessment methods would be set in stone, a small number of responses seemed to indicate a liking for varying assessment methods from year to year. Hence one respondent noted that:

It is difficult in certain circumstances to attribute percentage values to certain questions. For example in relation to assessment, I like to mix it up from year to year, so that some years involved a viva on the assessed coursework as well as an examination on other aspects of the course. Sometimes the assignment is on a non-taught subject, sometimes presentations are assessed in teaching sessions.

10.29 While there was no evidence that consistent use of the same methods had any appreciable effect on student numbers, there is some limited evidence that frequently varying assessment methods is associated with courses experiencing a decline in numbers. What we cannot say, though, is whether changes are made to assessment in order to halt declining numbers and unpopularity of a course more generally, and that it is this response to declining numbers that we are seeing here, rather than students steering away from courses because the assessment method changes frequently.

¹⁷⁸ The 1 Method Category includes one course where, apparently, anything goes (being listed as a single 'other' method). The 5 Category includes all methods used by a course that mixes assessment methods from year to year.

Assessing Transferable Skills

10.30 In some courses we found a fair degree of correspondence between the use of a transferable skill such as group work and oral presentations and the amount of weight given in the assessment to such methods.

10.31 In most courses, however, skills were either under-assessed in relation to their teaching time reliance or not assessed at all. Indeed, we found no 'transferable skill' TLMs which was always assessed. For example:

- oral presentations are used in 16 courses, but only assessed in 6.
- group work is used in 15 courses, but assessed in only 5
- research-based projects are used in 15 courses but only assessed in, at most, 6.179
- reflective reports were used in 5 courses but assessed in only 2.

10.32 In part this reflected the fact that such skills made up only a small fraction of many courses. For example, of the 16 courses using oral presentations, only 2 use this for more than 20% of teaching time and mean usage (amongst users) is probably between 5 and 10%.¹⁸⁰ Similarly, reflective reports were used for assessment only where they made up a significant (greater than 10%) teaching component. But there were courses where a TLM was used quite significantly but either relatively under-assessed (e.g. one course employed 33.3% usage of oral presentations, but only 10% assessment based on this) or not assessed at all (another course used 30% oral presentations but no direct assessment of this).

Innovation

10.33 Every use of innovative or non-traditional assessment methods that we identified are in some way tied to innovation in teaching and learning. For example, where we found reflective reports being used was only where simulations or other TLMs were being used.¹⁸¹ In part this may be because, as noted above, we did not search in sufficient detail for innovation within assessment methods, e.g. the use of open book or take-home exams.

10.34 As to the reception of students to innovative assessment methods, one respondent noted that, at her institution, all students will have had a "varied diet of assessment from Day 1", and were therefore "not as fearful" of being assessed in the way she does (a portfolio of report, essay, problem and review).

Conclusions

10.35 These may be stated as follows:

- Subject to departmental norms, generally teachers have freedom to choose assessment methods. Most often, any formal constraint was in favour of a preponderance of assessment by examination.
- The most used assessment methods are discursive essays and problem questions in exams, and coursework essays.

¹⁷⁹ Six here being the combined number of courses using group work and individually-focused research projects.

¹⁸⁰ Some respondents indicated usage without a percentage; in many cases usage of other TLMs suggests that usage is likely to be small. ¹⁸¹ E.g. Strathclyde.

- While there is a general correspondence between the use of discursive essays as coursework and also in exams, there is significantly less resort to coursework problem questions compared to their use in exams.
- There was relatively minor use of less traditional methods such as reflective reports or assessed group work.
- There was no use of certain methods, notably portfolio or progress files and e-based assessment.
- There appears to be no discernable difference in performance between law and non-law students.
- We found one example of different assessment methods being used for law and non-law students studying exactly the same course, and one example where law and non-law students are taught, and assessed, separately.
- Most frequently, courses used 2 or 3 assessment methods, with lesser number of courses using four methods and lesser still using five methods. A few courses use only one assessment method, and no course uses more than five methods.
- There is no indication that a greater range of assessment methods is associated with innovation, and some suggestion that a greater spread of methods correlates with courses experiencing declining student numbers (or indeed which are no longer running).
- The teaching and learning methods used in order to meet some of the challenges of environmental law may require assessment methods considered relatively onerous by students.
- There is no evidence that consistent use of the same methods has any appreciable effect on student numbers, but some limited evidence that frequently varying assessment methods is associated with declining courses. But it is not clear whether assessment changes are made to halt declining numbers and unpopularity of a course more generally, rather than students steering away from courses because the assessment method changes frequently.
- Some courses exhibit a fair degree of correspondence between the use of transferable skills and the weight given in the assessment to such methods.
- In most courses, however, skills were either under-assessed in relation to their teaching time reliance or not assessed at all.
- Innovative or non-traditional assessment methods always appear tied to innovation in teaching and learning. But this may be because we did not search in sufficient detail for innovation within assessment methods, e.g. the use of open book or take-home exams.

