The PRS-LTSN Journal

Philosophical and Religious Studies Subject Centre of the Learning and Teaching Support Network Vol. 1, No. 2, Winter 2002

Editor:

Dr David J Mossley Information Officer PRS-LTSN School of Philosophy University of Leeds Leeds LS2 9JT United Kingdom +44(0)113 343 1166 david@prs-ltsn.ac.uk

Distributed freely to all individuals in UK Higher Education and to those registered in our subject areas; register your interest at:

http://www.prs-ltsn.ac.uk/registration/index.html

See page 176 for details

Editorial Board:

Mr George MacDonald Ross Director PRS-LTSN University of Leeds

Dr Simon Smith Research and Administration Co-ordinator PRS-LTSN University of Leeds

Dr Nik Jewell C&IT Manager PRS-LTSN University of Leeds

Dr William Campbell Associate Director PRS-LTSN University of Wales, Lampeter

Dr Graeme Gooday Associate Director PRS-LTSN University of Leeds

Dr Hugh Pyper Associate Director PRS-LTSN University of Leeds

Dr Gary Bunt Project Officer PRS-LTSN University of Wales, Lampeter

Prof Stephen Clark Steering Group Co-Chair (Philosophy) Department of Philosophy University of Liverpool Prof Ann Loades Steering Group Co-Chair (Theology and Religious Studies) Department of Theology University of Durham

Prof David Evans NCP Representative School of Philosophical Studies The Queen's University of Belfast

Prof David Fergusson AUDTRS Representative Faculty of Divinity University of Edinburgh

Prof Barry Gower BSPS Representative Department of Philosophy University of Durham

Dr Jeff Hughes BSHS Representative Centre for the History of Science, Technology and Medicine University of Manchester

Prof Richard King BASR Representative Division of Social Science University of Derby

Prof Roger Trigg NCP Representative Department of Philosophy University of Warwick

The PRS-LTSN Journal Volume 1, Number 2, Winter 2002

Welcome to the second issue of the journal for the Philosophical and Religious Studies Subject Centre of the Learning and Teaching Support Network.

Contents

Building on Success: editorial8	33
The LTSN and the PRS-LTSN	34
Subject Centre News, Winter 2002	36
Projects and Funding	88
Departmental Visits and Contacts9	0
Workshops, Events and Networks)1
Other LTSN Subject Centres9	94
External Pressures on Teaching—George MacDonald Ross	98
Appendix: Further information and resources10)4
Informing, Teaching, or Propagandising? Combining Environmental and Science Studies for Undergraduates—	
Sean Johnston and Mhairi Harvey13	60
How do Different Student Constituencies (not) Learn the History and	
Philosophy of their Subject? Case Studies from Science, Technology and Medicine—Graeme Gooday	d 11
inculation of the method of the second	11
Studying Islam after 9-11: Reflections and Resources—Gary Bunt15	56
Speaking the Sexual—Julia Collar16	55
How to Cheat in Koine Greek—Jane McLarty16	59
About the Journal17	6

This is second issue of the *PRS-LTSN Journal*. Feedback to Volume 1, No. 1 has been very positive and I hope that this new issue will prove to be as popular and as well used.

In this issue I have tried to include many different perspectives on what a scholarship of learning and teaching in the PRS subject areas might be. There is a full article exploring the nature of curriculum design informed by philosophical and general ethical concerns in a course on the environment at Crichton Campus of the University of Glasgow; a reflective and resource-rich piece on the impact of the 11th September 2001 attacks in the USA on the teaching of Islamic Studies should stimulate interesting discussion: there is also a full article on the way students learn (or don't learn) the philosophy and history of their subjects and the potential benefits of student-centred approaches in history and philosophy of science. The PRS subjects are replete with opportunities to reflect on not just the content. but the nature and assumptions of how the topics are learnt and taught-indeed it would be very odd if the way important and weighty concepts are shared were not something worthy of more than a passing thought.

Also included is a major piece that looks at some of the external pressures now facing departments in terms of developments in quality assurance, record keeping and profiling. It is also available on our website and is a useful summary to have to hand as HE shifts into a higher gear of paperwork with new QAA arrangements.

Towards the end there are two shorter pieces of discussion and reflection on practical teaching.

This issue will be the last with as much Leeds/Lampeter 'in-house' content as we have published to date. Over the last six months we have been providing major funding (up to £5000) and other minor grants

(up to £3000) for a number of important projects exploring a wide range of themes in PRS learning and teaching—brief descriptions of the sort of projects underway are on page 89. Consequently, future issues of the *PRS-LTSN Journal* will carry full reports and feedback from these projects and we hope that there will be some exciting new resources "with something for everyone". We continue to offer financial support for projects and you can find details of how to bid for funding on page 88.

The last six months have seen a real expansion of our activities and the ways in which we are able to facilitate and develop the sharing of genuinely effective practices. The LTSN is becoming an important part of the national higher education scene, and the PRS-LTSN is *vour* subject centre within that bigger picture. With a remit to support diversity and innovation, we aim to serve the subject communities in the most effective ways possible, but we are always open to suggestions as to how we can do this better. Please do let us know what you do well and how your ideas might be shared and applied elsewhere, and what you think about what we do.

At a time of increasing external pressures on teaching and research, the PRS-LTSN exists to show just how much expertise there already is in teaching conceptually and personally demanding subjects, so that we can take back control of the agenda of higher education for our subjects. We are the experts in our fields; we have extensive combined knowledge of the best practices for encouraging student learning in PRS subjects. We should *recognise* that expertise for ourselves.

Finally, please note that the telephone numbers at the Subject Centre are changing—from 18th March our main number will 0113 343 4184.

David J Mossley, Editor

The LTSN and the PRS-LTSN

LTSN

The Learning and Teaching Support Network is a network of 24 subject centres based in higher education institutions throughout the UK. It is funded by the four HE funding bodies in England, Scotland, Wales and Northern Ireland. It aims to promote high quality learning and teaching through development and transfer of successful practice in all subject disciplines.

Activities

The LTSN's core activities are:

- setting up, supporting and developing learning and teaching networks;
- promoting and sharing successful practice in learning, teaching and assessment through workshops, conferences, meetings and the interoperability of resources and databases of resources;
- facilitating the transfer of knowledge between users, experts, developers and innovators.

The LTSN Generic Centre

There are also learning and teaching issues and practices common to all subjects that are disseminated and promoted by the LTSN Generic Centre, located in York. The Generic Centre is becoming a major national source of information and expertise on learning and teaching practices. It assists the subject centres, and HE providers generally, to make the best use of a wide range of approaches to learning and teaching, drawing on the expertise already present in HE.

Please visit their website for more information:

http://www.ltsn.ac.uk

The PRS-LTSN

The Philosophical and Religious Studies Subject Centre is based at the University of Leeds and at a partner site at the University of Wales, Lampeter and covers the disciplines of Philosophy, Philosophy of Science, History of Science (including the History of Medicine and Technology), Theology, and Religious Studies. The name 'Philosophical and Religious Studies' is merely an abbreviation for these subject areas.

General Activities

The PRS-LTSN is at the heart of a change in academic culture to foster the discussion of subject-specific issues in learning and teaching. The Subject Centre staff are engaged in promoting the network exchange of successful professional practice, and the encouragement of others to confer and publish about subject-specific learning and teaching issues so that research and publication in the scholarship of teaching is accepted part of academic life. It is worth noting that publications in learning and teaching are acceptable as submissions towards any future RAE. We provide the following services and resources:

- departmental visits (see p. 90);
- grants and funding for learning and teaching projects (see p. 88);
- a comprehensive website of electronic resources and reviews;
- the PRS-LTSN Journal
- National and regional workshops and conferences (see p. 91)

For up-to-date information on all developments at the PRS-LTSN: http://www.prs-Itsn.ac.uk or http://www.prs-Itsn.leeds.ac.uk

Welsh access: http://www.rhcda-aac.ac.uk

Staff

During the last six months we appointed a new Project Officer at Lampeter, Julia Collar. Julia is researching widening participation in PRS with a focus on sexuality, gender, and HIV/AIDS issues. This includes investigating the potential of distance learning as a flexible medium for students with long-term illness, and as a confidential learning medium for students unable to attend university residentially due to personal or social pressures.

Gary Bunt is researching a second paper relating to the implications of 9-11 for PRS (see p. 152 for research to date). This paper will be made available after the PRS 9-11 Colloquium in Leeds (on Tuesday 12 March 2002), and will incorporate feedback from colloquium participants. He is also working on further materials relating to the new disability legislation that will be produced, together with papers on other aspects of widening access and diversity issues. There are also plans to produce a printed and updated collection of PRS-LTSN documents relating to widening access issues and disability. As always, feedback and contributions to these areas are welcome on these issues (gary@prs-ltsn.ac.uk).

Almost all the subject centre staff are involved in the programme of departmental visits to all departments and schools involved in PRS subject teaching.

We have also appointed three reviewers for six months to greatly enhance our coverage of philosophy resource reviews on the website; in particular they are reviewing relevant articles from back volumes of the US based journal *Teaching Philosophy* and other journals and books. They are Annamaria Carusi, Richard Hamilton and John Sellars. Look out for the important new resources they are providing.

The website and the future, http://www.prs-ltsn.ac.uk

Alongside this journal, burgeoning networks, the workshops and events (described below) there is an ever-growing and successful website covering a range of materials in all the PRS subject areas with articles, discussion pieces and reviews of books, journals and conference papers, software and on-line teaching materials; challenging pieces in our 'Contentions' section to stimulate debate; and all the Centre's news. We have recently added substantial materials on external pressures faced by Visit the website today to find out how your expertise can help others and how you can gain from networking with other successful practitioners.

From 18th March 2002 all our telephone numbers are changing from: 0113 233 #### to: 0113 343

The main PRS-LTSN number will become:

0113 343 4184

Projects and Funding

Currently the PRS-LTSN can award grants for projects that will help to promote its aims, and from time to time, it receives additional funding for projects that are more ambitious. Since the four UK higher education funding councils fund the PRS-LTSN, grants are restricted to employees of UK institutions that are funded by the councils. However, in certain circumstances it may be possible to include people with a close connection to such institutions—for example, retired members of staff, or postgraduate students.

The closing date for the second tranche of funding for *major* grants (up to £5000) has now passed, but we have money available for smaller grants. In tranche one, we awarded seven major grants and during the academic year 2001/02 (only) we have substantial funds available for other smaller projects. We are therefore inviting bids for sums of between £500 and £3000. Projects may be on any teaching issue specific to the PRS-LTSN as a whole, to its individual disciplines, or to their sub-disciplines. Our main criterion for making an award is the likelihood of the project resulting in a publishable outcome that will stimulate debate and further research within the relevant subject community.

Bids may be submitted at any time.

Other contributions

Our budget for commissioning projects will be much reduced after the current academic year, and we shall rely mainly on colleagues' willingness to contribute voluntarily. We would therefore encourage anyone who has an active interest in teaching to send us materials for publication on our website or in this journal. We would be very pleased to receive:

- responses to documents we have already published;
- case studies of innovative practice;
- descriptions of methods which work particularly well;
- discussion papers outlining problems which are likely to be shared by others, reviews of textbooks or other teaching materials;
- anything which will be of interest and of help to people teaching in the same subject area elsewhere in the UK.

Currently funded major projects from Tranche One funding

- **Cardiff University:** The evaluation of participative learning and the development of critical thinking in Buddhist studies
- Anglia Polytechnic University: Critical thinking and the experience of international students on taught Masters programmes
- University of Lancaster: Partnership in Truth: the theory and practice of collaborative learning within philosophical discussion
- University of Glasgow: Evaluating learning resources in teaching formal philosophical methods
- University of Exeter: The culture of religious studies departments and problems of group learning
- University of Birmingham: An analysis of the scientific conceptual frameworks utilised by undergraduate theology students when studying science and religion
- University College London: Diversifying assessment: survey and synthesis of advice from research.

Further reports of these projects and listings of successful Tranche Two bids will be available soon on the website. The outcome of these projects will be printed in future issues of the *PRS-LTSN Journal*.

Departmental Visits and Contacts

Departmental Visits

We are now in the midst of a programme of departmental visits. These are proving particularly popular with Theology and Religious Studies and History and Philosophy of Science departments. If we have not contacted your department already we shall be in touch with your nominated representative or Head of Department/School shortly. Visits are about our discovering how we might better serve you and for us to gather and disseminate successful practice.

We are open to invitations at any time. We are especially keen to hear from philosophy departments who would welcome a visit. Ask your PRS-LTSN rep. (or HoD) for details.

Contacts

Our list of departmental contacts continues to grow, but there is still a small minority of departments that have not registered a representative. If you would like to be a representative for your department and receive a monthly e-bulletin outlining all up-and-coming funding opportunities, free conferences and workshops and new resources from the PRS-LTSN, please contact:

Dr Simon Smith PRS-LTSN School of Philosophy University of Leeds Leeds LS2 9JT Tel: 0113 343 4184 simon@prs-ltsn.ac.uk

Workshops, Events and Networks

In the last six months or so there have been a number of successful workshops and events either organised directly, or supported by the PRS-LTSN. These have included:

- Workshop at the *British Society for the Philosophy of Science* Conference at the University of York;
- Second Theology and Religious Studies Colloquium;
- Regional post-graduate workshop for new teachers and tutors in Philosophy at the University of Durham;
- Sponsored session at the AAR-SBL Annual Conference in Denver, Colorado, USA;
- Teaching Logic workshop;
- Joint workshop with ASTER on learning technologies;

Reports of these events are available on the website: http://www.prs-ltsn.ac.uk

Forthcoming events:

- National conference on the Scholarship of Learning and Teaching, 22nd March 2002, University of Leeds. This major conference will explore the status of pedagogical research for RAE purposes and the development of a rigorous, subject-specific scholarship of learning and teaching. Speakers will include the chairs of the RAE panels for Philosophy and for Theology and Religious Studies, and representatives from the funding councils.
- Benchmarking and Key Skills in History, Science, Technology and Medicine, 23rd March 2002, University College London. This one-day workshop will explore the form and content of a benchmarking statement for history of science, technology and medicine courses. This follows from discussions at the successful workshop held in Leeds in May 2001.
- Workshop on Student Retention Issues in PRS subjects, 3rd May 2002, University of Stirling: Innovative approaches to

recruitment and retention: attracting new students'

- Workshop at the British Society for the Philosophy of Science Conference: Details to be announced shortly.
- Many other workshops and conferences are in the planning stage check the website regularly for details.

Attendance at all these events is free and will include lunch for one day events.

Networks

From all organised events ongoing **networks** of enthusiastic practitioners arise which take the discussion forward. Those taking part are not overburdened in terms of the time they contribute to the network—the level of individual involvement is open. However, all are now benefiting from the ongoing dialogue. The forum is open to all interested parties and everyone is encouraged to join in. Just email us to ask to join a discussion email list:

enquiries@prs-ltsn.ac.uk

Since the PRS-LTSN's mission is to encourage the sharing of effective practice, we are keen to build on existing networks of experts and practitioners in the PRS subjects as well as establishing new networks. If you are involved in such a network—for example, as secretary of a learned or scholarly society—and would like to help promote discussion of learning and teaching issues relating to the interests of the network, we would be delighted to hear from you. Small grants may be available for network projects and we always looking for ways to work more closely with such organisations.

Contacts within organisations and networks will be added to our contacts' list for the monthly e-bulletin of events, funding opportunities and news from the PRS-LTSN Subject Centre.

ANNOUNCEMENT: Institute of Feminist Theory and Research

Due to funding received from the University of Liverpool and the PRS-LTSN, the Institute of Feminist Theory and Research has launched a web site, database and register for those working in and with feminist theory. The purpose of this exciting project is to facilitate scholarship and consolidate a diverse body of researchers through improved communication. Communication is generated through chat room facilities, notice boards and an accessible database. Individuals who join the register will be able to access information concerning other researchers, research projects, conferences and relevant resources. These resources will include teaching aids such as an information bank of course literature, bibliographies and IT material. Included on the site will be information concerning journals, organisations and institutes. We expect to be able to include a brief description of missions as well as contact details and web links. The site and register was launched on 19th January 2002 at the symposium 'Gender, Reason and Rationality' at the University of Liverpool.

In addition to this, and in association with the PRS-LTSN, the Institute aims to support teaching and learning and to disseminate good practice developed in and through feminist pedagogy. Following a previous conference on feminist pedagogy and forthcoming publication, we shall be developing a series of training workshops and events for departments and Institutions. These workshops may cover issues in teaching and learning such as alternative modes of assessment and evaluation, power in the classroom and institution, learning without learning outcomes, the use of questionnaires in evaluation, and mentoring. We fully believe that good practice guides devised through feminist pedagogy offer interesting pedagogic models and practices which both satisfy quality audit teams and ensure the professionalism and freedom of the academic community. If you are interested in participating in these events or facilitating a workshop then please contact the Directors of the Institute or the PRS-LTSN directly.

We do hope that you take this opportunity to become part of this new venture, registration forms for both the database and the conference can be obtained from **aphr05@liv.ac.uk**

Dr Gillian Howie, Director: Institute of Feminist Theory and Research http://www.iftr.org.uk

Other LTSN Subject Centres

Art, Design and Communication

University of Brighton http://www.bton.ac.uk/adc-ltsn

Bioscience University of Leeds http://bio.ltsn.ac.uk

Built Environment Cardiff University http://cebe.cf.ac.uk

Business Management and Accountancy (BEST)

University of East Anglia http://www.business.ltsn.ac.uk

Economics University of Bristol http://www.economics.ltsn.ac.uk

Education (ESCALATE)

University of Nottingham http://www.escalate.ac.uk

Engineering

94

Loughborough University http://www.ltsneng.ac.uk

English Royal Holloway, University of London http://www.rhul.ac.uk/ltsn/english/

Geography, Earth and Environmental Sciences University of Plymouth http://www.gees.ac.uk

Health Sciences and Practice King's College London http://www.health.ltsn.ac.uk

History, Classics and Archaeology University of Glasgow http://www.hca.ltsn.ac.uk

Hospitality, Leisure, Sport and Tourism

Oxford Brookes University http://www.brookes.ac.uk/ltsn

Information and Computer Sciences University of Ulster http://www.ics.ltsn.ac.uk

Languages, Linguistics and Area Studies University of Southampton http://www.lang.ltsn.ac.uk

Law (UK Centre for Legal Education) University of Warwick http://www.ukcle.ac.uk

Materials University of Liverpool http://www.materials.ac.uk

Maths, Stats and OR Network University of Birmingham http://ltsn.mathstore.ac.uk

Medicine, Dentistry and Veterinary Medicine University of Newcastle http://www.ltsn-01.ac.uk

Performing Arts (PALATINE) Lancaster University

http://www.lancs.ac.uk/palatine

Physical Sciences University of Hull http://www.physsci.ltsn.ac.uk

Psychology University of York http://www.psychology.ltsn.ac.uk

Sociology, Anthropology and Politics

University of Birmingham http://www.c-sap.bham.ac.uk

Social Policy and Social Work (SWAP)

University of Southampton http://www.swap.ac.uk

The LTSN Generic Centre

Genesis 3 York Science Park York YO10 5DQ Tel: 01904 434149 Fax: 01904 43427 Email: gcenquiries@ltsn.ac.uk

http://www.ltsn.ac.uk/genericcentre/default.asp

[Blackwell's advertisement]

Articles, Discussion and Practical Teaching

George MacDonald Ross

Director PRS-LTSN University of Leeds

Introduction

The primary role of the PRS-LTSN is to improve the quality of education by encouraging the sharing of good practice and innovation, and the discussion of common problems. However, there are other forces at play, which are pursuing the same end by different means. The purpose of this article is to explain what these forces are, and how the PRS-LTSN can help departments to satisfy their demands.

The first set of pressures comes from the Government *via* the funding councils, namely the requirement for higher education institutions (HEIs) to be publicly accountable for the services they provide with Government funding. The assumption is that the two main activities of HEIs are teaching and research:

- The Research Assessment Exercise² (RAE) is conducted by the Higher Education Funding Council for England (HEFCE) on behalf of the other funding councils, and research ratings have a major influence on funding.
- The assessment of the quality of teaching and of institutional quality assurance mechanisms is the responsibility of the *Quality Assurance Agency* (QAA) (see Appendix), which is an independent body funded jointly by the funding councils, Universities UK (UUK) and the Standing Conference of Principals (SCoP). Ratings do not affect funding, except that there is the ultimate sanction of withdrawal of funding for persistently unsatisfactory programmes of study.

PRS-LTSN Journal Volume 1, No. 2, Winter 2002, pp. 98-103 © Copyright PRS-LTSN, 2002

¹ This is a slightly revised and updated version of collated web pages available at: http://www.prs-ltsn.ac.uk/generic/qualenhance/index.html

² See http://www.prs-ltsn.ac.uk/policies/rae.html for further information.

• More recently, the Transparency Review commissioned by the funding councils evaluates the extent to which funding for research is actually spent on research, and funding for teaching is actually spent on teaching.

We are concerned with the RAE only in so far as pedagogical research comes within its remit. We do not see the Transparency Review as raising any subject-specific issues, except that in our disciplines it is more difficult than in many others to draw a sharp line between teaching-related and research-related activities—particularly in the case of pedagogical research. Our main interest is in the QAA.

The second set of pressures comes from the National Inquiry into Higher Education, 1997³ (the 'Dearing Report'). It is fair to say that the Government rejected most of the recommendations which implied increased Government funding (student support and academic salaries), and accepted those which merely meant more work for academics. Since it will be the task of the QAA to ensure that these recommendations are implemented, it seems sensible to deal with them under the heading of QAA review.

There is a third set of pressures—still on the horizon, and not yet fully enshrined in concrete Government policy—namely the need to compete in the global education market through courses delivered electronically. Some institutions are moving faster down this road than others, and there will be increasing pressure on PRS disciplines to enter the brave new world of e-learning, if they have not already done so.

QAA Review

At the time of writing, there has been public consultation about the future of QAA subject review. Institutional review is largely unaffected, and the QAA policies discussed in the remainder of this article still stand. The likely outcome is that, in Scotland at least, there will be no more subject reviews, and instead there will be a quality enhancement programme covering broad subject areas. In England, there will probably be an 'audit trail', in which about 10% of departments in each institution will be reviewed, under the new review method already published (the recently completed reviews of Philosophy and Theology and Religious Studies were among the last to be conducted under the old method).

³ http://www.leeds.ac.uk/educol/ncihe

However, although the probability of any given department being subjected to external review will be low, all departments will have to behave as if they were going to be reviewed, for two reasons:

- First, subject reviewers will check documentation over a number of years, and policies and procedures will have to be in place, just in case a department is reviewed.
- Second, the current proposals do not affect institutional review. All institutions will continue to be reviewed regularly, and the QAA will check whether its policies have been implemented internally.

So, although the large majority of departments will be spared the stress and hard work of being reviewed, the pressure to conform to QAA policies will remain. It will be applied through mechanisms internal to each HEI, rather than directly by the QAA. In particular, institutions have recently been required by the funding councils to produce annually updated *Learning and Teaching Strategies*, which should include internal mechanisms for ensuring the implementation of national as well as local policies.

A new review method was piloted in Scotland in 2001, and it will be applied elsewhere when and if a new cycle of subject reviews is implemented. The most significant difference from the previous method is a shift in emphasis from the assessment of *quality* to the assessment of *standards*. In this context, 'quality' means 'achievement of objectives'—so that a department which sets itself low standards and meets them is of higher quality than one which sets itself high standards and narrowly fails to meet them. Now a judgment will be made about the appropriateness of the standards themselves.

There has always been some assessment of standards through external accrediting bodies (where these exist), external examiners' reports, and the inspection by reviewers of student work. To these the QAA has added a hierarchy of specifications.

At the generic level, there are *qualifications frameworks* (see Appendix) (one for England, Wales, and Northern Ireland, and a similar one for Scotland). The frameworks are designed to kill two birds with one stone: to establish a consistent nomenclature for awards at different levels, and to define in general terms the standards which will have been achieved by holders of the awards. A crucial element is that it is no longer permissible to award a lower qualification to students who narrowly fail to meet the requirements of a higher one (e.g. a pass or

ordinary degree to an honours candidate). A student in danger of failing should be counselled to transfer to a programme leading to a lower qualification whose positive requirements they can meet. Similarly, there should be exit qualifications for students who successfully complete part of a degree programme, but do not continue to the end.

At the subject-specific level, there are *benchmark statements* (see Appendix), which translate the generic descriptions of the qualifications frameworks into the knowledge, skills, and attributes (flearning outcomes') expected of students in individual disciplines for different qualifications (e.g. BA Hons, or MA), and at different levels of performance (e.g. typical, or bare pass). At present, the benchmark statements vary widely in their prescriptiveness, and they are often less demanding than the qualifications frameworks. It seems likely that the benchmark statements will be tightened up and made more consistent over the years.

At the institutional level, each department is expected to write a *programme specification* (see Appendix) for every programme of study it offers. These have to be written in terms of learning outcomes, and specify how they are calibrated against the benchmark statement (or statements) relevant to the programme, and any other external specification of standards, such as those required by an accrediting body.

However, the purpose of programme specifications is not simply to enable reviewers to make judgments about an individual department's academic standards. They are also a key element in a separate agenda deriving from the Dearing Report. The report expressed concern that applicants to HEIs had insufficient information to judge which programme of study at which institution would be must suited to their needs, and that prospective employers had insufficient information as to what applicants had actually learned. Programme specifications are a means for making such information publicly available (though how far people will actually read them is another matter).

As far as prospective employers are concerned, the Dearing Report recommends the provision of far more detailed information than is given by a simple degree classification. A number of research projects have put flesh on the bones of the Dearing recommendations, and the policy is now that graduates should be able to provide potential employers with the following three items, known collectively as a *progress file* (see Appendix):

- A detailed *transcript* supplied by the institution, with personal details, a breakdown of marks for each module or course, and the algorithm for translating marks into a degree classification in addition to degree classification itself.
- A *programme specification* supplied by the department, which makes it clear what learning outcomes the graduate can be expected to have achieved given their degree classification.
- A *personal development record*, supplied by the graduate with or without authentication by the department, which provides evidence that the graduate went through a process of Personal Development Planning (PDP) while a student, and adds details of learning outcomes not certified by the department or institution (e.g. generic skills, work experience, charitable work, or contributions to university societies).

Finally, the QAA has produced a *Code of Practice*, divided into 10 sections on different themes, with an average of about 40 'precepts' in each. Most of the sections are of relevance only to central administrations, but some have direct repercussions for teaching departments. Institutional reviews will include audit trails, to check whether the precepts have been implemented down to departmental level.

What departments need to do

Here is a checklist of what departments need to do in order to satisfy even the 'lighter touch' review system currently proposed:

- ensure that, for RAE purposes, due credit is given to publications on teaching issues;
- encourage the development of C&IT-based modules and programmes;
- maintain documentation of quality assurance procedures (minutes of relevant committees, programme and module reviews, peer observation of teaching, etc.);
- write programme specifications for all programmes of study, with reference to the qualifications frameworks and the relevant benchmark statements;
- create new programmes of study for students who would previously have been awarded a lower qualification as a consolation prise;
- institute a system of PDP, which involves the creation of a progress file for each student;

• implement the relevant precepts in the *Code of Practice*.

How the PRS-LTSN can help

We do not wish our agenda to be driven by QAA requirements. Nevertheless, we do see it as part of our role to support individual departments and the subject communities as a whole in addressing the QAA agenda.

We can help by:

- summarising and explaining policy documents emanating from the QAA, the funding councils, and other sources;
- organising workshops on the scholarship of learning and teaching, and providing a forum for publications;
- facilitating discussion of the use of C&IT in teaching (sharing examples of good practice, solving common problems, reviews of software, brokering consortia to develop new materials);
- facilitating discussion of how to apply the qualifications frameworks and benchmark statements when writing programme specifications;
- producing subject-specific model progress files for individual departments to adopt or adapt.

If you can think of any other ways in which the PRS-LTSN can help departments respond to the external pressures outlined in the present document, please contact us with your suggestions.

Appendix: Further information and resources

QAA Academic Review	104
Qualifications Frameworks	106
Benchmarking	111
Programme Specifications	115
Progress Files	

QAA ACADEMIC REVIEW

General

The QAA has published an excellent summary of its present and future activities as *Quality Assurance in UK Higher Education: A Brief Guide*, 16pp:

http://www.qaa.ac.uk/public/heguide/QAAintrotext-only.htm

The LTSN Generic Centre is building up an area on its website devoted to QAA policies, and the relationship between the QAA and the LTSN:

http://www.ltsn.ac.uk/resources/qaa/introduction.asp

See in particular Norman Jackson's QAA Policies:

http://www.ltsn.ac.uk/resources/qaa/policies.asp

and Nuts and Bolts of Academic Subject Review:

http://www.ltsn.ac.uk/resources/qaa/academic_review.asp

Reviews up to December 2001

The QAA publishes institutional review reports for all HE institutions in the UK:

http://www.qaa.ac.uk/revreps/instrev/instname.htm

The QAA also publishes subject review reports for all subjects in England and Northern Ireland:

http://www.qaa.ac.uk/revreps/subjrev/bysubname.htm 104 The first round of Scottish subject review reports are available on the SHEFC website:

http://www.shefc.ac.uk/publicat/qapubs/qareport.htm

Reviews from 2000 onwards will be on the QAA website.

Brief summaries of the Philosophy and Theology reviews have been provided by Mary Hayward of the PRS-LTSN in the subject sections of the PRS-LTSN website.

The outcomes of the first round of Welsh subject reviews are available on the HEFCW website:

http://www.wfc.ac.uk/education/hefcw/qar/index.html

Be warned that the document is 18 pages long, and the only information it gives is whether a department was 'excellent' or 'satisfactory'. Copies of the reports themselves have to be ordered from the HEFCW.

Reviews from 2000 onwards will be on the QAA website.

Future reviews

The review method used from 2000 in Scotland, and from 2002 in the rest of the UK is detailed in the *Handbook for Academic Review*.

http://www.qaa.ac.uk/acrevhbook/intro.htm

This method will have to be modified in the light of the surprise announcement by the Secretary of State for Education, in March 2001, that there will be a 'lighter touch':

http://www.dfee.gov.uk/pns/DisplayPN.cgi?pn_id=2001_0162

See also the media release by UniversitiesUK:

http://www.universitiesuk.ac.uk/mediareleases/show.asp?MR=233

The HEFCE, UUK, and SCOP responded almost immediately with a document entitled *Quality Assurance in Higher Education: Delivering Lightness of Touch*:

http://www.hefce.ac.uk/news/hefce/2001/gainhe.doc

Since then, it has been superseded by a consultation document: *HEFCE* 01/45: *Quality Assurance in Higher Education*:

http://www.hefce.ac.uk/Pubs/hefce/2001/01_45.htm

QUALIFICATIONS FRAMEWORKS

1. Frameworks and 'graduateness'

The QAA qualifications frameworks build on earlier attempts by its predecessor, the Higher Education Quality Council (HEQC), to define 'graduateness'. These attempts are described and criticised in a paper written by the author in 1996.

http://www.prs-ltsn.leeds.ac.uk/generic/qualenhance/graduate.html

2. Why 'frameworks' in the plural?

The original intention was to have a single UK framework; but the historical differences between the Scottish HE system and those prevailing in the rest of the UK proved unbridgeable (in particular, 4-year degree programmes, and the ordinary degree). There are therefore two frameworks: one for Scotland:

http://www.qaa.ac.uk/crntwork/nqf/scotfw2001/contents.htm

and one for the rest of the UK:

http://www.qaa.ac.uk/crntwork/nqf/ewni2001/contents.htm

The only significant differences between the two frameworks relate to the nomenclature of degree programmes, which is a matter for central administrations rather than departments. So, with apologies to the Scots, we shall focus on the framework for England, Wales, and Northern Ireland in the present document.

3. The purpose of the framework

The purpose of the framework is to:

- provide a consistent nomenclature for qualification titles at different levels;
- define the standards to be achieved at each level.

4. The framework and other requirements

The framework comes at the top of a hierarchy of other requirements:

- the framework is generic, and applies to all disciplines;
- subject benchmark statements apply the framework to broad subject areas, with special reference to Honours level;
- programme specifications apply the subject benchmark statement to a particular programme of study in a particular institution;
- progress files apply the programme specification to the achievements of individual students.

Despite the use of the present tense, this hierarchy is not yet in place, and it is not even clear that the benchmark statements are consistent with the qualifications framework. This is not surprising, since the earlier benchmark statements were written before the framework was published in January 2001.

5. Monitoring implementation

Institutions are required to implement the framework by the start of the academic year 2003/04. Implementation will be monitored through QAA Academic Review.

6. Levels

There are five levels, covering three levels of undergraduate education, and two levels of postgraduate education. The assumption is that students will be eligible for an award after successful completion of any level, even if they do not continue with their studies. For example, a student who drops out after successfully completing the first year of a Bachelors programme can be awarded a Certificate of Higher Education. The levels are: **C (Certificate) level:** normally one year of a Bachelors programme: Certificate of Higher Education.

I (Intermediate) level: normally two years of a Bachelors programme: Diploma of Higher Education, or Foundation Degree; but also three years to a lower standard: ordinary (Bachelors) degree.

H (Honours) level: *either* completion of a Bachelors Programme: Bachelors degree with Honours; *or* completion of a postgraduate programme which does not build on a Bachelors degree in the same discipline: Graduate Diploma, or Graduate Certificate.

M (Masters) level: one year or less of postgraduate study: Masters degree, Postgraduate Diploma, or Postgraduate Certificate.

D (Doctoral) level: Doctorate.