11 Course Evaluation

11.1 When it comes to evaluating environmental law courses, there would appear to be nothing distinctive about the methods used. The most popular method of evaluating courses was perhaps unsurprisingly the student questionnaire. 35 respondents used questionnaires and 57% of these found them more than a reasonably valuable way of evaluating their courses. 35 respondents used External Examiners' Reports as a method of evaluating courses with 50% finding these more than reasonably valuable. Peer review within the law department was used by 26 respondents with 42% finding these more than reasonable valuable. Very few alternative methods were adopted widely with peer review outside the department being used by 6 respondents; student interviews (9 respondents); and peer review by environmental law tutors (4 respondents).

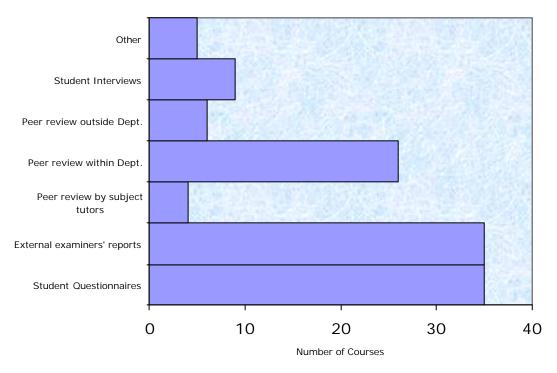


Fig. 11.1 - Course Evaluation Methods

11.2 Other methods suggested by respondents included:

- New Course approval requires external comments
- Best evaluative indicator is the students' responsiveness in class; and any growing or decreasing willingness to do reading
- Discussions with students
- Being an external examiner on other courses

11.3 One respondent - bravely – published, unedited, the reflective class review document from the previous year. This collated responses to student questionnaires, external examiner's report, pass marks achieved etc, and was audited by a Law School Academic Committee. The use of such a thorough system is clearly a benchmark for others, undoubtedly provided an objective and rigorous measure of an evolving course and is worthy of further study as desirable best practice.

12 Where Now?

12.1 This Subject Survey raised a significant number of issues about the subject and teaching and learning in general. Regrettably there was insufficient time at the workshops to explore future directions in more detail. However, the authors would like to take this opportunity to:

- Suggest a range of practical initiatives that could be launched in order to support those teaching environmental law; and
- Outline a number of lines of inquiry which might usefully form the basis of further research on the teaching of environmental law.

Practical Support for environmental law teachers?

- 12.2 The following are suggested as useful ways to take things further:
 - A dedicated email list (akin, perhaps, to the US 'envlawprofs' list which is heavily used)
 - Dedicated web space (UKCLE has provided funds, for example, to establish web space in relation to Teaching Feminist Perspectives)
 - A teaching and learning network in environmental law (this might take the form of a standing conference of teachers, and provide everything from contact avenues in relation to the provision of external examiners,¹⁸² to identifying teaching resources of particular benefit to environmental law teachers and co-ordinating major subject-specific teaching and learning initiatives). This might be launched with a one-day seminar facilitated by UKCLE, showcasing innovation in environmental law teaching, and allowing for greater depth of discussion than provided at the workshops for the present study. As one teacher remarked:

Environmental law is a relatively small community. . .and most of us know each other to talk to so in that sense it [a collaborative network] is there but that is mainly brought up through research links rather than teaching links. I'm not sure we'd know if there were people out there teaching environmental law who weren't actually writing.

• Greater links with existing bodies (e.g. to redress the imbalance of interest in teaching and learning within bodies such as UKELA)

Further lines of inquiry?

12.3 During the review of the Questionnaire responses, the interviews and the results of the workshops it became clear that there were a number of issues raised which fell outside the aims and objectives of the Subject Survey but which would be worthy of further consideration. Some of the issues raised were of a general nature, these included:

• The exact nature of teacher support which would be most valued (teachers guides to textbooks, CD Roms / worked examples etc)

¹⁸² UKCLE is currently developing a database of external examiners in consultation with CHULS.

- The availability of study leave (in particular the difference in availability in new and old universities) and the extent to which leave is granted in order to develop new courses as opposed to research
- The impact of TQA/QAA culture on teaching, learning and assessment methods

12.4 There was, however, one major theme which we did not explore explicitly in the Subject Survey, but which was implicitly and in some cases explicitly a theme of many of our discussions.

The Potential Impact of the RAE

12.5 Although it was not directly addressed as part of the current research, the results of this survey indicate that the Research Assessment Exercise (RAE) may also have had an impact on the teaching of environmental law. The RAE will undoubtedly have had an impact on teaching by sheer dint of the fact that it limits the time available for teaching activities – in particular innovative or developmental work. Needless to say, however, further research would be necessary to quantify the specific nature and extent of any possible impact by the RAE. Drawing from the findings of the current research, the following is an attempt to identify potential lines of specific enquiry in this regard.

12.6 First, in terms of historical development, it would appear clear that the life of the 'typical' environmental law course mirrors that of the RAE. The 1990s witnessed not only the entrenching of the RAE as a feature of academic life in the UK but also the launch of most of the environmental law courses currently taught in UK universities. While the authors have identified a range of other factors that might have stimulated the surge of interest in environmental law teaching during this period, ¹⁸³ it is possible that the RAE also provided a potent incentive to individual academics and their institutions to proactively align teaching and research activities in the interests of efficiency and enhancing research quality. In effect it is possible that the RAE can be accredited with facilitating - possibly fuelling - the crystallisation of environmental law as a discrete legal subject area appropriate for university-level teaching and research.

12.7 A second potential impact of the RAE may have been to inhibit the willingness of individual academics to develop strategies for tackling the particular challenges posed by teaching environmental law. Respondents to the survey and participants in workshops identified the interdisciplinary dimension to the subject as a significant challenge. Despite this, and the fact that most environmental law courses are taught by sole teachers, the survey established how few interdisciplinary teaching alliances had been formed either in terms of assistance with selection of course content or actual teaching collaboration.¹⁸⁴ Indeed, the process of undertaking the survey indicated that those teaching environmental law within law departments knew relatively little about other environmental law courses taught within other parts of their institution. Although workshop discussion concerning the impact of solo teaching on tackling interdisciplinarity highlighted various practical and institutional hurdles to co-operation,¹⁸⁵ it is possible that the RAE's bias (real or perceived) against interdisciplinary research also acted to dampen individual and institutional interest in the development of interdisciplinary collaboration.

¹⁸³ See paras. 3.10 and 4.8.

¹⁸⁴ See paras. 3.5 – 3.9.

¹⁸⁵ See para 3.5.

12.8 The selection of course content is a third area of potential RAE impact on environmental law teaching. In this regard its impact on the availability of student textbooks and therefore on selection of course content is of particular interest. 79% of 33 respondents considered the availability of teaching and learning resources such as textbooks and library holdings to be a material factor in their choice of course content. Of these, 42% considered it to be of considerable of determinative importance. In addition, 33 respondents noted the importance of textbook availability and coverage in terms of selecting course content. Of these 67% considered it to be a material factor; while 18% considered it to be of considerable or crucial importance. However, despite the importance attached to the availability of textbooks, it would be surprising if the RAE's bias against the submission of student textbooks had not exerted a significant influence on the range and nature of the available textbooks.

Although it would be difficult to quantify the exact influence of the RAE 12.9 in this context, as a minimum the RAE is likely to have affected the amount of time authors could afford to devote to the writing of textbooks. Given their weaker currency in RAE terms, it is unlikely that institutions would have supported work on the production of textbooks by means of the leave and other assistance afforded to more directly RAE focused research. By limiting the time available to devote to such work, the RAE could also have had a far-reaching influence on the approaches taken to textbook writing and consequently on the content and design of environmental law courses. In this regard it is interesting to turn to the difficulties faced by teachers in tackling the interdisciplinary nature of the subject. Despite this being a widespread experience, it would appear that a textbook has not yet emerged that meets the needs of environmental law teachers and students in this regard. It would be interesting to explore whether the RAE's bias against interdisciplinary research has inhibited the writing of such textbooks.

12.10 The influence of the RAE may also explain the absence of differences between the courses being taught in the separate jurisdictions within the UK. Although not as influential as other factors, their personal research agenda was considered to be a significant factor influencing course content by 53% of the 36 respondents. 19% stated that it was of considerable or determinative importance. While it seems clear that research influences teaching and vice versa, it would also appear that individuals working in the different parts of the UK do not seek to develop a significant local dimension to their environmental law courses despite the evident differences in environmental laws across the country. Given the RAE's emphasis on publication in mainstream English law journals, it begs the question whether individuals have focused their research and consequently their teaching interests away from local matters towards what would be perceived as being of 'national' interest in RAE terms.

Bibliography

Bottomley, A., (ed.) Feminist Perspectives on the Foundational Subject of Law London, Cavendish, 1996.