Note: The concept of a Foundation Degree completed within two years (thought up by the Government) is inconsistent with the Bologna Declaration which requires a minimum of three years for the completion of a degree. It is likely to be declared illegal by the EU within the foreseeable future:

http://www.crue.upm.es/eurec/bolognaexplanation.htm

7. Implications for departments

Departments must ensure that:

- they have programmes of study leading to an award at each of the above levels (and special attention needs to be paid to the distinction between 'postgraduate' awards for students who have a Bachelors degree in the same subject, and 'graduate' awards for those who do not);
- the programme specifications for each level of award they offer are consistent with the relevant 'qualification descriptors' (see below);
- the programme specifications consist of 'positively defined outcomes', not failure to meet the requirements of a higher level of award;
- they have procedures for counselling students at risk to transfer to a programme of study at a lower level (e.g. from Honours to an ordinary degree, or from a PhD to an MPhil), since it will no longer

be possible to award a lower degree as a compensation for narrowly failing to meet the requirements of a higher one);

• the amount of expected study time is appropriate for the level of the award (though the framework gives little guidance on this, since it recognises that institutions have very different systems for quantifying study time).

8. Qualification descriptors

Qualification descriptors for each level are specified in Annex 1 of the Qualifications Framework:

http://www.qaa.ac.uk/crntwork/nqf/ewni2001/annex1.htm

The most important is that of the *minimum* requirements for a Bachelors degree with Honours, all of which have to be satisfied. It runs as follows:

Honours degrees are awarded to students who have demonstrated:

- 1. a systematic understanding of key aspects of their field of study, including acquisition of coherent and detailed knowledge, at least some of which is at or informed by, the forefront of defined aspects of a discipline;
- 2. an ability to deploy accurately established techniques of analysis and enquiry within a discipline;
- 3. conceptual understanding that enables the student:
 - a. to devise and sustain arguments, and/or to solve problems, using ideas and techniques, some of which are at the forefront of a discipline; and
 - b. to describe and comment upon particular aspects of current research, or equivalent advanced scholarship, in the discipline;
- 4. an appreciation of the uncertainty, ambiguity and limits of knowledge;
- 5. the ability to manage their own learning, and to make use of scholarly reviews and primary sources (e.g. refereed research articles, and/or original materials appropriate to the discipline).

Typically, holders of the qualification will be able to:

- a. apply the methods and techniques that they have learned to review, consolidate, extend and apply their knowledge and understanding, and to initiate and carry out projects;
- b. critically evaluate arguments, assumptions, abstract concepts and data (that may be incomplete), to make judgements, and to frame appropriate questions to achieve a solution—or identify a range of solutions—to a problem;
- c. communicate information, ideas, problems, and solutions to both specialist and non-specialist audiences;

and will have:

- d. qualities and transferable skills necessary for employment requiring:
- e. the exercise of initiative and personal responsibility;
- f. decision-making in complex and unpredictable contexts; and
- g. the learning ability needed to undertake appropriate further training of a professional or equivalent nature.

9. Comment

The description is of the *minimum* standards to be achieved by any graduate in any discipline. It is remarkable how many of the properties of graduateness described here are the properties expected of good *philosophy* graduates. While we welcome the recognition that all higher education should be more philosophical in its approach, we do not see the qualification descriptors as giving a realist account of what is actually achieved by weaker students in any discipline—not even in philosophy.

The QAA seems to have fallen into the trap of making grandiose claims about the value of HE for the eyes of the Government and employers, without considering what it is practicable to deliver. It has not learned the lesson of the old HEQC that academics tend to define their expectations in terms the *good* graduate (the 2.1/2.2 borderline), and not in terms of the pass/fail borderline.

There is a serious question as to whether the qualification descriptors are mere rhetoric to be ignored, or whether they have teeth. If the latter (as is almost certainly the case) we face a choice between failing half or more of our students, or improving the quality of the education we provide, so that the large majority of students meet the minimum standards.

Some institutions, such as the University of Leicester (to give just one example) saw what was coming, and developed a strategy for ensuring that all graduates would achieve at least minimum (or 'threshold') standards. It defined the Attributes of a Leicester Graduate:

http://www.leicester.ac.uk/ua/vc/ilts/lg.html

before the qualifications framework was published; but the list of skills, understanding, and personal attributes is quite similar. Whether its strategy will be successful is another matter:

http://www.leicester.ac.uk/ua/vc/ilts/strategy.html

We expect that the main pressure on departments to conform to the qualifications framework will be internal. Nevertheless, as in the Leicester example, the emphasis is likely (and quite rightly) to be on developing skills in the *subject context*.

Although helping departments to satisfy the requirements of the QAA is only subsidiary to the aims of the PRS-LTSN, we have a major role to play in ensuring that the educational values of our disciplines are not distorted by the imposition of inappropriate models. We shall facilitate discussion of the relevant issues at subject level, so that they can be addressed collectively.

BENCHMARKING

The QAA Qualifications frameworks are generic specifications of the minimum standards expected of all graduates (and holders of other HE awards). Subject benchmark statements are intended to apply the generic specifications to honours graduates in broad subject areas, and also to articulate 'the conceptual framework that gives a discipline its coherence and identity.'

The function of benchmark statements is to provide:

- an external point of reference for institutions when designing or approving programmes of study;
- a means for external examiners and reviewers to verify and compare standards;
- information for students and employers.

All the benchmarking statements likely to be relevant to our disciplines are already available:

- Philosophy: http://www.qaa.ac.uk/crntwork/benchmark/philosophy.pdf summary: http://www.prs-ltsn.ac.uk/generic/qualenhance/philbench.html
- Theology and Religious Studies: http://www.qaa.ac.uk/crntwork/benchmark/theology.pdf summary: http://www.prs-ltsn.ac.uk/generic/gualenhance/trsbench.html
- History: http://www.qaa.ac.uk/crntwork/benchmark/history.pdf summary: http://www.prs-ltsn.ac.uk/generic/qualenhance/histbench.html

The History and Philosophy of Science (including the History of Medicine and Technology) has been overlooked by the QAA as a distinct subject area. Enquiries by the PRS-LTSN suggest that the Philosophy of Science community is happy to go along with the Philosophy benchmark statement, whereas the History of Science community is less happy with the History benchmark statement. The PRS-LTSN is currently engaged in a consultation exercise to assist in the writing of a separate History of Science benchmark statement; indeed there is a Benchmarking and Key Skill workshop in the History of Science, Technology and Medicine on 23rd March, 2002 at University College London organised by the PRS-LTSN.

All the above benchmark statements were written before the publication of the qualifications frameworks. They were produced by members of the subject communities themselves (nominated by the relevant subject associations), under the guidance of a QAA official; and the Philosophy panel in particular went to great lengths to consult departments at an early stage. The focus is as much on what a *good* honours graduate can be expected to achieve as on minimum or 'threshold' standards.

As a result, these particular benchmark statements are somewhat less demanding than the qualifications frameworks. Even so, a strict application of the threshold standards may well mean that some students who are now awarded a third-class honours degree might have to be failed in future (in accordance with the qualifications frameworks, the awarding of a pass degree is no longer an option).

Comments

1. Inconsistencies between the qualifications frameworks and the benchmark statements mean that the whole area will have to be revisited within the near future (the QAA says that this will happen, but not before July 2003). It would be preferable for the qualifications frameworks to be revised downwards to be brought into closer contact with reality; but it is likely that the pressure will be to revise the benchmark statements upwards.

2. The benchmark statements have generally been drawn up with the single-honours student in mind—this is the almost inevitable consequence of their subject-specificity. However, a large proportion of students are registered on joint or combined programmes, or take modules as electives. To give just two examples:

- there are more students studying philosophy as a component of a named degree at Oxford than anywhere else; yet Oxford is one of the few institutions which do not offer a single-honours philosophy Bachelors degree programme at all;
- there are only two single-honours history and philosophy of science programmes, both recently instituted.

There are serious problems as to how benchmark statements can usefully be applied to degree programmes involving two or more disparate subjects, let alone to elective modules.

- first, it is unrealistic to expect a joint-honours student to attain the same standard as a single-honours student in each subject, and adding two sets of lower standards does not make a higher standard (in other words, there is a general problem as to how benchmark statements can balance depth against breadth);
- second, there may be conflicts between the attributes of graduateness expected by the two disciplines (e.g. a philosopher might be expected to question established wisdom, whereas an engineer might be expected to adhere strictly to professional guidelines—so what is to be expected of a student who combines philosophy with engineering?).

What departments need to do

Despite the above reservations, departments need to ensure that all their programme specifications are consistent with the relevant benchmark statement or statements.

How the PRS-LTSN can help

We believe that the task will be made easier if departments do not work in isolation. Although the programme specifications themselves will vary from department to department, the problem of how to apply the benchmarks statements will be largely common to departments in the same subject area. A shared understanding across the subject community of how they are to be applied will be a powerful weapon in dealing with difficult university administrations and external reviewers, since the essential purpose of benchmark statements is to provide calibration across each discipline.

Further information

The Generic Centre of the LTSN has adopted the implications for departments of the benchmark statements as one of its major research themes. It has set up an area of its website devoted to benchmarking:

http://www.ltsn.ac.uk/genericcentre/projects/qaa/subject_benchmarkin g.asp

This site provides links to the following documents:

- Jackson, Norman, "Implications of benchmarking for curriculum design and the assessment of student learning";
- Yorke, Mantz, "Assessment issues arising from the benchmarking statements";
- Jackson, Norman, and Smallwood, Angela, "Subject Benchmarking and Personal Development Planning";
- Dunne, Elizabeth, "Generic learning outcomes in benchmarking statements".

In addition, the Generic Centre has commissioned a number of studies into the potential influence of benchmark statements on programme specifications. The PRS-LTSN has been selected as one of the subject centres to undertake this project and we have commissioned reports in all our subject areas.

PROGRAMME SPECIFICATIONS

Programme specifications were originally recommended in the Dearing Report (recommendation 21). They can be seen both as part of a hierarchy of requirements taken up by the QAA, and as good practice in their own right.

As part of a hierarchy, they are the second most detailed and specific item in a chain which proceeds downwards:

- from the qualifications frameworks, which define standards common to all disciplines;
- through subject benchmark statements which apply these standards to particular disciplines, and also supply information as to the scope of the discipline, and methods of teaching and assessment;
- through programme specifications, which apply these general descriptions to what is offered by a particular programme of study at a particular institution;
- to progress files, which apply the programme specification to the achievements of the individual student.

The consequence is that programme specifications must make explicit reference to the relevant subject benchmark statement (or statements if more than one is relevant). The benchmark statement should not be copied slavishly, but used as a point of reference against which the programme specification is justified. Conformance will be monitored by the QAA through academic review.

As good practice in their own right, programme specifications give interested parties the information they need to know about programmes of study. The QAA document *Quality assurance in UK higher education: a brief guide*, states that:

Programme specifications are standard sets of information that each institution provides about its programmes. Each specification clarifies what knowledge, understanding, skills and other attributes a student will have developed on successfully completing a specific programme. It also provides details of teaching and learning methods, assessment, and subsequent career opportunities, and sets out how the programme relates to the qualifications framework.

This information allows prospective students to make comparisons and informed choices about the programmes they wish to study and provides useful guidance for recruiters of graduates.

Sources

The main source of information about programme specifications is the QAA itself. It has made two documents available in the area of its website devoted to programme specifications, *QAA policy on programme specifications* (October 1999)

Guidelines on preparing programme specifications (June 2000):

http://www.qaa.ac.uk/crntwork/progspec/contents.htm

Anyone who has to write a programme specification will need to refer to this document in particular.

In addition, the LTSN Generic Centre is building up an area of its website devoted to programme specifications:

http://www.ltsn.ac.uk/genericcentre/projects/qaa/prog_spec.asp

Who are programme specifications for?

Programme specifications are for:

- intending and actual students, so that they can understand the programme;
- employers wanting to know what graduates have achieved (especially subject-specific and transferable skills);
- professional regulatory bodies wanting to know whether the programme meets their requirements;
- institutions and teaching teams, as ensuring a clear understanding of aims and learning outcomes, and serving as a reference point for internal reviews;
- QAA reviewers and external examiners;
- those seeking feedback from students or recent graduates as to their learning experience.
Which programmes should have a programme specification?

Programme specifications should be written for all:

- single or major programmes;
- integrated interdisciplinary programmes;
- well-defined pathways through a modular structure, which are followed by large numbers of students.

In the case of multi-disciplinary programmes (where students merely choose options from a range of different programmes), there should be an indication of the range of choice, and the generic learning outcomes should be stated fully.

Joint-honours programmes do not normally need separate programme specifications, provided that there is a short statement of the rationale for the combination, and of the ways in which the outcomes of each subject reinforce each other.

Subject to the above exceptions, there should be programme specifications for all taught programmes from Certificate to Masters level, as defined in the Qualifications Frameworks. Where lower-level qualifications are no more than 'stopping off points' for students originally registered for higher level awards, they should be defined, perhaps by particular combinations of modules that provide the outcomes needed for the qualification awarded.

The format of programme specifications

There is no prescribed format for programme specifications. They may be written as a straight narrative, or using a template. The QAA Guidelines includes eight examples of programme specifications of different kinds of programme, in different subject areas, and in a variety of formats(pp.10-41):

http://www.qaa.ac.uk/crntwork/progspec/contents.htm

Whatever the format, the outcome must be a document which satisfies the Dearing expectation of a 'clear description' that will help prospective students to make an informed choice. Some complex documents produced during the process of drawing up a specification (e.g. those mapping module outcomes to overall programme outcomes) may be of value to course teams and internal and external reviewers, but they should not be included in the published programme specification.

The content of programme specifications

Programme specifications are normally expected to include at least the following information:

- awarding body/institution;
- teaching institution (if different);
- details of accreditation by a professional/statutory body (if applicable);
- name of the final award;
- programme title;
- UCAS code;
- aims of the programme;
- relevant subject benchmark statements and other external and internal reference points used to inform programme outcomes;
- programme outcomes: knowledge and understanding; skills and other attributes;
- teaching, learning and assessment strategies to enable outcomes to be achieved and demonstrated;
- programme structures and requirements, levels, modules, credits and awards;
- date at which the programme specification was written or revised.

Specifications could also include the following:

- criteria for admission to the programme;
- information about assessment regulations;
- indicators of quality;
- particular support for learning;
- methods for evaluating and improving the quality and standards of learning.

Module and programme learning outcomes

The expression 'learning outcomes' is used to emphasise that students do not acquire merely knowledge and understanding, but also skills, capabilities, and values—some of which will be specific to the discipline, and some of which will be generic.

Module handbooks will specify the learning outcomes, and assessment methods and criteria for that particular module. In drawing

up a programme specification, it may be helpful to map the outcomes of individual modules against the intended outcomes for the programme as a whole, in order to ensure that each student meets all the requirements. However, the programme itself should be specified holistically, and not merely as the sum of its parts.

Further advice not included in the present summary The QAA Guidelines has two annexes (pp.6-9):

http://www.qaa.ac.uk/crntwork/progspec/contents.htm

Annex 1 makes some suggestions as to how:

- outcome statements might be phrased;
- standards might be calibrated;
- benchmark statements might be used;
- students might be expected to achieve and demonstrate intended outcomes;
- where further information might be found.

Annex 2 lists the fourteen items in the Handbook for Academic Review which have a direct bearing on programme specifications. This highlights the importance of having robust programme specifications in place well before any subject review.

How the PRS-LTSN can help

We believe that the task of drawing up programme specifications will be made easier if departments do not work in isolation. Although the programme specifications themselves will vary from department to department, the problem of how to apply the benchmarks statements will be largely common to departments in the same subject area. Again, none of the examples supplied by the QAA are relevant to our subject areas, and it would be of great benefit to all if PRS departments which have already undergone the exercise could provide models for publication on our website. Please contact us (see p. 172).

The PRS-LTSN will encourage discussion through electronic discussion lists and workshops, and it will provide a forum for the publication of examples and other documents. It also has limited sums available for small grants to encourage research into problems relating to

the writing of programme specifications in disciplines covered by the Subject Centre.

PROGRESS FILES

The Dearing recommendation

Recommendation 20 of the National Inquiry into Higher Education, 1997 (the 'Dearing Report') was as follows:

We recommend that institutions of Higher Education, over the medium term develop a Progress File. The File should consist of two elements:

- a transcript recording student achievement which should follow a common format devised by institutions collectively through their representative bodies;
- a means by which students can monitor, build and reflect upon their personal development.

The Government response

The Government's response was as follows:

The Government welcomes the Committee's recommendation and would encourage the higher education representative bodies to agree soon a common format for Progress Files and, with the assistance of the Quality Assurance Agency, develop a document which provides the information required by employers and dovetails with records of earlier learning achievement. DfEE is already supporting, through the Higher Education and Employment Development Prospectus, six projects costing f_{1m} to develop innovative models for recording student achievement.

The context

The recommendation arose from two concerns:

First, the fact that a graduate has been awarded a degree of a particular class in a particular discipline at a particular HEI gives potential employers very little information about the knowledge, skills, and attributes acquired by the graduate. A much fuller transcript, together with details of the graduate's extra-curricular experience and learning, would make good the deficiency.