Burton, Martin Clement, Standley and Williams, 'Teaching Family Law' at www.ukcle.ac.uk/resources/Family.pdf

Corcos, C., Durchslag, M., Morriss, A. and Wagner, W., (1997) Teaching a megacourse: adventures in environmental policy, team teaching, and group grading, *Journal of Legal Education*, June 1997, 224.

Evans, T., and Jewell, T., Simulating an environmental regime in multidisciplinary undergraduate courses, in Saunders, D., (ed.) *The Simulation and Gaming Yearbook volume 3: Games and Simulations for Business*, London, Kogan Page, 1996.

Fuller, L., The Forms and Limits of Adjudication, *Harvard Law Review* 1978, p. 353.

Hammer, R., Integrating Interdisciplinarity Perspectives into Traditional Environmental Law Courses the challenges of interdisciplinary teaching in environmental law, *Journal of Geography in Higher Education*, 1999:23(3) p.367

Howarth, W., Environmental Law Comes of Age (inaugural lecture, University of Kent), 1993.

Jackson, C., SPTL/BIALL academic law library survey 1999/2000. *Legal Information Management*, 1(2), 28-39.

Joy, Political Interference with Clinical Legal Education: Denying Access To Justice 1999:73 *Tulane Law Review* 235.

Kelly, M., Teaching international environmental law: tools of the trade: a survey of materials, *Stetson Law Review*, 1999:Spring, pp.1197-1227.

Kuehn, Denying Access to Legal Representation: The Attack on the Tulane Environmental Law Clinic 2000:4 *Washington University Journal of Law and Policy*, p.33 and at <www.wulaw.wustl.edu/Journal/4/Kuehn.pdf>

Lazarus, R., Environmental scholarship and the Harvard difference, *Harvard Environmental Law Review*, 1999:23 p.327 (part of a symposium on environmental law: trends in legal education and scholarship).

McGlynn, C., Women, representation and the legal academy, *Legal Studies* 1999:19(1) p.68.

Plater, Z., Environmental law and three economies: navigating a sprawling field of study, practice, and societal governance in which everything is connected to everything else, *Harvard Environmental Law Review*, 1999:23 p.359 (part of a symposium on environmental law: trends in legal education and scholarship).

Poustie, M., Engaging Students and Enhancing Skills: Lessons from the Development of a Web-supported International Environmental Law Conference

Simulation, 2001:15(3) International Review of Law Computers and Technology, pp. 331-344.

Reid, C., Environmental Law: Sifting Through the Rubbish', *Jur. Rev.* 1998:4 pp. 236-255.

Reid, C., and Jewell, T., Environmental Law in Hayton, D., (ed) *Law's Future(s)* Oxford: Hart Publishing, 2000.

Robertson, H., Methods for teaching environmental law: some thoughts on providing access to the environmental law system, *Columbia Journal of Environmental Law* 1998: 23, p.237.

Sanders, A., and Walton, W., The delivery of environmental law in UK planning education: a critical hiatus or an unimportant luxury, paper presented at *XI Aesop Conference*, Nijmegen, The Netherlands, 28-31 May 1997.

Sax, J., Environmental law in the law schools: what we teach and how we feel about it, *Environmental Law Reports*, 1989: 19 pp. 10251.

Turner, S., and Morrow, K., The more things change, the more they stay the same? Environmental Law, Policy and Funding in Northern Ireland, *Journal of Environmental Law*, 1998:10 p.41.

Wakefield, J., Attitudes, ideals and the practice of environmental law, UCLA Journal of Environmental Law and Policy 1991:10 p169

Wirth, D., Teaching and research in international environmental law, *Harvard Environmental Law Review*, 1999 p.423

Whitty, N., Buss, D., Mansell, W., Millns, S., and Bell, C., *Teaching Human Rights*, 2nd ed, Warwick, UKCLE, 2002.

Appendices

Appendix I UKCLE Subject Survey - Environmental Law

Please note: The vast majority of this survey applies only to teaching of environmental law (or similar) courses at undergraduate level. In most institutions this will comprise an environmental law module or unit on the undergraduate law degree. We are, however, also interested in obtaining general information about other courses in, and teaching of, environmental law at other levels (including postgraduate and professional courses) and on non law courses. This information should be used to fill in Box 1.

For the purposes of this questionnaire, we are primarily interested in your main course(s) (i.e. the course which is taken by the largest number of students and occupies the most significant part of your teaching time). We include within the definition of 'environmental law' courses which include content which covers the areas listed in Section 3 and which therefore includes (although not exclusively): EC Environmental Law; International Environmental Law; Planning and Environmental Law; Nature Conservation Law; Pollution Control Law; and associated courses.