There are similar concerns at the European level, where mobility of labour presupposes that potential employers understand what applicants' qualifications mean, despite the wide variety of higher education systems. The intention is that the UK Progress File should be compatible with the EC/Council of Europe Diploma Supplement:

http://europa.eu.int/comm/education/recognition/diploma.html

which is currently under development, and to which the UK is committed under the *Bologna Declaration* (19th June 1999):

http://www.crue.upm.es/eurec/bolognaexplanation.htm

The Declaration was made by the European University Association:

http://www.unige.ch/eua/welcome.html?http&&&www.unige.ch/eua/En/ home.html

Second, it has become widely accepted among educationalists and staff developers that people's performance will be improved if they spend some time in systematic reflection on their objectives and performance as a whole, and not merely on their performance at individual tasks. It is common practice for schoolchildren and FE students to keep the *National Record of Achievement (NRA)* and professional associations require members to undergo continuing professional development (CPD), including the keeping of a record, in order to remain in good standing:

http://www.dfes.gov.uk/nra/index.cfm

Hitherto, academics have been largely exempt from compulsory CPD, apart from patchily implemented appraisal systems, and encouragement to attend courses provided by staff development units (SDUs). Another Dearing recommendation was the establishment of the Institute for Learning and Teaching in Higher Education (ILT), with the intention that membership would eventually become compulsory for all HE teachers, and that they would have to give evidence of CPD in order to retain their membership.

So the thinking behind the Dearing recommendation is that, if it is a good thing for schoolchildren to keep an NRA, and for graduate employees to undergo CPD, it is natural that HE students should undergo personal development planning (PDP), as part of a continuous transition from school, through HE, to employment.

Subsequent developments

Responsibility for carrying the Dearing recommendation forward was taken up by a Progress File Implementation Group, representing Universities UK, SCOP, Universities Scotland, the QAA, and the LTSN Generic Centre. The group worked in close co-operation with other bodies, such as the Centre for Recording Achievement (CRA), the National Union of Students (NUS), the Association of Graduate Recruiters (AGR), the Institute of Personnel Directors (IPD), and the projects funded by the (then) Department for Education and Employment (DfEE). Its actual implementation will be monitored by the QAA through institutional and subject reviews.

As a result of the consultations, it was agreed that there would not be a common format for progress files. Instead, there would be guidelines which would leave a significant degree of freedom for institutions to develop their own systems. It was also agreed that it could not be made compulsory for every student to participate in PDP, but that institutions should provide the opportunity for every student to do so, and encourage them to take advantage of it.

The Guidelines for HE Progress Files were published in February 2001:

http://www.qaa.ac.uk/crntwork/progfileHE/contents.htm

However, they are in many respects tentative and provisional, with considerable emphasis on the problems which still need to be overcome through further research and the sharing of good practice. The general message is that, whether or not PDP is a good thing, it *must* be implemented, because it is Government policy. If HEIs adopt a minimalist approach, it is unlikely to be effective; but if a more burdensome system is imposed from above, it will be resisted by staff and students alike. As so often in HE policy making, the representative bodies are trying to formulate an approach which is sufficiently liberal and not burdensome to be acceptable to the academic community, while still being robust enough to satisfy Government demands.

Terminology

The Dearing recommendation was made after a number of institutions had already embarked on a variety of projects using their own terminology. Some people use the same expression to mean different things, and some use different expression to mean the same thing. In order to avoid confusion, we should adopt the terminology of the *Guidelines*, however unsatisfactory we may feel it to be:

• a Progress File is the totality of the documentation possessed by the student, and which can be presented to a potential employer;

- a Transcript is that part of the Progress File which is authenticated by the institution (e.g. module marks, marking scheme, programme specification);
- Personal Development Planning (PDP) is the process through which students are supported in reflecting on their learning.

A Personal Development Record is a written outcome of PDP, which a graduate may present to a potential employer, but which is not formally authenticated by the institution.

Timescale for implementation

HEIs are encouraged to introduce transcripts during 2001/02, and are expected to do so by 2002/03. This is largely a matter for central administrations, but departments may be required to supply information about marking schemes and programme specifications.

It is recognised that PDP will take longer to incorporate into the design of programmes, and full implementation is not expected to be completed across all HEIs and programmes of study until 2005/06. During the intervening period, QAA reviewers may report on progress towards meeting the guidelines, but they will not *judge* the practice seen.

The current debate relates specifically to students on taught programmes of study, and it is as yet unclear how far and in what way Progress Files will affect research students (though some initiative for developing Progress Files for research students are in progress).

Personal Development Planning

The Guidelines define PDP as:

a structured and supported process undertaken by an individual to reflect upon their own learning, performance and/or achievement and to plan for their personal, educational and career development.

The intention is that PDP should help students to:

- see relations between their personal and academic development in the light of their long-term goals;
- become more autonomous in identifying their own strengths and weaknesses, and in identifying means for reinforcing the former and overcoming the latter;
- understand how they are learning, and be aware of different learning strategies;

- review their progress in the programme of study as a whole, and make informed choices as to optional elements (this is particularly important in modular programmes);
- focus on the generic learning outcomes detailed in their programme specification, and be able to articulate what they have learned;
- articulate the learning outcomes of extra-curricular activities (e.g. part-time work, or participation in student societies), and identify further opportunities for such learning;
- prepare themselves to write a CV which sums up all their knowledge, skills, and attributes relevant to employment, and not merely those certified in the transcript.

PDP should also help departments and academic staff in the following ways:

- benchmark statements refer to generic learning outcomes which might not be addressed explicitly in any given module/course, and PDP provides a means for satisfying internal or external reviewers that they are addressed systematically at the programme level;
- if students are more autonomous learners, they will need less direct tuition (or to put it another way: teaching methods which presuppose that students are autonomous learners will be more effective);
- if PDP is linked to a personal tutorial system, personal tutorials will be more focussed and productive;
- personal tutors will have more, and more relevant information when writing references for employment or further study;
- the department will have an improved graduate employment rate;
- teachers will have greater insight into how students actually learn, and will be able to adjust their teaching styles accordingly.

The major issue is that of how PDP can be 'structured and supported' without a significant increase in staff and student time, to the detriment of other aspects of learning and teaching. In general, there are two possible models, with a range of hybrid variants.

Model 1 is to absorb PDP explicitly into the programme of study—in other words, PDP activity is taught and assessed like any other aspect of the degree programme, and student and staff time are catered for through the normal mechanisms.

The advantages are:

- there is no extra burden on students or staff (apart from redesigning the programme);
- in some disciplines there are already precedents to build on, in the form of study skills or careers modules, or year-abroad or work-placement logs,
- because PDP is assessed, students will actually do it;
- as part of the programme of study, there will be a clear specification of what students are required to do, and of the criteria by which they will be assessed.

The disadvantages are:

- time spent on PDP will be taken away from time spent on delivering the syllabus (though if PDP is effective, students should gain more from other modules/courses);
- in order to ensure continuity, PDP should be practiced throughout the programme of study, and not just in an introductory skills module—but if so, the time devoted to PDP may be disproportionate;
- academic staff may not have the necessary skills to handle PDP (either they will need to be trained, or the teaching will have to be farmed out to other units, such as the Careers Service, with consequent loss of subject-specificity and income);
- PDP presupposes that students are open about their non-academic activities; but there are serious questions as to the legality (let alone the morality) of including non-academic activities in academic assessment;
- more generally, some students come from cultural backgrounds in which there is a sharper distinction between personal and academic development than there is in the UK, and including PDP within the syllabus may lay a department open to charges of racial discrimination.

Model 2 is to keep PDP separate from the syllabus, and to link it instead to the personal tutorial system. On this model, the student will be responsible for keeping a Personal Development Record (PDR), of which a summary is given to the personal tutor, as the basis for discussion at regular tutorial meetings.

The advantages are:

- no time is taken away from delivery of the syllabus;
- PDP is a regular activity throughout the student's degree programme;
- confidentiality about private matters can be preserved;
- the cost in staff time is no greater than for any properly functioning personal tutorial system (for example, the norm at Nottingham is 10 minutes per student three times a year);
- the department can build up a detailed but succinct record of each student's progress, which can be used for writing references, etc.

The disadvantages are:

- unless given strong encouragement, students may be unwilling to spend the necessary time (and it is difficult to imagine appropriate sanctions for non-completion);
- the system presupposes the active co-operation of all teaching staff, and not just a few enthusiasts (there is evidence that students take PDP seriously only if their tutors do);
- there is a significant initial cost in devising a system which is appropriate to the individual discipline and department, and in ensuring that everyone understands it.

The Personal Development Record

Content

The key element in a successful PDP system is the design of the Personal Development Record (PDR), which the student is expected to fill in. There are already many examples of PDRs used in different institutions and subject areas:

http://www.prs-ltsn.leeds.ac.uk/generic/qualenhance/pdregg.html

However, they are unlikely to be of much use as models for others unless they are heavily adapted.

Here are some suggestions as to how to write a PDR:

- involve all those who will have to use it as closely as possible, so that they feel ownership of the document—this includes students as well as staff;
- make sure that there is a clear explanation of what it is for, how it should be used, and how it relates to the personal tutorial system;
- make it *progressive*—at first it should help the student through the transition from school or previous work to university, and by the end it should help the student through the transition to employment or further study (career choice, CV, preparing for interviews);
- distinguish carefully between what is private to the student, and summaries which will be copied to the personal tutor and put on file;
- include sections on:
 - strengths and weaknesses in relation to generic skills (e.g. literacy, C&IT, participation in discussion);
 - previous experience and extra-curricular activities, and what has been learned from them;
 - performance on individual modules, how they form a coherent whole, and future choice of options;
 - extent of fulfilment of the learning outcomes detailed in the programme specification;
 - o identifying preferred learning strategies;
 - o (in the later stages) preparing a CV.
- provide advice about local sources of support for developing skills or overcoming problems.

Format

Normal practice is give each student a ring binder with a specially designed cover, containing all the paperwork they will need for their undergraduate career. But while it provides them with a physical object which they can take pride in maintaining, it has two disadvantages:

- it is expensive to produce (some estimates are as high as £8 per student);
- students are forced to fill it in by hand, and the sise of boxes is inflexible.

A number of institutions have been experimenting with on-line PDRs, and it is likely that these will become standard within the near future. In particular, there is a clear advantage if a summary of the PDR suitable for public consumption can be stored centrally, and printed out as an appendix to the official transcript.

A national Progress File IMS Group as been established to facilitate interoperability between Student Record Systems and electronic PDRs:

http://www.leeds.ac.uk/pdp/GARTREF.HTM

How the PRS-LTSN can help

The PRS-LTSN can help by:

- collating and disseminating examples of PDP and PDRs which have already been used in the disciplines;
- drafting discipline-specific model PDRs, for improvement through discussion lists and workshops;
- keeping the subject communities informed of national developments;
- offering grants for subject-specific research into PDP;
- providing a consultancy service for departments implementing PDP.

Further information

More information about Progress Files can be obtained from the following sites:

Guidelines for HE Progress Files, July 2001, 28pp:

http://www.qaa.ac.uk/crntwork/progfileHE/contents.htm

This is the official policy statement of UUK, SCOP, Universities Scotland, the QAA, and the LTSN Generic Centre. Appendix 4 (the last page) provides links to other relevant organisations.

The LTSN Generic Centre PDP Site is maintained by Norman Jackson of the LTS Generic Centre, who has a special interest in PDP:

http://www.ltsn.ac.uk/genericcentre/projects.asp

The Centre for Recording Achievement (CRA) has been researching and disseminating good practice in PDP since the early 1990s. Its website contains links to many other sites with information on PDP:

http://www.recordingachievement.org/

The Personal Development Planning in Higher Education (Scotland) Network (PDPHES) is primarily concerned with Scottish institutions:

http://www.eds.napier.ac.uk/PDP/

The University of Leeds PDP Site contains useful information and links, and it is not confined to the Leeds context:

http://www.leeds.ac.uk/PDP/

Article: Informing, Teaching, or Propagandising? Combining Environmental and Science Studies for Undergraduates

Sean Johnston and Mhairi Harvey

Crichton Campus University of Glasgow

Introduction

This article discusses recent experiences in the integrated teaching Environmental Studies and Science Studies in a generalist curriculum at a new University campus in Scotland. At the University of Glasgow, Crichton Campus, over the past two years, a new mixed curriculum has been developed that coherently combines Environmental and Science Studies, perhaps the first such curriculum in the UK and equally uncommon in America.¹ The Crichton curriculum is intentionally multi-disciplinary, drawing closely on the nineteenth-century Scottish model successfully exported to America.² This generalist approach, emphasising broad philosophical principles, informs the courses and their inter-relationships.

Most components of Environmental Studies, forming one of the five degrees offered, are taught largely from a scientific perspective, reflecting the academic background (geomorphology) of the teaching staff. The subject of Science Studies is introduced as a core first-year course and via optional second and third year courses, dissertations and projects. The analytical themes for the Science Studies courses are history of science and technology, philosophy of science (e.g. epistemology, ontology and moral philosophy) and the sociology of

¹ A version of this paper was presented at the *Taking Nature Seriously* conference, University of Oregon, Eugene, Oregon, in February 2001. The Eugene campus has recently introduced a combined Environmental Studies/Science Studies option in their Environmental Studies degree, apparently the only such linkage in the United States. ² Davie, George Elder, *The Democratic Intellect: Scotland and Her Universities in the Nineteenth Century* (Edinburgh: Edinburgh University Press, 1961), 352 pp. science and scientific knowledge (e.g. interest groups and cultural beliefs).

Our teaching argues that an understanding of the inter-related technical, social and philosophical aspects of environmental research provides a strongly positive approach to engaging real-world problems, by promoting an understanding of multiple viewpoints in the technical and cultural issues at the centre of modern scientific debate. This contextual interdisciplinarity³ challenges both teacher and learner to look beyond the establishment of environmental scientific facts to the creation of an environmental science discourse.

This critical approach to knowledge has required a broadening of the teaching of environmental science to incorporate many of the issues tackled in Science Studies. At the same time, the general themes addressed by the Science Studies courses are illuminated by examples from Environmental Studies. The complementary academic stances of these subjects have been synthesised in a second-year course on Environmental Ethics, co-taught by lecturers from both subjects. Our experiences in integrating these two studies indicate that this can be a fertile approach that links contemporary debates to deep understandings of the natural world and society. We argue that this approach, and the teaching methods utilised, are effective means of engaging and teaching our students, and are particularly relevant in the modern British context.

The context of modern life

In both the UK and America, Environmental Studies and Science Studies began to coalesce as interdisciplinary academic subjects during the late 1960s and 1970s. In both countries some of the obvious triggers for interest in historical and social studies of modern science and technology was the questioning of environmental consequences of technological growth, the rise in pollution and the apparent abuse of 'the commons'.⁴ Widely publicised cases such as the Torre Canyon disaster in 1967⁵ and questions of nuclear reactor siting through the 1970s began to engage the public directly in questions of policy-making and the

³ Boden, Margaret, "What is interdisciplinarity?", in Cunningham, Rachael (ed.),

Interdisciplinarity and the Organisation of Knowledge in Europe (Belgium: Office for Official Publications of the European Communities, 1999, pp. 13-23). Boden defines contextual interdisciplinarity as being "concerned with the social relevance, public acceptance and ethical justification of scientific research"

⁴ Hardin, Garrett. "The tragedy of the commons", Science, 162, 1968, 1243-1248.

⁵ in which 119,000 tonnes of crude oil polluted miles of the French and British coasts.

evaluation of scientific facts. Students too demanded that academic curricula reflected and were relevant to their social environments.⁶ Thus Science Studies and Environmental Studies addressed some common themes from their very beginnings as academic subjects.

More recently, British experiences make the subjects of Environmental and Science Studies particularly relevant to students and to the general public. A relatively compact and densely populated country, Britain has a legacy of human management of the countryside with no remaining wilderness areas. There is a close association between food production, heavy industry (and the resulting pollution) and urban conurbations reflected in a long history of pollution crises and legislation. For most Britons, humankind's effect on the environment is inescapable and obvious.

In the last decade, there has been a skyrocketing awareness in Britain of problems with health, the environment and scientific authority. Readers will be familiar with the rapid succession of issues. In 1988 salmonella in eggs filled headlines; during 1990 Bovine Spongiform Encephalitis (BSE, or "mad cow disease") was identified, and by 1996 blamed for human deaths; the cloning of Dolly the sheep in 1997 brought scientific ethics to public attention; the summer of 1999 was dominated by a vociferous public debate and political debacle over the testing and marketing of GM foods; and from spring 2001 the contentious facts, containment strategies and politicisation of foot and mouth disease have filled newspapers. Between these major events, food poisoning, inoculation, and radioactive contamination affairs have excited public discussion.

The context of teaching, learning and discussion

These issues are particularly pertinent to Southwest Scotland, where our campus is located. Dumfries and Galloway is a rural region that combines mixed farming, small towns and stands of forest. The area has the highest rate of farms converting to organic status in Scotland. It boasts internationally important sites including Special Protection Areas and Special Areas of Conservation (both designated under European Community Directives) and Ramsar Sites,⁷ designated under the Ramsar International Wetlands Convention. Part of its coastline is being

⁶ Soule, M. E and Press, D. "What is environmental studies?", *Bioscience* 48, 1998, 397-405.