1. General Information

Name

Name of institution

Address of institution

Name(s) of other environmental law teacher(s):

Is environmental law the only subject you teach? YES/NO (Please fill in the Box)

If NO, please list other subjects currently taught (and levels)

How long has your institution run environmental law courses? Please identify the course(s) and the year in which it ran for the first time.

How long have you taught on environmental law courses at your current institution?

How long have you taught on environmental law courses generally?

What is the trend in numbers of students on the course? Please indicate with a X in the correct column

Trend in Student Numbers	х
Up over time	
Down over time	
About the same	

Are the courses offered every year? YES/NO (Please fill in the Box)

If your answer was NO what reasons are there for not offering the course every year?

Is environmental law taught on any other law course either by way of thematic example (e.g. environmental crime in criminal law or environmental liability in tort) or as an integral component of the other course (e.g. international environmental law as a part of international law)?YES/NO (Please fill in the Box)

If YES, please describe the courses in which environmental law is taught in this way?

Would you like to be included in a directory of environmental law teachers (for use in further survey work) YES/NO (Please fill in the Box)

Could we contact you to conduct research in a more in-depth, qualitative, study (from the end of November, 2001) YES/NO (Please fill in the Box)

If you have answered YES to either of these, please provide the following:

Telephone no: address:....E-mail

2. The Challenges of teaching Environmental Law

In general terms, to what extent does the teaching of environmental law pose particular challenges? Please indicate which particular challenges apply to your course. Please give a weighting to each of the selected factors from 1-5 e.g.

1 = not a challenge at all; 2 = a challenge of marginal significance; 3 = a significant/material challenge; 4 = a very difficult challenge; 5 = an insurmountable challenge

In addition please indicate whether you consider that any of the challenges are unique to environmental law as a subject

Challenges of teaching Environmental Law	Weighting (1-5)	Unique? X
dealing with student idealism and cynicism		
exploration of detailed procedural laws (licence applications, enforcement etc.)		
interdisciplinary dimension to the subject (e.g. policy, science)		
meeting student expectations of the subject		
polycentric nature of the subject		
presumed prior knowledge of a wide range of law subjects		
rapid pace of change in law and policy		
selection of appropriate course content		
transitional nature of much of environmental regulation (e.g. teaching laws not yet in force)		
undefined boundaries of the subject		
other (please specify)		

3. The Courses

Box 1 seeks information about all teaching of environmental law (and similar courses) in your department/school/faculty and wider institution. Please complete Box 1 (The Box below gives some examples which illustrate what we are looking for).

BOX 1 - Illustrative Examples

Course Name	Teachers	Degree Programm e and level (if necessary make clear whether U/G, P/G, LPC, CPE)	Stage Offered and compulso ry/option al (eg, final year option only)	Prerequisit e Courses (if any)	Duration of Course (weeks) (if law only forms part of the course, how many weeks?)	Students	Is the Course Taught Solely within a law dept to law students (includin g combined honours students) [Y/N?]	If NO, please describe which students take the course and the relative proportion compared to students on law programme (for non-law course, what proportion of students have a background in law)
Environmental Law	J Simon and G Monbiot	LLB	3rd and 4th Year Option	Public Law I	22 weeks	25	Ν	Some students from BA Environmental Management (around 5 per year)
Conservation Law	R Leakey	MSc Wildlife Manageme nt	Core Course (2nd term)	none	12 weeks	15	N	20% of students have law background
Pollution Control: Policy, Management and Law	J Houghton	BSc Envir- onmental Chemistry	Final Year Option	none	11 weeks (of which 2 weeks law)	30	N	No students with legal background

BOX 1 - To complete

Course Name	Teachers	Degree Programm e and level (if necessary make clear whether U/G, P/G, LPC, PGDL)	Stage Offered and compulso ry/option al (eg, final year option only)	Prerequisit e Courses (if any)	Duration of Course (weeks) (if law only forms part of the course, how many weeks?)	No. of Students	Is the Course Taught Solely within a law dept to law students (includin g combined honours students) [Y/N?]	If NO, please describe which students take the course and the relative proportion compared to students on law programme (for non-law course, what proportion of students have a background in law)
							-	

3. Undergraduate Course Content

We are interested in the content of environmental law courses. Whilst recognising that not all courses will be taught in a strictly compartmentalized way, please indicate which areas are covered in your course and the approximate percentage of the overall course content.

	X	% o overall content	f
Access to environmental information			
Access to justice including public participation, judicial review and issues of standing			
Air pollution			
Animal (Welfare) Law			
Comparative environmental law			
Contaminated Land			
Countryside protection			
EC Environmental Law			
Enforcement of environmental law			
Environmental economics			
Environmental ethics			
Environmental impact assessment			
Environmental Justice e.g. distributional justice			
Environmental politics			
Governmental and non-Governmental Institutions and organizations			
Human Rights Law and the environment			
Integrated Pollution Prevention and Control			
International Environmental Law			
Nature conservation (excluding animal welfare law)			_
Noise			_
Pollution of controlled waters	1		
Principles of environmental law (e.g. precautionary principle, sustainable development)	1		
Private law (nuisance, negligence etc.)			