⁷ Ramsar sites, listed under the Convention of Wetlands of International Importance, are often designated for their importance to wildfowl habitats.

considered as a World Heritage Site. Around 75,000 hectares of land are protected by national legislation.

On the other hand, like many other areas in Britain, it has a nearby nuclear power station,⁸ waste incinerators and landfill sites. The radioactive fallout from Chernobyl 15 years ago affected its dairy and sheep industries significantly. Its coastline has measurable contamination from discharge by the Sellafield Nuclear Fuel Reprocessing Plant, located near the Sellafield nuclear reactor (70 km south of the campus)⁹. Several areas in the region are used as military practice sites where depleted uranium shells have been fired regularly and where low level flying by fighter jets is a commonplace. A chemical plant is located on the outskirts of Dumfries itself, and Gretna (25 km east) was the site of the largest munitions chemicals factory in Britain during the First World War.

The most current concern—and one of immense economic importance to our immediate region—is the foot and mouth disease crisis. The region has been affected almost as seriously as Cumbria, immediately to the south. Most of our students have been affected directly or indirectly by the widespread culling, decline of support industries, and restrictions on movement. Field classes, for example, were cancelled; some students were restricted to infected farms; most felt or saw the effects on local employment and tourism. In such a context, science is not an abstract academic concern: it is challenged daily in the fields, on the streets and in the classrooms.

Thus food production, pollution and livelihoods are inextricably interlinked at our campus. The environment, and science's influence on it, are immediate public and personal issues in the minds of our students. Students entering first-year incoming courses have consequently been highly polarised on these issues. Nearly all had been saturated with news coverage in the preceding months. Many had convictions without substantive background knowledge; others were bewildered and isolationist. As university lecturers, we are very aware that the students entering our campus are extremely concerned about the very public issues of environmental management, ethical policy and scientific reliability. Our challenge is to convert this inchoate awareness and concern into solid knowledge and reasoned perspectives. How far

⁸ The second oldest power reactor in Britain, Chapelcross is 22 km west of the campus and employs some of our students and members of their families.

⁹ Harvey, M. M. and Allan, R. L. "The Solway Firth Saltmarshes", *Scottish Geographical Magazine* 114, 1998, 42-45.

can students acquire a critical understanding of environmental issues beyond the rapidly changing and media-dominated constructions of these activities?

Our student body, as a whole, has evinced a strong interest in ethical issues, and has demonstrated a willingness and ability to relate them to historical cases and sociological perspectives. Our general approach therefore, has been to work with the inbuilt differences of disparate and opinionated groups to construct courses with interwoven threads of environmental science, ethics, critical thinking and historical and social studies of science.

Shaping an integrative curriculum

The general curriculum at Crichton currently includes five degrees, one of which is Environmental Studies. Environmental Studies focuses on teaching strengths in physical geography and geomorphology, as shown by the list of titles given in the Appendix. It encourages students' recognition that the physical environment cannot be viewed in isolation because of the impact of human presence on the planet, whilst also stressing that in order to understand the extent of human impact there must be an understanding of how the environment functions. Whilst drawn from fields of scientific enquiry, the courses always ensure that there is an understanding of wider social, economic, political and philosophical issues. The first introduction that students have to the environment and environmental issues is through a course called The Environment and Sustainability which, while focussing on the technical details of ensuring a sustainable environment (illustrated through issues such as resource/energy use and population), also addresses the social, economic and political issues that are at the centre of much policy making.

There is also a strong and explicit thread of Science Studies in the general curriculum. Our curriculum is perhaps unique in Britain: first-year Science Studies are mandatory for all students for our five degrees.¹⁰ We see this as an acknowledgement of the importance of science and its effects on daily life. We aim to teach students that, while rational methods of creating knowledge are the best that we have, these methods have inbuilt limitations and intimate links with culture and society, and are solidly embedded within a value system and ethical

¹⁰ All five degrees (Environmental Studies, Liberal Arts, Scottish Studies, Health and Social Studies, and Creative and Cultural Studies) fall within the Faculty of Arts at the University of Glasgow.

stance. This emphasis, reflected in both Science and Environmental Studies, is illustrated by one of four 'core courses' (or mandatory subjects) taken by all students called *Science: History and Culture*. This is a course about rational knowledge: its evolution over time, its strengths and its weaknesses. The course traces the historical trajectory that has produced our modern reliance on technocentric solutions, and relates intellectual ideas to cultural beliefs. Other Science Studies courses are listed in the Appendix.

The essence of Science Studies at Crichton is the exploration of the social and philosophical dimensions of science and technology. This is also the central premise for the Environmental Studies curriculum. The first link between environmental and scientific issues for first year students is the 'core' course *Issues in Contemporary Society*, which as the name suggests, discusses contentious ethics of modern life. The past year's topics included environmental stewardship and the Human Genome Project; a year earlier we presented a section on agricultural genetic engineering.

The challenge for educators

Such course titles suggest the challenge that we face as educators: first of all, to teach environmental studies to a wide spectrum of students having a variety of incoming beliefs. Some of our students are committed environmentalists. Others arrive as intensely distrustful and dismissive about professional science. Indeed, many begin with a kind of mental paralysis. We can illustrate this by an example. Locally there were plans to construct a landfill site in an area of commercial forest plantation, a development which students commonly identify as being 'wrong' or 'bad' but without necessarily thinking about the overall implication of the alternatives. This is not apathy: it is a commitment to deeply held beliefs, sometimes incomplete, sometimes inconsistent and occasionally intractable.

Our second challenge is to present science studies material deferred until second year at some institutions, and usually left as course options or electives—to first-year students already deeply engaged with amorphous concerns. We feel that the nuanced perspective of science studies is very important for our first year students; unless they can begin to question their own convictions, and the convictions of others, they cannot begin to understand the issues at the centre of current environmental debates. This profound questioning is the central theme of the two core courses mentioned above. Our third challenge as educators is to articulate the scientific and moral objectivity behind our teaching.

It is important to emphasise that we are not 'environmentalists', 'pro-science' nor 'anti-science'. We stress in our lectures that we aim to teach, not preach.¹¹ This is something that many first year students are either surprised about, disappointed about, or deeply suspicious about! It is important to be scrupulous in providing a balanced perspective that respects different stances while stressing the importance—and sometimes the ultimate limitations—of scientific knowledge. This should not be interpreted as merely being politically correct. We are not concerned with giving 'equal time' to opposing groups. We do not try explicitly to balance the statements of Friends of the Earth with those of local chemical firms. We do, however, explore the reasoning and values underpinning different stances. This is combined with instilling skills in critical thinking—attempting to evaluate the plausibility of factual claims, or the coherency of arguments. The students develop such analytical skills through web-based study units and tutorial exercises.

This point is important: we have titled this article "Informing, Teaching or Propagandising", because Environmental Studies and Science Studies courses could do any or all of these things.

We use the word "Informing" to mean providing facts. But facts—especially facts about the complex natural environment—can often be contentious or very difficult to discern. For this reason, we believe that a typical strategy of first year science or earth science courses does not work here. We cannot merely supply technical details, from 'basic' to 'advanced', and expect our students to gain any deep understanding of the environment as a whole. Obviously, we provide the students with technical, often science-based information, but we also provide them with the tools to critically assess some aspects of this information.¹²

The second word in our title—"Teaching"—we take to mean a more wide-ranging activity than merely providing uncontentious nuggets of information. As one student said recently, he felt that our approach was one of sharing knowledge rather than us imparting facts, thereby facilitating student led learning.

¹¹ Indeed, one student exercise in our *Issues in Contemporary Society* course is to vote on whether the lectures have been pro- or anti-genetic engineering, an exercise that opens the door to the debate on the objectivity of scientific investigation and reporting.

¹² This point has also been made in Cantor, Geoffrey, "Teaching Philosophy and HPS to Science Students", *PRS-LTSN Journal* 1, 2001, 14-24.

The third word—"Propagandising"—can all too easily be incorporated into environmental discourse. It is possible that our personal commitments to the environment, which understandably have led us down this academic road, will flavour our teaching, perhaps giving it a biased view. This is, of course, also a commonly expressed concern of science departments about the content of science studies teaching. To the credit of the University of Glasgow, which has the largest Faculty of Science in the UK, the introduction of Science Studies has engendered little criticism from the Faculty thus far.

Environmental Studies seems to us to be a subject prone to being either trivialised or overtly politicised for a number of reasons. Today, to be environmentally conscious or pro-active is something to which most citizens and, indeed, lecturers claim to subscribe. Isn't everyone for a 'clean environment', whatever that means? Even inanimate objects—everything from underarm deodorant to hamburger boxes are designed to be environmentally friendly. So, too, are companies, governments and social groups. The notion of environmental responsibility is now so dilute and ubiquitous that it has ceased to have much intellectual value.

Yet it is also a concept that has become politicised. Defending waste incinerators, in some contexts, can be as unpopular as defending eugenics. Environmental issues are at the heart of major governmental policy decisions, certainly in Britain. In this context of necessary but sometimes unpopular policy-making, it is all too easy to produce the very opposite of what we, as educators, want. For example, at the end of 2000, Britain was hit by a series of major floods resulting from prolonged periods of rain. These floods were placed firmly at the door of global warming by the Government and environmentalists alike. A few months earlier, equal levels of public criticism were levelled at the price of petrol, an expensive product in Britain owing partly to an 'environment' tax designed to restrain the excessive consumption of petrol and to pay for the research and development of alternative energy sources. In both cases an atmosphere was created that avoided or submerged informed public, and even academic, debate, a position contrary to the ethos of both science studies and environmental studies.

Both the trivialisation and the politicisation of environmental studies are a danger to its academic expression. Indeed, the issue of the academic robustness of environmental studies has been hotly debated in recent years in some American literature¹³ It is for this reason that we are not interested in being identified as 'environmentalists', 'pro-science' or 'anti-science'. Our courses strive to be analytically neutral, scientifically aware and socially perceptive.

The appropriate means to an end

Let us refer back to our challenges outlined above: to teach environmental studies to a wide spectrum of students with a variety of incoming beliefs; to present science studies material to students enabling them to confront the sometime conflicting issues at the centre of current environment debates; to articulate the scientific and moral objectivity behind our teaching. Our approach to engaging with these challenges has been two-fold: firstly to devise an appropriate curriculum; and secondly to utilise appropriate teaching methods.

Let us illustrate this with a second-year course offering, *Environmental Ethics*, taught by the authors, Johnston (Science Studies) and Harvey (Environmental Studies). Such a course has increasingly been offered at UK universities since the late 1970s, most frequently in departments of philosophy. We have conceived our variant of this course as the symbiosis of two studies. It is not merely a dialogue between two specialisms, but an integrated and complementary approach. It is also designed to appeal to at least two varieties of students: first, those studying for the Environmental Studies degree; and second, those studying for the Liberal Arts degree, with a strong emphasis on philosophy and history of science. Thus we immediately have a dichotomy between those students with a strong interest in the environment, on the one hand, and those students with an interest in moral philosophy and scientific practice, on the other.

The course explores the relationship between value systems, scientific uncertainty and decision-making. The value systems and case studies behind environmental ethics are, of course, unusually wide-ranging. The responses from students have been interesting. One response is muted shock; many are surprised that the course does not necessarily validate their own values. Traditional moral philosophy is anthropocentric: firmly human-centred, based largely on the treatment of one individual by another individual. In environmental ethics, however, anthropocentrism is merely one of many systems, ranging from

¹³ For example, Soule and Press, 1998 *inter alia*.; Maniates, Michael "Environmental Studies: The Sky is Not Falling", *Bioscience* 50, 2000, 509-517.

biocentric to ecocentric to Gaian, and with many flavours in between.¹⁴ On the other hand, some of the Environmental Studies students are equally disconcerted to find that their own values are not quite as consistent or defensible as they had thought, or indeed universally recognised by the class as being morally correct. Animal rights activists, deep ecologists and social ecologists, for example, could have dramatically different responses to some real-world situations that we introduce, such as the acceptability of a waste dump located near their homes. Other fruitful talking points have been whether the government, to discourage the use of cars, even if the local economy would be affected, and whether the various national stances on the reduction of greenhouse gases are ethically defensible, should raise petrol prices.

In order to deliver the curriculum, this course demands an alternative approach to teaching. Although some core material is taught in lecture format, the greater proportion of class time is given over to group-based discussions on issues that, as indicated above, are of direct relevance to the students. This student-led approach is rarely used in teaching science-based subjects despite the proven advantages. Collaborative learning (also called co-operative, active, inquiry-based etc.) encourages students to engage with materials because, as Herreid puts it "Students enjoy the experience more, have a better attitude toward the subject, develop better social skills, become more articulate, and end up respecting differing viewpoints".¹⁵ These qualities are vital in teaching a subject which forces students to locate and defend their own ethical positions regarding certain environmental issues.

Conclusions

One of the central questions of this article is how Environmental Studies courses can be related to the interests and concerns of incoming students. We argue that the perspectives of Science Studies can do much to give students a critical and reasoned perspective, not just of the scientific issues at the heart of Environmental Studies, but at the social and moral questions that inform judgements.

Science Studies and Environmental Studies are complementary and interdependent; the former, to bring together disciplines providing

¹⁴ As taught in some Philosophy departments, Environmental Ethics focuses on issues of animal rights. We prefer to extend the discussions of moral questions to plants, microbes, and atmospheric chemistry.

¹⁵ Herreid, Clyde Freeman, "Why isn't cooperative learning used to teach science?" *Bioscience* 48, 1998, 553-559.

analytical viewpoints and theoretical stances; the latter, to relate these to the real world in a variety of case studies that are important, contentious and inescapable in the modern world, and particularly in modern Britain. This approach has engaged students from their first semester, and has, to date, produced increasingly analytical and articulate proponents for a variety of philosophical positions with respect to the environment.

Our conclusion is that our courses can strive to be 'objective' by combining reasoned thinking with a nuanced appreciation of scientific evidence and historical case studies, and with an exploration of the wide range of differing, but self-consistent, moral perspectives.

Appendix: Current Environmental and Science Studies Curriculum at the University of Glasgow Crichton Campus

A: ENVIRONMENTAL STUDIES COURSES

- Our Changing Environment: An introduction to earth systems and dynamics (1st year)
- The Environment and Sustainability (1st year)
- Shaping the Environment: Applied Geomorphology (2nd year)
- Assessing the Environment (2nd year)
- Applied Ecology and Conservation (3rd year)
- Explorations in Pollution: Causes and Effects (3rd year)

B: SCIENCE STUDIES COURSES

- Science: History and Culture (1st year)
- Technology in Society (2nd year)
- Imagined Futures (3rd year)

C: SHARED COURSES

- Issues in Contemporary Society (1st year)
- Environmental Ethics (2nd year)
- Current Issues in Science, Technology and Medicine (3rd year)

s.johnston@crichton.gla.ac.uk m.harvey@crichton.gla.ac.uk

Article:

How do Different Student Constituencies (not) Learn the History and Philosophy of their Subject?

Case Studies from Science, Technology and Medicine¹

Graeme Gooday

Associate Director for History and Philosophy of Science PRS-LTSN University of Leeds

1. Introduction: themes and summary of the argument

Why should H.E. teachers concern themselves with how their students do or don't learn? Much has been said recently about the alleged merits and demerits of 'student-centred' learning, especially on the extent to which student autonomy in the learning process is beneficial to their long-term interests.² This paper is a not a contribution to that debate. Rather it focuses on how teachers might uphold their conventional educational responsibilities but make their role *more* effective. Its central thesis is that this role is most effective when treated

My thanks go to Bill Astore, David Mossley, Greg Radick, Helen Valier and Adrian Wilson who helped me greatly in the preparation of this paper. Greg Morgan undertook empirical research on the learning practices of psychology students with financial support from the Philosophical and Religious Studies Subject Centre.

¹ This paper was presented at a meeting of the International History, Philosophy and Science Teaching Group in Denver, Colorado, November 2001.

² Donna Brandes and Paul Ginnis: *A Guide to Student-Centred Learning*, Cheltenham: Stanley Thornes, 1996;

David Newble and Robert Cannon, A Handbook for Teachers in Universities and Colleges: a Guide to Improving Teaching Methods, 4th ed., rev. London: Kogan Page, 2000;

P. Ramsden, *Learning to Teach in Higher Education*, 1992, New York/London, Routledge; K. Trigwell and M. Prosser, 'Improving the quality of students learning: The influence of learning context and student approaches to learning on learning outcomes.' *Higher Education*, 22, (1991). 251-266.

L. Sparrow, H. Sparrow, and P. Swan, 'Student Centred Learning: Is it Possible?' In A. Herrmann and M. M. Kulski (eds.), *Flexible Futures in Tertiary Teaching* (2000). *Proceedings of the 9th Annual Teaching Learning Forum*, 2-4 February 2000. Perth: Curtin University of Technology: http://cleo.murdoch.edu.au/confs/tlf/tlf2000/sparrow.html

not so much as the 'teaching' of students as the process of *helping students to learn*. This particular study concerns how university students of science, technology and medicine (STM) can be helped to learn the history and philosophy of their respective subject from practitioners in the history and philosophy of science, technology and medicine. But I will not be focussing on those students (sometimes the majority) who have no trouble learning to think in historical and philosophical ways about their subject. They are not the ones who require most help from us. More importantly, I look at those students who—despite the best efforts of their teachers—find the historical or philosophical sensibility to be difficult, repellent, uninteresting, irrelevant, pointless or simply weird. In the worst case scenario such students learn *nothing* substantial or valuable from classes in the history and philosophy of their subject, and become bored, alienated or hostile to the whole enterprise.