Statutory Nuisance	
The disposal of trade effluent to sewers	
The protection of the cultural heritage	
The regulation of environmental protection (e.g. the use of standards, differing legal instruments, economic instruments etc.)	
Town and Country Planning	
Waste management	
other (please specify)	

Do you teach any part of the course in a thematic way by taking a topic which cuts across the boundaries of some or all of the areas mentioned above. Examples would include climate change, agriculture or transport.

YES/NO (Please fill in the Box)

If YES what themes have you selected?

4. Aims of Course and Course Documentation

We would also like to know about the aims and objectives of your course and its content. Please could you provide a copy of any documentation** which shows this.

** Please note: It is not our intention to reproduce any of your course documentation, samples etc. We merely want to have a look at them in order to see what sorts of things environmental law teachers are currently doing.

If this information is fully available on a course website that we can access, please just give the web address

5. Factors influencing Course Content

We are interested in the factors which influence the selection of course content - please indicate which factors influence your present choice of course content? Please give a weighting to each of the selected factors from 1-5 e.g. 1 = an irrelevant factor; 2 = of marginal relevance; 3 = significant/material; 4 = of considerable importance; 5 = a crucial or determinative factor.

Factors	X	Weight (1-5)
availability of teaching and learning resources (e.g. text books, library holdings etc.)		
contents of pre-existing course		
feedback from previous courses		
integration of parts of the course into the whole (i.e. selection of elements which combine well e.g. planning and environmental assessment)		
length of course		
nature of course (e.g. specialist course such as nature conservation or pollution control)		
personal interests		
personal research agenda		
relevance to practice		
requirements of Professional Bodies		
student preferences (i.e. students select course content from a range of options)		
text-book availability and coverage		
topicality		
type of student (e.g. non-law students)		
other (please specify)		

6. Teaching

One of the main aims of the research is to identify teaching and learning methods within the subject area and to identify innovation and best practice where possible - please indicate which teaching and learning methods are used. Tick all that apply and indicate as far as possible what percentage of overall teaching and learning each method comprises.

Teaching and Learning methods (other than IT – addressed in 7 below)	Х	% of overall
clinical/practice activities (advising clients; assisting in real cases)		
group work		
Lectures		
oral presentations		
portfolio/progress files		
poster presentations		
reflective reports		
research based projects		
role play		
seminars (Large Group Study)		
short notes/seminar reports		
skills-based activities (e.g. negotiation,		
tutorials (Small Group Study)		
videos/TV programmes/Movies		
other (please specify)		

7. Electronic Resources

Please list full details of the main electronic learning and teaching resources used.

Resources used	X (plus details where appropriate)
courseware (e.g. self-test questions on CD-Roms such as IOLIS)	
datasets, for example LEXIS- NEXIS, Westlaw, Lawtel, Context	
electronic/video conferencing	
videos/TV Programmes (list all examples used)	
virtual learning environment, for example WebCT, Blackboard, Lotus Notes	
Web-based course materials	
Websites (List most frequently used in teaching and learning (a general description - no specific address required)	
other (please specify)	

8. Assessment

Please indicate which formal assessment methods are used and also indicate the percentage of the overall final mark which is allocated to each method. If you use optional assessment methods, by for example having optional dissertations, Please describe these in the space below the box.

Assessment method	Х	% of
		marks
answers to problem questions (not in a formal exam)		
reports from clinical/practice based activities		
computer-based assessment (e.g. CD Rom based or multi- choice questions)		
discursive essays (not in a formal exam)		
Dissertations		
Formal Examinations - problem questions		
Formal Examinations - discursive essays		
group work		
library-based projects		
Multiple choice questions		
oral presentations		
peer assessment		
portfolio/progress files		
poster presentations		
reflective reports		
self-assessment		
short notes/seminar reports		
skills-based activities		
other (please specify)		

Optional methods of assessment

9. Course evaluation

How do you evaluate your courses? Which methods of evaluation provide the best feedback?

Please give a weighting to each of the selected methods from 1-5 e.g.

1 = a poor evaluation method; 2 = an evaluation method which has some value 3 = an evaluation method which has a reasonable value 4 = an evaluation method which is very valuable 5 = an evaluation method which is essential

Evaluation Method	Х	Weighting (1-5)
Student questionnaires		
External examiners' reports		
Peer Review by environmental law tutors		
Peer review within your Department		
Peer review outside the Department		
Interviews with students		
other (please specify)		

THANK YOU for taking time to complete this questionnaire. If you have any other comments then please write them below or on a separate sheet if you prefer.

We would encourage you to complete this questionnaire electronically and send your completed questionnaire to:

a.p.rossrobertson@dundee.ac.uk

If for some reason you have any difficulties in filling in this questionnaire electronically, please reply to the person who sent you this questionnaire requesting a hard copy and we will send you this by 'snail mail' with a pre-paid reply envelope.

Appendix II Semi-Structured Interview Schedule

Thanks for taking part in the second stage of the UKCLE environmental law subject survey, the purpose of which is to understand what is currently being taught as 'environmental law' and to share knowledge about teaching and learning in environmental law, including identifying good and innovative practice.

The purpose of this interview is to: clear up any uncertainties arising from your initial responses obtain qualitative views on particular topics which have been identified following Stage 1 of the Survey

The structure of the interview is based on the questionnaire, but please do not feel constrained by this if you want to touch on, or make comparisons/contrasts with, topics 'out of sequence'. The interview should take between 30-45 minutes.

Names of Interviewer and Interviewees, and date of interview:

About You and Your Subject

First, some things about you and why you teach environmental law, about how much of your time is devoted to the subject, and about student numbers.

1. How much of your teaching time (including marking etc) is occupied by environmental law relative to other teaching commitments?

[Prompt / Explore: how much environmental-type teaching is done on other courses, eg toxic torts, if any]

Rationale: how much of their job is 'environmental law'. To seek a qualitative view on the relative importance of the subject in objective terms (i.e. by reference to other subjects which are taught)

2. Given that, would you describe yourself as an environmental lawyer ?

[Prompt / Explore: research interests in comparison to teaching interests

Rationale: qualitative view on the relative importance of the subject in subjective terms by reference to what they would call themselves.

3. Why did you start – or continue – teaching Environmental Law?

Prompt: personal interest / involvement in green issues / a development from other teaching interests?

Rationale - is it a supply or demand issue?

4. How much scope do you have within your institution to collaborate in relation to teaching environmental law? Would you see added value in being able to collaborate with other colleagues within/outside your institution, either lawyers/non-lawyers?

[Prompt: eg, you identified co-teachers; how much interaction is there between you. Or how do you cope with being the only one interested in this area? If you are the sole teacher of environmental law, are there colleagues in your University, either within or outside your department, who you can collaborate with in relation to teaching and learning in environmental law? Do the professional bodies provide an adequate support network? What would you gain by greater collaboration?]

Rationale – teaching and learning support, assistance, collaboration with other bodies

5. What do you feel makes environmental law a more or less popular or attractive subject?

[Prompt: eg, the trend in numbers on your main environmental law course is, over time [up/down/about the same]; Do institutional constraints play a part? – Modularisation/ Semesterisation/ Reduction of options? Is it seen as a 'hard' subject?]

6 [Where you have a combination of law and non-law students taking your main environmental course], Is there any difference in popularity between these two groups, and what do you feel accounts for this?

Your Students

Thanks. Next a couple of questions about your student profile.

7. In Box 1 you identified that [**** number/percentage] of non-law students take [your main course]. What is your experience of teaching a mixed class of students?

[Prompts / supplementaries: is this experience positive or negative? What factors account for this? What differences can you ascertain if any between them? Is any allowance, or special provision, made for non-law students? Have you made any alterations to the content of your course because of a mixed cohort?]

Rationale: does teaching environmental law to combined groups of law and non-law students affect the content and development of the subject?

8 [If some of your teaching is entirely to non-law students], why is this? Is it more successful than trying to teach a mixed group? What differences are there in teaching non-law students? What works what doesn't? The Challenges of Teaching Environmental Law

9. You identified [****] as being material, very difficult or insurmountable challenges. How do you deal with them (if at all)? And [if appropriate] why did you identify certain challenges as unique and how do you deal with these?]

[Prompt: eg, do you tackle these challenges through your teaching, or bypass them (i.e. by exclusion from the curriculum)?

Rationale: having tried to identify any institutional etc constraints to teaching (see Q5), what factors relating to the subject itself make it difficult to teach?