Accordingly, I aim in this paper to help fellow teachers avoid such unfortunate outcomes by sharing some perspectives on how to handle or even pre-empt the less positive responses of our students. It is based on empirical research on student learners of HPSTM at my own institution but it is also informed by insights kindly shared with me by colleagues both at Leeds and at other UK institutions of higher education. From those I have certainly learned that it is by no means only students on programmes of science, engineering and medicine that find something unfamiliar or peculiar in the pedagogical values and study methods of HPSTM.³ But my concern in this instance is *specifically* with students of STM, especially those who have no prior training in the humanities and thus find something baffling about the way HPSTM is taught. For example, it is disorienting for many that course textbooks do not supply authoritatively 'correct' answers but are rather the targets for critical discussion and interpretation. It can, moreover, be alarming for some that 'independent' thinking is required of them in order to get the highest marks-a distinctly alien and unsettling notion. Elsewhere I have suggested some generalizations about how such difficulties might be applied across the spectrum of STM undergraduates⁴.

By contrast, in this paper, I aim to explore the constituencyspecific nature of the pedagogical challenges involved. I do this by

³ Graeme Gooday 'Report on LTSN HSTM Workshop, Leeds, 30-31 May 2001':

http://www.prs-ltsn.leeds.ac.uk/hist_science/articles/hstmrep.html, 2001

⁴ Graeme Gooday, 'The Challenges Of Teaching History and Philosophy Of Science, Technology and Medicine To 'Science' Students', 2000:

http://www.prs-ltsn.leeds.ac.uk/hist_science/discussions/problems.html

reflecting upon experiences of my own and of colleagues of 'service' teaching HPSTM to groups enrolled on specialised undergraduate programmes in science, medicine and technology. The particular constituencies I consider are the vocationally oriented groups at the University of Leeds: first year psychology students (history of psychology and history of technology); second year students of information technology (computer ethics) and fourth year medical students (medical ethics). Although my analysis is thus highly limited in scope, I aim to draw out broader generalizations about how particular kinds of student constituencies can be helped to learn HPSTM—generalizations that other teachers of HPSTM might in future apply, extend, refine or challenge.

My overall contention is that university teachers encountering a particular kind of student constituency in service teaching should not merely know the relevant area of HPSTM. They should also seek especially at the start of teaching—to develop knowledge of their students and how they learn. The following two points seem most pertinent to know about:

i) *What* these students actually know about the relevant area of HPSTM (if anything) before the class begins. With that knowledge the teacher can help them build upon what they already know.

To try to do otherwise, e.g. by making incorrect or unhelpful assumptions about what students already know, can make it very difficult for them to follow where the teacher wishes to take them. I have written elsewhere on this as the Canute fallacy.⁵ What I have learned from colleagues is that this problem can be avoided simply by *asking* students what they already know by means of questionnaires or oral brainstorming in the first class. It can be pleasantly surprising to find out how much students know and understand about some aspects of our subject—and not a little shocking to find out how little they know or understand of other aspects with which we might have expected some familiarity.⁶

⁵ Graeme Gooday: 'Expunging King Canute, or, the virtues of starting by finding out what your students can actually do and what they do actually know', 2000:

⁶ John Pickstone, 'Past and present knowledges in the history of science,' History of

http://www.prs-ltsn.ac.uk/contentions/current/gooday1.html

Science, 33 (1995), pp. 203-24 discusses the potential value of bringing 'anachronistic' understandings of present day science to bear in learning about the science of the past.

ii) What *practices, strategies* and *expectations* of learning their students have acquired in previous or concurrent areas of study. In this context, by practices I mean the learner's habituated actions, by strategies I mean the procedural decisions for problem-solving and by expectations I mean the outcomes that students anticipate from the learning process. By knowing about these aspects of their students' initial orientation to the learning process, teachers can help them (if necessary) reconfigure those practices, strategies and expectations so that they can be more effectively geared to learning the topic of HPSTM in hand.⁷

This is very important since students of STM can bring with them learning practices from their specialist fields of study that can inhibit their effective learning of HPSTM. Too often students and teachers only begin to realise the mismatch between their respective perspectives at the end of a course—when it is too late to do much about it.

It is to the latter topic that I shall devote most effort in this paper since it is perhaps most amenable to generalization from one cohort of students to another and between different institutions. First, however, let me explain a little more about my focus on student 'learning'.

2. Re-centring the student: a neo-Copernican revolution in pedagogy

For those familiar with recent educational theory—especially school teachers—it would be somewhat truistic to claim that the most important point in evaluating the educational process is not what teachers try to teach, but what learners actually succeed in learning.⁸ After all, who could disagree that the success of any educational scheme is primarily to be judged by the accomplishments of students rather than of their teachers? A teacher might well be justified in taking personal pride in a brilliantly constructed and elegantly delivered lesson, or in the clever and insightful remarks, s/he makes in discussion. But if students do not share their teacher's connoisseurship in these matters by not appreciating the sophistication of their teacher's lesson, those qualities alone cannot be guaranteed to make for successful pedagogy. From this

⁷ I agree with Helen Valier that this analytical framework would probably not be (immediately) comprehensible to the students themselves as actors' categories. Teachers obviously need to address such questions to students with strategically framed questions that elicit the relevant responses from students.

⁸ Michael Matthews, *Science Teaching: the Role of History and Philosophy of Science*, London, Routledge, 1994 e

point follows my next: who could argue against the claim that what is 'taught'—however interestingly or intelligently—is not always 'learned' by the recipient? What matters most to teachers might be entirely opaque or incomprehensible to the majority of students and pass completely over their heads. What teacher has not at some point been disappointed by the way that some of their most subtle and eloquent efforts at teaching have sometimes appeared to have had no impact whatever on the quality of their students' subsequent writing in essays or examination papers?

For those who teach at universities, placing such a focus on the primacy of students' learning outcomes is still a relatively unfamiliar practice. It is especially alien for those traditionalists who seem to conceive their role in education as being part of a one-way process that is centred on the greater knowledge of the teacher. One might unfairly caricature one common view of this as the 'decanting' view: that teachers have a duty to (try to) draw upon their vast font of erudition and pour their hard-won learning into the (putatively) empty vessels of their students' minds. Whilst admirable for its emphasis on a sense of scholarly duty, this approach perhaps misses the point that students' minds are not empty vessels-and indeed, it misconstrues the process of student learning to be an entirely passive process of imbibing wisdom poured in from 'above'. A more pernicious variant of this sort of position is what I call the 'broadcasting' view. In this teachers effectively shielded from any personal knowledge of their listeners, loudly enunciate their views while leaving it up to the wit of the omni-competent student audience to 'tune in' to the relevant transmission frequency to be able to receive the teacher's message. In this approach, students who are unable to tune in appropriately can be tempted to transfer to classes run by teachers who broadcast on a more accessible frequency! In both approaches (especially the latter) there tends to be a telling asymmetry in explanations of student success vis-à-vis student failure. While teachers accept the contractual responsibility to supply relevant knowledge and to take the credit for students who perform well, students who underperform tend to be blamed unreasonably for being solely responsible for such failures, usually by teachers attributing such deficiencies as obtuseness, laziness, inattentiveness or wilful neglect of studies.

A more productive view of the educational process is to treat students as active participants in the learning process—indeed as the participants in the educational process to whom most attention should be given. Close attention should be given to the students, especially as people who by the time they graduate should have acquired through the learning process some degree of autonomy, independent judgement and self-confidence. For the traditional teachers discussed above the adoption of a student-centred approach would probably entail a discomfortingly radical shift of perspective. Indeed moving students to the centre of the pedagogical universe is in some ways akin to a form of Copernican revolution. We have to abandon the long-entrenched view of students passively orbiting around a resolutely fixed scholarly earth! And taken to its full conclusion, this approach is indeed just as shocking as the loss of an earth-centred universe was for Ptolemaic astronomers. It is, after all, the teachers who are not so much the grounding of the entire universe, but the ones with the greatest mobility to move through exalted orbits in response to the demands of our students.

From the point of view of the broadcasting model, this move is just as shocking as 'audience reception' theory was to early broadcasters who considered themselves to have great power over passive audiences. theorists have since realised that audiences construct Media 'understandings' of broadcasts in ways that depend on their existing listening/viewing practices and the prior understanding(s) that they bring to bear on them.⁹ If audiences often take away from a programme something other than the broadcaster's intended message, this is not evidence of the *incompetence* of listeners or viewers. Rather this should be seen as a natural consequence of the complex way that audiences respond to broadcasts. Broadcasts are, after all, only one of the many resources that audiences use to develop their understanding of the world, and they can only make sense of these broadcasts by drawing upon the assumptions, interpretive apparatus and analytical practices that they already possess. Following the analogy through we can see that students construct 'understandings' of our teaching in ways that depend on their pre-existing interests, patterns of thinking and prior knowledge of the subject. It should thus be entirely unsurprising if some or all students take away from a lecture something other than their teachers intendedeither less than the full message or a different message altogether. We should in fact see this as a natural consequence of the complex way that students respond to our teaching, this being, after all, only one of the many resources that students can draw upon in making an active contribution to the learning process.

⁹ Denis McQuail, *Mass Communication Theory*, 4th ed, London, Sage, 2000.

And understanding the student contribution to the process of learning HPSTM is what I consider next.

3. Understanding students' practices, strategies and expectations in learning HPSTM

Historians of science interested in the 'reception' of theories and philosophers interested in the nature of model-building are surely well qualified to understand the complexity of the learning process. When learners enter into an unfamiliar field of knowledge, their entry is never *just* a simple unidirectional process of picking up knowledge. In STM as much as in HPSTM, novices need to secure the appropriate practices, strategies and expectations to be able to articulate and use such knowledge in accordance with the values of their specialist field. Effective pedagogy in HPSTM thus requires teachers to focus on how best to help 'newcomer' students actively secure these prerequisites of learning. With this aim in mind, I contend it is best to consider our students as coming to us already equipped with a set of learning practices, strategies and expectations that are contingent on their prior experiences of life and learning. It is not reasonable to expect that students will drop all their previous learning habits at the very moment they enter our classrooms, and somehow immediately pick-up by some mysterious power of telepathy what entirely new approaches to learning they might need in taking up the study of HPSTM. And unsurprisingly students do indeed start off learning HPSTM with the practices, strategies and expectations from previous learning experiences-how could it be otherwise? This claim can be seen as an extension of what Wittgensteinians might call the practice-laden character of student learning¹⁰—supplemented by theses concerning the strategy-laden and expectation-laden character of learning (see below). From the point of view of the HPSTM teacher, it is thus important to find out which (if any) of these pre-existing practices of student learners will positively help them to learn our subject, which might have a positively antithetical effect on the learning of HPSTM. My thesis is that it is the teacher's job to help our students build on the positive features of their learning practices and overcome the negative features.

¹⁰ I am grateful to Andrew Warwick for introducing me to the concept of practiceladenness. See A. Warwick, 'Cambridge Mathematics and Cavendish Physics: Cunningham, Campbell and Einstein's Relativity, 1905-11, pt II,' *Studies in History and Philosophy of Science*, 24 (1993), pp.1-25.

For the sake of brevity I will focus on the *negative* features in this paper simply because these are,

i) perhaps the easiest from which to draw out generalizations, and;

ii) of most pressing concern to the HPSTM teacher.

In this sense, I aim to help H.E. teachers to understand the particular kinds of counterproductive 'baggage' that students can bring with them, and for them in turn to help their students gently jettison this baggage in becoming more effective learners of HPSTM. An important point here is that HPSTM teachers have not always fully appreciated the significance of the practice-ladenness of learning when dealing with students from science-related disciplines. Techniques for effectively learning HPSTM can differ greatly from effective techniques for learning STM, and differ in ways and to an extent that both teachers and students have not hitherto fully apprehended. Having myself once been a science undergraduate facing the prospect of learning HPSTM, basically I see the problem as a clash of cultures. Some of the deeply acculturated assumptions and learning strategies, which science students acquire as effective means of progressing in the sciences, can be-and usually arehighly counter-productive when applied to the humanities. I think it is not unusual for science students to see the scholarly values of HPSTM teaching as bafflingly vague, gratuitously subjective and self-indulgent, whilst the pedagogical practices employed seem to lack a proper emphasis on 'getting the right answer.'¹¹ Whilst I am open to correction about the details of this phenomenon, I am convinced that teachers of HPSTM cannot do their job to the best of their ability without having at least some sense of the 'inertial' nature of their students' approach to learning their subject.

Before proceeding to case studies I should emphasise I am not proposing that teachers find out by biographical or psychological interrogation all the relevant features of each student's previous lives: only that they be aware of the fact that students will come with some sort of baggage. Put another way, the particular way that a student learns from us (or perhaps doesn't) might be idiosyncratic to his/her previous schooling, collectively specific to a particular learning group, dependent on a generational cohort or linked to a disciplinary dependence on the 'parent subject'. But the means by which a teacher can deal with this need not depend on knowing the precise aetiology of these matters. All

¹¹ See Gooday 'The Challenges Of Teaching History and Philosophy Of Science, Technology and Medicine...' and Pickstone, *op.cit*.

that is required is an ability to listen to students and gauge their reactions to us with a view to overcoming any barriers that they find in trying to learn from us.

4. Case study 1: psychology,

Among psychology students in the United Kingdom, the history and philosophy of psychology was recently voted their least favourite subject! It seems that many psychology students commonly adopt the exclusivist assumption that every part of their education should be directed primarily to making them better psychologists, and the most extreme consider that their education should consist exclusively of psychology courses. This perhaps reflects the way that for many psychology students, they are taking a vocational degree programme and can only hope to succeed in the employment market if they are as well-equipped in the technicalities of psychology as their peer-group trained at other institutions.

Those with less extreme views consider they should only take courses in HPSTM if it can help them achieve higher marks in their psychology courses, and can deeply resent spending any time on study that is not thus directed. A colleague (Janet Cunniff) who teaches the history of psychology to psychology students has found an effective way of challenging this assumption when they explicitly bring it to her classes. She tells them that learning about psychology as a discipline is very much like learning about a fellow human being: in order to understand the way they are now you have to ask intelligent and sensitive questions about their past and thus learn about where they came from. Similarly, she tells them that in order to understand psychology as it is now, it is necessary to understand its past and thus come to 'know' it in a comfortable biographical sense as one knows a good friend. This reflexive strategy of using psychology on psychology students seems by all accounts to have been very effective and has won many of them over to the merits of studying the history of their subject

From discussing this approach with her, I personally learned a great deal about how to appeal to those students of psychology who challenge an institutional obligation to learn any subject other than psychology. This was important in teaching a course in the history of technology in which psychology students were the single largest constituency. The strategy I adopted when faced with the disaffected *ennui* of 'why do we have to learn this?' was to treat the history of technology as a set of historical case studies in the social psychology of

human responses to technology. It is indeed remarkably easy-and not at all contrived-to treat the history of television, radio, computers, nuclear power, biotechnology and domestic technology as a set of questions of why people responded as they did to the technological choices with which they were faced. Translated thus into their framework of values, and playing along with their expectations of how learning should benefit their vocational pursuits, these students become surprisingly amenable to some of the more radical perspectives of gender analysis. Students sceptical of the relevance of feminist treatments of technology-whether male or female-can soon be encouraged to take it very seriously when encouraged to reflect on the differential responsibilities and prerogatives concerning technology among men and women in their own families, especially those of successive generations. This directed study enabled them to develop a keener appreciation of the historically changing nature of their subject, and of the conditioned nature of their assumptions about technological usage. By getting them to think about the *changing* social psychology of technology in gendered terms, one can encourage students to think both historically and in a critical philosophical vein about the relationship between their degree specialism and the everyday world around them.