[Note: focus on more interesting responses (4s and 5s) only. Or responses which are interesting in relation to the whole response, eg where innovative assessment methods are identified which seem to be in response to challenges of the subject. The box below is for guidance only]

Challenge	Tackle	Strategy	Bypass	Strategy
	(v)		(v)	
dealing with				
student				
idealism and				
cynicism				
exploration of				
detailed				
procedural				
laws (licence				
applications /				
enforcement				
etc.)				
interdisciplinar				
y dimension to				
the subject				
(e.g. policy,				
science)				
meeting				
student				
expectations of				
the subject				
polycentric				
nature of the				
subject				
presumed prior				
knowledge of a				
wide range of				
law subjects				
rapid pace of				
change in law				
and policy				
selection of				
appropriate				
course content				
transitional				
nature of much				

of environmental regulation (e.g. teaching laws not yet in force)		
undefined boundaries of the subject		
Other that you identified (or now want to add?) [insert here]		

Course Content

We are interested in why you cover certain issues/areas in your course, and how you bring these together.

10. Has your course content changed over the years? If so, how and why?

[Prompt: because of legal changes (eg HRA); because of semesterisation? Changes in research or other interests? Student feedback? Textbook coverage? Other?]

Rationale: factors affecting the evolution of environmental law

11. How does your course content fit within an overall structure?

[Prompt: what are the basic aims and objectives of your course?]

Rationale: what is seen as the essence of teaching environmental law, and perhaps whether having to address generic transferable skills affects aims and objectives.

12. Is your present course structure successful? How do you define success?

[Note: useful to tease out any topics / structural features which have not worked well in the past]

13. In relation to teaching and learning, what are the more (and less) successful topics in your course, and why do you think these are more or less successful

(What do we mean by 'successful' – popular / student understanding / attendance / tutor satisfaction?)

14 You cover [**** pick out unusual topic from response]. Why? What has your experience of this been?

15 Do you deal with areas of the law that are not common throughout the UK, and other cross-jurisdictional issues? Is this a problem?

Rationale: are there any material problems in teaching environmental law in the non-English jurisdictions, or working with materials that are UK-based?

16 In an ideal world, what would you like to do with your course in the future?

[Note: Explore both any constraints to change - e.g. coverage in other courses; lack of experience/expertise in topic area(s); inadequate textbook coverage; constraints of research culture; modularisation? – and where teachers would like to see the subject develop]

Rationale: to find out how what is being taught might differ from what could be taught, given enough resources and support

17 You use a theme in your teaching. Why do you do this, and how successful is it? Does it make teaching easier or harder?

[Prompt: 'success' might include both teacher and student experience; 'why' might include links to research fields; modularisation; make-up of student cohort]

[Prompt: on easier/harder, e.g. is it very time-consuming? Are there difficulties organising materials of sufficient depth? Is there student resistance to what might be perceived as too narrow a course?]

Rationale: to explore innovative approaches, and opportunities and constraints

[for most respondents, n/a]

18 You seem to use a small number of topics on your course. Why (choose a small number) and why do you choose these topics? How successful is this?

[Note: only where no more than 3 topics are evident from the return or from the course outline?]

[Prompts: see Q15 above]

Rationale: again, to explore innovative approaches, and opportunities and constraints, and to see e.g. which sectoral topics are used / can be used to illustrate in sufficient breadth what environmental law is.

Teaching and Learning Methods

We are keen to identify successful and innovative practice, and the factors that encourage this and those which do not

General Rationale: are there teaching and learning methods that are more appropriate for environmental law?

Are there any constraints imposed upon you in selecting teaching and learning methods?

[Prompt: validation requirements, uniformity, lack of resources, time etc.)]

20 Which teaching methods work well and which do not?

[Prompt: are there methods that you use for environmental law but not for other teaching that seem to work particularly well in environmental law?]

21 Would you consider using, or like to use, other T&L methods?

22 [As appropriate] Could you expand on your experience of more innovative teaching methods?

[Prompt / Rationale: eg extent to which these are used to meet some of the particular challenges of teaching environmental law]

Electronic Resources

Have you found using electronic sources [such as ****] particularly helpful in relation to teaching environmental law? If so, why (or why not)?

24 (Depending on level of interest) Are there ways in which electronic teaching and learning resources might be better used for teaching environmental law?

Rationale: how can electronic resources be used to improve teaching and learning

25 Would you be prepared to share information about the electronic resources you use, for example by UKCLE compiling a central database of videos or the sharing of access amongst environmental law teachers to WebCT sites?

[Note: note down any other suggestions about how to achieve this aim]



Assessment

Again, the aim here was to identify innovative and best practice, and constraints and support.

26 Why do you use the assessment methods you indicated?

[Prompt: does your department or school require these methods, are they of your own choosing? Does this help address the specific challenges of teaching environmental law? Etc]

Rationale: scope for tailored assessment methods for environmental law, and whether assessment methods are school or subject led

Other

Thank you very much. That's the end of the interview questions. Time permitting, are there any other things relating to the subject survey that you want to raise or discuss?

[see whether they raised anything in the final 'any other comments' box at the end of the questionnaire which has not been discussed]