That being said, some empirical surveys undertaken on these students by questionnaires revealed that such strategies did not work across the board. A significant number of these students were nevertheless resistant to the idea that they should take their critical thinking with them into their essays and examinations. When faced with the pragmatic decision of what to say about their insights into either the history of psychology of history of technology, such students tended to expect their tutors to tell them the 'correct' answers to the questions they had to consider. This may in part be attributable to the way in which such students are very firmly inculcated into the view that psychology is a science and thus that it produces clear-cut answers of a distinctive certitude. According to the principle of practice-ladenness outlined above, these students thus tacitly or explicitly assume that all learning associated with psychology is of a similarly 'cut and dried' in its conclusions-even if it is of a historical and philosophical nature. When faced with this problem, teachers have to work hard to persuade students to renegotiate their assumptions about what the outcome of learning should be. One major strategy in this is to persuade students that their teachers do not secretly maintain a set of 'right' answers which have to be guessed at, but that there are still many genuinely 'open'

questions on which it is reasonable to expect individuals to develop individual view points. In addition it is vital to build up the selfconfidence of such students about their developing expertise in HPSTM so that they do not feel hamstrung by anxieties that inhibit their individual input to historical and philosophical questions

5. Case study 2: Medicine:

While medical students often have concerns for professional training even more narrowly focused than their counterparts in psychology, their longer period of training perhaps lessens the urgency of avoiding humanistic digression. The challenge for HPSTM teachers is more that medical students are often uncomfortable with open-ended debate about questions of life, health and death. Most of them anticipate facing a future professional responsibility for dealing with morally fraught situations in which their actions might cause death or permanent harm. It can thus be very unsettling for them to be told by teachers of medical ethics (and history of medicine) that the answers to some such questions are not necessarily clear-cut and require the exercise of mature reflective judgement. Learning through study of real-life medical case studies, however, helps them to learn how to deal with these matters in a rehearsal of real-life practice in debate with their peer-group. Particularly valuable in medical ethics is the use of the Socratic method to show students that as adults experienced in moral debates they come to the study of ethics with some well-formed abilities to adjudicate the 'right' action in particular cases. Moreover, when faced with classic examples of 'bad' practice in clinicians' handling of patients, they are able to identify rapidly the nature of the inappropriate behaviour and come to some conclusions about appropriate alternatives. From this the students can develop confidence in their own judgement and an ability to deal with fellow students when disagreements arise over professionally sensitive matters.

While medical students can readily be persuaded of the value of training in medical ethics, they are not unusually a little more sceptical about the rationale for studying history of medicine.

Some common responses from them have included the following in various degrees of counter-productiveness and sophistication:

i) Why should we learn about medicine's past? What we want to know is how to cure people better today!

- ii) All very interesting but how does this history stuff help me become a better doctor?
- iii) Isn't it useful to know how history shows how we've (eventually) arrived at the right cures/therapies today?
- iv) History of medicine is disturbing because it shows how often people in the past thought they had it right and hadn't—and the same might be true today.
- v) Is this history of medicine stuff meant to show us (wrongly?) those medical judgements and therapies only work relative to context?

Colleagues who run classes in the history of medicine to medical students not uncommonly find themselves initially faced with incomprehension, suspicion or unhelpful assumptions among their charges. Using historical case studies of important medical techniques, it becomes possible quite quickly, however, to see the many benefits of historical training. One such (by Helen Valier) focuses on how the introduction of insulin treatments in the 1920s served to transform diabetes from an acute terminal illness to a chronic disease with long term implications for the administration and financing of relevant kinds of healthcare. It also holds enormous implications for the doctor-patient relationship when the diagnosis of diabetes requires over a dozen independent biochemical tests rather than the doctor's qualitative diagnosis from similar past cases. Such cases impress students with the way that current medical practice has arrived at particular notions of 'best practice' in treating patients which are neither unequivocally the most beneficial to individual sufferers nor obviously the most universally progressive for society at large. Historical studies of changing treatments can thus helpfully raise medical students' awareness to the recurrent problems intrinsic to so-called 'progress' in medicine and (perhaps) to the possibility that alternatives to current procedures might be possible (albeit still problem-laden).¹²

Another valuable case study (by Adrian Wilson¹³) concerns the introduction of the obstetric forceps in the eighteenth century by a new breed of surgeons turned 'man-midwives. This can raise awareness of the issues posed of introducing instruments to clinical situations. Important topics here include: what is the rationale for introducing potentially injurious technology to replace the more sensitive—if less powerful—

¹² Roberta Bivins and Helen Valier, 'Organization, ethnicity and the British National Health Service' forthcoming in J. Stanton (ed.) *Innovations in Health and Medicine*, London, Routledge, 2002 (forthcoming).

¹³ Adrian Wilson, The Making of Manmidwifery, London, UCL Press, 1995.
clinical hand? Another point raised by this case-study is the central role of 'tacit' manual skill in medical practice—a point on which medical students are given little time to reflect upon in their mainstream teaching. This is especially valuable to contemplate in relation to the rapid changes in technology (why do they need to change?) and the need for medical practitioners to adapt to new technologies by developing new skills—lest they injure their patients through technical mishap (c.f. examples from early key-hole surgery in the 1990s). Then again, what also emerged from this case study is the question about who should make a technological intervention in medical practice and at what stage in the process? Important points are raised thereby for medical students about the need to ask *whether* a technological fix is actually required in a particular clinical context, and if so *which* technologies would best satisfy the concerns of both patient and doctor.

By means of such case-studies, medical students can come to see that, although history of medicine does not always yield stories and messages that bring great comfort to the 21st century practitioner, it is possible to show them how thinking historically can broaden their horizons in ways that can be of great value to their future professional practice.

6. Case study 3: Computing:

Computing students, by contrast, tend to feel a great deal more remote from the human context of their work, and initially doubt that the history and ethics of computing can be of anything more than anecdotal interest. In terms of the history of their subject, they rightly observe that the technology of computing changes so fast that it is very hard to see how anything that hasn't happened in the last 10 years or so could possibly be relevant to them. As far as computer ethics is concerned, most of the students expect to work in large teams, so cannot easily see why they should be expected to take personal responsibility, especially if they expect to be told by laws and managers what to do. There are of course exceptions to these sweeping generalizations, especially among students who are more mature, or those who have worked in the computing industry and know the kinds of changing human contexts in which their work will later be deployed.

One strategy I have adopted, one originally developed in the context of teaching engineering ethics to engineering students, was to encourage computing students to see themselves as future *professionals* on a par (perhaps) with doctors, lawyers, architects etc. That way their view

of themselves and their likely future status can be given enough of a boost that the students can be flattered into imagining an important active role in either changing the technology of computing or having a major role in protecting human welfare in their work. Certainly such students do start to take a little more interest when given case study materials that illustrate the kinds of power and responsibility they will have in their future professional work. But they are still often reluctant to learn the ethics of the subject by engaging in a critical analysis of their own views on the ethics of hacking, privacy and software copying. These students find it strange enough to be expected to make critical judgements of standards in textbooks on computer ethics. It is even more bizarre for them to be expected to have *their own* well-reasoned views about these subjects—let alone to be self-critical about them! Hardly anything in their previous experience in computing has prepared them for this.

Even so, by getting them to debate these topics among small groups with guided questions on carefully chosen *flawed* discussions of the topic in hand (e.g. on computer 'cracking', privacy or software copying), their appreciation of the critical mode of discussion is soon enhanced. This is especially so, when critical discussion is harnessed to peer-assessed class presentations that require them to reply to questions and critical comments from their audience. This also gives them an opportunity to develop an awareness of the possible internal inconsistencies of their own positions, especially on the admitted widespread practice of unauthorised software copying. A very useful approach to this subject is role-play: to imagine that they have written some important new software, and from that point of view to interrogate the arguments put forward by those who favour the free copying of software. Very quickly students find it difficult to sustain the claim that there is no particular moral problem in allowing anyone to copy whatever software they feel like copying. From that philosophical challenge they can start to develop the self-aware and self-critical perspective that will help bring them into the world of professional computing and perhaps even make them more valuable employees.

7. Conclusion

By learning about how our students learn, we as teachers of HPSTM experience the learning process in a way that enables us to understand more readily the perspective of our students as learners. From my experience and that of colleagues, it is clear to me that this is an effective

approach and perhaps the best way of helping our students learn the relevant field of HPSTM. Of course, I do not claim that all the challenges and solutions discussed above apply to all such students in all institutions at all levels. Nevertheless, I hope that my characterization of some such problems with some students resonates usefully with the experiences of at least some other university teachers of HPSTM and helps them to reflect on how their own students learn.

Discussion: Studying Islam after 9-11: Reflections and Resources¹

Gary Bunt

PRS-LTSN University of Wales Lampeter

N ew considerations have emerged in relation to the study of Islam and world religions after the events of September 11 2001 (referred to here as '9-11'). These can appear to be footnotes in relation to the 'bigger picture', but could have a significant impact on approaches to the study of religion, and indeed to wider academic concerns; whether the issues themselves are 'religious' in nature is perhaps open to question. However, many academics associated with the study of religion and/or Islam will have been asked to provide opinions for the media on diverse issues deemed by journalists as being 'associated' with their field of study. Some may have seized on this opportunity to promote their views to a wider audience, although for others the physical and intellectual dangers of being edited or quoted out of context have led many academics to disconnect their telephones and modems.²

There is certainly a new and sustained interest in the study of Islam and Muslim societies, especially given the deficiencies in knowledge highlighted through various governmental and media pronouncements on the subject. Books on Islam, including those produced by academics, have been enjoying an international sales boom, whilst the Qur'an has been reprinted to meet a growing demand, and newspapers have introduced basic guides to Islam. These in themselves have been revealing, in the forms of Islamic expression that have been emphasised; there may be little attention paid to the cultural and religious diversity under the umbrella of Islam, with a focus instead on political rhetoric and activism at the expense of quietist, mystically oriented

¹ This article first appeared on the PRS-LTSN website. All resources referred to and underlined can be accessed via the internet from a page of links:

http://www.prs-ltsn.ac.uk/relig_studies/discussions/islam/islamlinks.html ² See Joe Plomin, "<u>Five-minute fame</u>", The Guardian, October 2, 2001.

beliefs (which themselves have considerable antecedents within Afghanistan).

There may be an attendant increase in demand for academic courses at university level in the study of Islam and Muslim societies, and the need for more specialists in the medium to long-term. It has been suggested that there is also a broader interest in the study of religion, and perhaps the moral and ethical issues associated with the conflict. The need for improved knowledge about religion has especially been highlighted during recent events with the attendant deficiencies in governmental and agency intelligence on the religions, cultures and languages of Asia. President George W. Bush himself acknowledged that a theologian would have been useful on his team, especially given the unfortunate application of the terms 'crusade' and 'infinite justice' during initial pronouncements on the crisis. Whether this demand could be met in part through graduates in theology and religious studies is open to question, and some colleagues may have ethical and moral qualms about training their students for such future activities. The role of tutors within religious studies may evolve and/or be challenged in the light of 9-11. The demand for specialists may increase the number of people studying religion at undergraduate and postgraduate levels, although their expectations of the profile, orientation and content of courses may be different from 'traditional' students.

Certainly, the content of many Islamic Studies courses had to be adjust in the light of 9-11, and the subsequent pursuit of Osama bin Laden, al-Qaeda and the Taliban. This required flexibility was not unique to that crisis. The writer runs a course of Islam in the Contemporary World, which has always incorporated interpretation of current affairs relating to Islam and Muslims. The content of a course curriculum has been adjusted at times during a lecture to take account of breaking news. For example, the writer was running a seminar-lecture over a two-day period on Afghanistan. On the first day, Kabul was in the control of the Taliban; during the second lecture, Kabul was in the process of capitulating to the Northern Alliance (on 13 November 2001). The content of the seminar was radically readjusted, and informed by newspapers and 'rolling news' from the Internet.

Given the limited academic sources on the Taliban, this portion of the course relied heavily on the use of Internet and media sources to 'update' students, together with a book written by Pakistani journalist Ahmed Rashid on the Taliban (updated through his Daily Telegraph reports).³ Opinion and debate was also stimulated through showing programmes such as *Panorama* and *Kilroy*, both of which contained heated debates on the crisis, which led well into subsequent student analyses and discussion (especially in relation to media representation of Muslims and Islam). Such resources, when applied appropriately, can be successfully integrated with 'academic' materials.

In seminar settings, I have noted a particular increase in interest in other themes that dominated events after 9-11, including themes of 'jihad', martyrdom, and the place of religion in the contemporary world. In many ways, the crisis has stimulated student interest in 'real' issues, with an attendant increase in reading academic textual, theoretical and theologically centred materials. This can be very different from teaching historically based courses, but I also observed the necessity to discuss such issues within my course on the life of Muhammad, in particular the precedents established during the early Muslim community and the representation of key issues within the Qur'an and biographical sources.

Within such an academic framework, sensitive issues are raised, particularly those associated with perceptions of 'the other', and the formulation of academic material in a rapidly shifting global context. The consideration of contemporary themes has to be integrated into conventional pedagogy, although practitioners may question whether it is it possible or necessary to be academically 'impartial' to world events of this scale. Students themselves present value judgements, in particular in relation to religion and its representation in the media. The emotional shock of 9-11 may have caused some to suspend faculties of impartiality. Some Muslim students may have felt under pressure from their peers, especially given the comments circulating about Islam and Muslims. It may be difficult within such a context for them to feel secure in presenting opinion about events, for fear of reaction not just from people who are not Muslim, but also from their own community. Some may articulate implications and suspicions, for example if a Muslim student questions the bombing of Afghanistan. There may also be reactions if a student is dressed in a fashion that is associated by others with 'fundamentalists'. The constant need to defend individual beliefs is an added pressure for some students, especially if it is felt necessary to

³ Ahmed Rashid, *Taliban: Islam, Oil and the New Great Game in Central Asia* (London: I.B. Tauris, 2001)

separate themselves from the parties alleged to be associated with the attacks on 9-11.⁴

It may be that individual students are associated with controversial Muslim perspectives that have been active on some university campuses, and this itself brings another dimension to approaching the teaching of Islam and reactions to 9-11. A student may utilise the forum of a seminar to present potentially inflammatory political and religious opinions. Questions have to be asked as to what the role of a tutor is within this process, and if it is ethically and morally appropriate to engage in such discussions? One example of such an outspoken platform is Al-Muhajiroun, which is certainly not representative of any 'mainstream' and has been opposed by Islamic Societies that are more 'conventional'; however, it has been successful in recruiting from campuses across the UK. This subject might be appropriate for a future discussion through the PRS-LTSN Journal pages, although institutions may not wish to be associated with students that have such affiliations, and may not appreciate the attendant publicity! This issue could be extended to cover the teaching of religion in other contexts, where individuals have beliefs that are deemed 'contentious' by some. Theoretically, some individuals may see the teaching of beliefs other than their own as being in this category!

Serious questions emerge relating to the attendant stress and psychological damage an event of this magnitude can have on students and lecturers (not just those whose disciplines may be 'associated' with the event). At this stage, it may be difficult to determine the impact on Muslim students in university settings (not just in the PRS disciplines) facing a new media barrage focused on their religion, and (in some quarters) an attendant increase in prejudice and tension. It may be that PRS specialists are called in by other disciplines in order to formulate approaches to such issues. Islam-related studies traverse many disciplinary frontiers outside of PRS, perhaps requiring a breaking down of conventional academic barriers to discourse. It is also important to compare and contrast experiences with individuals outside of the British framework. The writer is currently dialoguing on these themes with European and American academics in a broad range of related disciplines, and hopes to integrate themes from these discussions into a future article for the website (http://www.prs-ltsn.ac.uk).

⁴ There are parallels here with reactions to the Gulf Crisis in 1990-1. Comments here are observations, and are not connected with students at the writer's own institution.

Resources

All the underlined resources are linked into the following web page: http://www.prs-ltsn.ac.uk/relig_studies/ discussions/islam/islamlinks.html

For the purposes of this article, several useful English language resources on Islam and Muslim opinion after 9-11 are highlighted, which could be applied to stimulate student discussion about Islam in the light of 9-11 and subsequent developments. Some could be described as apologetic in nature. The choice includes materials that are 'introductory' in nature, to be used either in PRS related courses, which might refer to the conflict (i.e. philosophical considerations regarding warfare), or by those outside of PRS disciplines. Opinions expressed on the sites should not be taken to reflect those of the author or of PRS-LTSN.

One key issue is the acquisition of information and opinion about the aftermath of 9-11 from a broad range of sources, in particular to balance media coverage and opinion. The Internet, along with satellite television channels such as Al-Jazeera, has been integral to the distribution of a broad range of Muslim opinions dealing with 9-11 and its aftermath. These range from sites introducing the basic teachings of Islam, through to pages that can prove to be valuable resources in the evaluation of Muslim responses.

One of the most interesting responses, which could be applied within a seminar setting, is a radio programme produced by Minnesota Public Radio, as part of their First Person—Speaking of Faith series. The one-hour programme, entitled <u>The Spirit of Islam</u>, can be heard using a Real Player^{TM.5} It features interviews with two American Muslims, who discuss "how sound, music, and especially poetry offer a window onto the subtleties and humanity of Islamic religious experience." This is very much in contrast to much of the media coverage about Islam since 9-11, and would be a helpful introduction to students who have not studied the subject before, or who have only approached Islam from a political interpretative perspective. There is also a listing of introductory reading that reflects the spiritual dimensions of Islam, together with details of the recitation and music featured in the programme. Some of the music

⁵ Minnesota Public Radio, First Person—Speaking of Faith, Religion and Disaster II, The Spirit of Islam, October 19, 2001. For copyright reasons, this can only be heard using a live feed at present, although it could be recorded through application of a CD writer or the Professional version of Real Player.

comes from Afghanistan, whilst a highly proficient Muslim woman, described as a "non-clerical recitor of the Qur'an", explains her approach towards the Revelation.

There are several useful introductory books to Islam available, most recently the provocatively titled *Complete Idiot's Guide to Understanding Islam*, whose publication date was brought forward after 9-11.⁶ However, locating appropriate introductory resources to Islam online can be problematic, especially given the rapidly shifting Internet landscape, which became more complex after 9-11 when several sites vanished from cyberspace. The writer has provided his own website of <u>Islamic</u> <u>Studies</u> resources since 1996, which contains annotated links to a series of websites discussing different aspects of Islam and Muslim expression.⁷ These range from Qur'an recitations and translations, through to illustrations of the diversity of Islamic expression, in political and religious contexts.

In terms of reactions to 9-11, perhaps the most useful component of the site has been the collection of <u>news feeds</u> built into the site, drawn from numerous international sources, which are updated on an hourly basis. Students and researchers have utilised these, as they offer a quick and comparative approach to interpreting current events. The <u>Islamic News</u> feed provided by Newsnow has been particularly relevant, especially as it draws from major English language sources in the USA and UK, as well as media sources in the 'Muslim world'. Moreover.com provides regional headlines, and a thematic <u>Religion</u> source; they recently added a <u>Muslim</u> channel, to add to <u>Buddhist</u>, <u>Catholic</u>, <u>Christian</u>, <u>Hindu</u>, Jewish and <u>Sikh</u> news). With the exception of the Jewish channel, these are unedited feeds that trawl the net for key words, so the occasional discrepancy and omission can occur (notably the opera singer Charlotte *Church* frequently turns up in the Christianity section). In the aftermath of 9-11, a <u>Taliban</u> channel also emerged.

Another useful Islamic news source has been <u>UmmahNews</u>, drawing from a broad range of international media, and seeking to provide "an independent and non-partisan global media service offering original and accurate news and features without relying on western news

⁶ Yahiya John Emerick, *The Complete Idiot's Guide to Understanding Islam*, (USA, Complete Idiot's Guide, 2001)

⁷ For a comprehensive listing of Islamic resources online, see the writer's website, <u>Virtually Islamic</u>. Also see the Islam chapter in Gary Bunt, <u>The Good Web Guide to</u> <u>World Religions</u>, (London, The Good Web Guide, 2001)

services."⁸ <u>Middle East Newswire</u> draws on its own network of reporters in an attempt to go "beyond the headlines". The Pakistan newspaper <u>Dawn</u> provides an extensive online version of its print edition. <u>Afghan</u> <u>News Network</u> presents primarily western newsfeeds, as part of its educational resource site. <u>Al-Bawaba</u> presents daily news stories in English, from throughout the Middle Eastern region. The Muslim News provides one news perspective from Muslims in the United Kingdom, whilst <u>Islam Online</u> contains news and opinion from American Muslim perspectives.

A particularly significant development in the acquisition of Muslim news and opinion is contained on the Arabic language Al-Jazeera website, with content reflecting the television channel based on Oatar. There are plans to launch an English language service next year, but in the interim, it is possible to acquire a sense of the content contained on the website through a new online translating system. Despite the inherent difficulties of such software, it does opens up at least some sense of the Arabic language Internet content, and thus broadens educational opportunities for those students lacking language skills. In order to translate any Arabic page into English, the web user should visit the separate Ajeeb translation service (which itself offers English language news). The translator works by typing the required URL (Uniform Resource Locator or web address) into the form on the page, and pressing the 'Translate' button. Alternatively, there is a listing of Most Visited Sites, which can be quicker (and is headed by Al-Jazeera). As with any translation software, the computer-generated syntax may be twisted, and at times bizarre, but it does open up sources for nonlanguage specialists and provides an alternative inclusive perspective.

Outside of news feeds, a useful starting point for opinion is contained on <u>Islam for Today</u>. This is focused on 'converts' to Islam, and contains an extensive series of articles and links seeking to "promote a positive image of the *religion* of Islam today". A key area is the <u>Muslims</u> <u>Against Terrorism</u> section, which contains quotations from the Qur'an and other sources. These include fatwas against the events of 9-11 from Muslim scholars and authorities. There are illustrations of the attacks, and also of demonstrations for- and against- the United States. The section on the <u>Plight of the Women of Afghanistan</u> contains a representative sample of academic and journalistic articles documenting the treatment of women by the Taliban. Some of the material is quite graphic in nature, and links to the extensive site produced by the

⁸ <u>UmmahNews</u>, About Us

<u>Revolutionary Association of the Women in Afghanistan</u> (RAWA). These pages incorporate digital photographs secretly taken to document the deprivations of the region, and to comment on how RAWA has endeavoured to provide health care and education in the face of adversity.

Academics have also endeavoured to produce responses to the crisis. Alan Godlas of the University of Georgia provides an exhaustive list of links to articles on the crisis, focusing on condemnations from representative, Muslim organisations, leaders governmental and 'personalities'. It contained a photo of President Bush with 'American Muslim leaders'. This site leads into other resources and perspectives on Islam, and features articles drawn from a broad range of primarily American media sources, including interviews with Yusuf Islam (Cat Stevens), and a site produced in conjunction with the American Academy of Religion denouncing the attacks on 9-11. Godlas' listing is comprehensive, and perhaps overwhelming in its detail, but could be of use to those seeking to gather a broad range of opinion about 9-11 and its aftermath. The online academic response from religious studies and theology academics in the UK was muted by comparison.

Whether these resources would be useful for critical study is open to question, particularly in the context of the UK It may be helpful to contrast them with opinions contained on the pages of the <u>Muslim Council of Britain</u>. This has the most pro-active website of the several platforms seeking to represent the interests of Muslim communities in the United Kingdom. Its site includes a statement made by <u>British Imams and Scholars</u>', defining 'terrorism' and discussing the implications of 9-11 for Muslim living in the UK. There is also an <u>archive</u> containing the emails (negative and otherwise) sent to the Council after the attacks that makes for sober reading. At the time of writing, there were 105 pages of correspondence. There were also links to the <u>UK Islamic</u> <u>Mission</u> site, which itself contains hyperlinks to <u>Jamaat-e-Islami</u>, vocal supporters of the Taliban in Pakistan.

In any analysis of the post 9-11 situation, attention should also be drawn to materials implicitly or overtly in support of the Taliban and Osama bin Laden, even it these are unrepresentative of mainstream opinion. For example, <u>Al-Muhajiroun</u> have maintained a website throughout the crisis, although at times it has been relocated or occasionally disappears. Other related platforms that are still active on the web in the UK include the <u>Khilafah</u> movement and <u>Hizb ut-Tahrir</u>. Outside of the UK, a number of organisations have been proactive in their support of the Taliban and Osama bin Laden, and these are discussed elsewhere by the writer.⁹

Conclusion

New questions have emerged in the teaching of Islam since 9-11. At a time when institutions are seeking to widen access to education, the needs and broad interests of students in PRS have to incorporate empathy towards those who feel directly or indirectly affected by conflict. Philosophical, religious and even psychological issues associated with the aftermath of 9-11 have had to be addressed. The academic requirements of objectivity and reliable sources have been challenged by the need to draw upon alternative perspectives and non-conventional resources, in order to augment traditional materials. This has been particularly problematic, given the onslaught of opinion about Islam and Muslims that has emerged not just in the media, but also in everyday conversations. The application of the Internet as a teaching tool has been one way in which debate and discussion within the seminar room has been informed. Determining what is 'appropriate' for study is an evolving process. The question of whether PRS academics have a role to play in influencing opinion about Islam and Muslims, and even providing an educational role for government and media, is one that needs to be addressed. It is hoped that PRS-LTSN can, in the future, initiate a debate on these issues beginning with the workshop to be held 12th March 2002.

Readers wishing to discuss any aspect of this article are welcome to e-mail Gary Bunt (gary@prs-ltsn.ac.uk). It would be particularly useful to learn of colleagues' own experiences and approaches towards these issues.

⁹ See Gary Bunt, Virtually Islamic: Computer-mediated Communication and Cyber Islamic Environments (Cardiff, University of Wales Press, 2000)

Discussion: Speaking the Sexual

Julia Collar

PRS-LTSN University of Wales Lampeter

Scanning through the websites of departments of Theology and Religious Studies around the UK I was extremely surprised at the lack of module contents specifically pertaining to sexuality and religion. In the light of Marcella Althaus-Reid's passionate assertion that all theology is sexual theology,¹ in that subscribing to a religion also necessarily entails subscribing to a code of morality and ethics that govern the interaction of the body with society and the environment, why are there so few modules that mention sexuality as more than a passing reference, let alone devote a whole course to it? Who speaks for the sexual?

The study of sexuality as a serious scholarly pursuit has been slow in being realised, especially in fields of expertise beyond medicine or psychology but it seems that Religious Studies in particular has been rather left behind in its engagement with the subject. I wonder if this is not because the inherent assumption is that religion and sexuality are eternally in conflict especially in the increasingly secularised West, and to engage with such emotive and fervently pursued arguments may be rather more than many are prepared to deal with. However, if we are interested in the pedagogical implications of teaching religion to students who themselves bring their own religious beliefs to the lecture hall then it ought to be the case that the pedagogical opportunities and dilemmas thrown up by introducing sexuality into the equation are just as important. Students may have religious or secular beliefs that colour their access to information, ability to debate, and affect their learning outcomes but first and foremost these students are gendered bodies, replete with hormones, and are consequently sexual, and in some cases highly sexualised, individuals.

¹ Marcella Althaus-Reid, *Indecent Theology*, Routledge, 2000 PRS-LTSN Journal Volume 1, No. 2, Winter 2002, pp. 165-168 © Copyright PRS-LTSN, 2002

Many aspects of religious life revolve around prescribed cycles of human relationships; birth, marriage, rites of passage, ritual activities at times of festival or in the context of day to day living are all, to a certain extent, dependent on acknowledgement of gender and sex yet are very often not dealt with in this light. Whether this is because it is assumed that every student will automatically deduce this, or whether it is because it is difficult to teach, or whether it is because it is seen as irrelevant is unclear and probably not reducible to a single consensus.

From a student's perspective however, sexuality and gender can be very appealing both out of curiosity and out of the peculiar 'hip' factor some courses generate. Dr Ashley Tauchert from the University of Exeter mentioned at an IFTR (Institute for Feminist Theory and Research) event on feminist pedagogy held in January² a theory she had about student enrollment on a course she teaches covering feminism in English Literature. She stated that to her surprise the course ended up with a majority of male students and she attributed this to the fact that for a male student in the cut and thrust of university social life, to have an understanding of feminism can be very much a boost to status and certainly curries favor with the opposite sex. Dr Tauchert originally wondered whether the male students may have enrolled on the course to disparage, however she found that their understanding and empathy with the subject in hand developed throughout the duration of the course in a way she could not have predicted and which resulted in the students seeking deeper levels of learning for themselves. It can be argued that feminism is a long way from gender and sexuality however, but this example does point to the fact that such potentially controversial subjects and circumstances can be very popular and a means of attracting students to classes they might not necessarily consider.

Sex and sexuality can also perhaps be more obliquely useful for maintaining student engagement with learning. In a 1997 issue of the Times Higher Education Supplement in an article titled 'Sex as a Method,' Julia O'Connor Davidson at the University of Leicester explained why she used sex as a consistent working example in order to get across theory on sociological method, which her students found very dry and difficult on which to concentrate.

² See p. 93.

"I thought if I took examples of method to do with sexuality it might help because students are always interested in sex," she says. "It meant they actually listened."³

Not every lecturer would necessarily feel comfortable handling such material, which leads me to speculate whether there are certain assumptions, originating both from students and other lecturers, about what a person who teaches in this way is like.

Thinking back to sex education at school I think there are few who have not, either unintentionally or otherwise, come to characterise their instructors in one of two stereotypical directions. I remember fondly a very stout and stern looking deputy headmistress who took my inner city class of unruly teenagers through sex education. She did this with a stately decorum worthy of Hattie Jacques' indomitable Matron character, loosing her composure only once when the class dissolved into hysterics after she absent mindedly observed that the condom packet was empty because one of the science masters had been using them. She was able to control the class because her manner turned the student's embarrassment into a perceived weakness, it was wrong to be uncomfortable with the subject matter in her eyes and I wonder if she didn't try and maintain absolute control because she was frustrated with her own discomfort. The other stereotype is not so much based on gender but on demeanor: the teacher who is more relaxed and a bit 'right-on' and trendy, who is able to deal with their embarrassment by making it comfortable enough for the students to be embarrassed too. Some of these teachers were very effective no doubt but how long did it take for the casual attitude and informal atmosphere to degenerate into smut and innuendo?

In the case of Religious Studies and sexuality I wonder if the same kinds of stereotype prevail. Do students expect on the one hand a lecturer who handles their learning about sexuality and religion with clinical precision and detachment, or do they expect an instructor who can engage with them on their own level and make the subject as interesting as its allure suggests? Are we suspicious of someone who wants to teach and research in sexuality? Do we suspect that there is more to their motives than academic interest; are they perhaps looking to espouse personal polemic, or to bring their perversions out for display and discussion, or to coerce or abuse their students? I am purposely using pejorative language, as I would wish to argue that it is perhaps

³ Available online to subscribers at

http://www.thesis.co.uk, Sex as a Method by Harriet Swain, 22nd August 1997

assumptions like these that have contributed to the neglect of sexuality in the field of Religious Studies.

Though religions may place value on virtue, sex and sexuality within certain boundaries, and the disapproval of breaking sexual conventions and contracts, this is not what Religious Studies wishes to endorse as well. Religious Studies is uniquely placed to be able to teach students the background and debate to the religious sexual standards that have become deeply engrained in society's morality, to provide opportunities for discussion on territory a majority of students will have some experience of and are enthusiastic to engage with, and to potentially provide an access point to difficult theories or unpopular material through a pedagogy of sex and sexuality. If Althaus-Reid is right, it must be asked who *can* speak for sexuality within the Religious Studies academy and when will this happen?

Practical Teaching: How to Cheat in Koine Greek

Jane McLarty

Lucy Cavendish College, Cambridge

A large proportion of those who study *Koine* Greek at university are theologians for whom New Testament Greek is a compulsory option. They are not primarily linguists and see the language as a means to an end. For the teacher, therefore, the challenge is firstly to keep up their morale and make the classes as enjoyable as possible; then, to remember that knowledge of grammatical terminology may be nonexistent and experience of language learning techniques also lacking. It is important that students are enabled to see some reward from their studies as quickly as possible, and so aids to language work such as an analytical lexicon or grammatical analysis will help keep the student motivated. Web resources can also make the task of language learning fun, and provide useful aids for the teacher, whose patience, humour, and determination to get the students through the examination, in the end constitutes the best resource for the students.

I must start by confessing that I am a turncoat: my first degree was in Classics. Subsequently I worked in the City for five years, returning to Cambridge when I could stand City life no longer, to study for a two year M.Phil. in Theology. I soon discovered myself in demand to help undergraduate theologians with their Greek (I recommend Professor Moule's Idiom Book of NT Greek as a quick conversion course for classicists) and found that I enjoyed supervising these students. Three years ago I was asked to take on one of the theology faculty's New Testament Greek Beginners' classes; last year and this I taught two classes and I am now Paper Co-ordinator.

I have some understanding of the task that faces these theologians since I started Classical Greek at eighteen myself, not unusual these days when so few schools are able to offer Greek. I had studied Latin since the age of twelve, and in preparation for the Cambridge Entrance Examination my Latin teacher offered me Greek lessons after school. I was full of excitement at the prospect of learning what I saw as an attractively "secret" language, and with one-to-one tuition, and of course building on the basis of all the Latin grammar endured over the years, we got off to a roaring start.

The situation for students in the Theology and Religious Studies Faculty is rather different—hence the title of this paper. Our policy is that all students must study a biblical language in their first year. The choice is Hebrew, Arabic, Sanskrit, or New Testament Greek. Unsurprisingly the majority plump for Greek, and are roughly sorted into four groups depending on their experience of language learning. I teach what we call the Beginners' group, i.e. those who have little or no experience of language learning. Consequently, for the first lesson of term many of the faces arrayed before me exhibit a sort of sullen apprehension at the thought of the ordeal that lies before them.

So, one of my major concerns when dealing with these nonlinguists is to build up morale. The technique I favour is a relentless cheeriness, which means that as term wears on one comes more and more to resemble Joyce Grenfell in one of her more manic incarnations. A fair proportion of the class are there simply because they have to be, and therefore I see it as important to make the experience as painless as possible, and perhaps even enjoyable. Even those who are interested in the language do not have the same attitude towards it as a classics undergraduate does; they are theologians, and see the language as a means to an end. Of course they recognise that being able to refer to the original will be useful when they are dealing with New Testament texts, but still their primary concern is theology or ethics or religion, and not the language itself.

After morale, the next hurdle to overcome is the language of grammar itself. I think this particular problem may diminish in a few years, as the government now prescribes some quite complex grammar training for primary school pupils, but at present it is still important to make sure you use no technical term such as adjective or adverb without explaining it. This is why the first items on the attached bibliography are there. The problem of terminology need not be a major one, so long as you are prepared for it and take care not to assume that students will know what you may think of as the simplest of grammatical terms

So, after terminology, what are the difficulties? Simply using a lexicon can be a major undertaking. As a relatively late beginner in Greek, I still remember the frustration of spending five or ten minutes trying to track down a verb in Liddell and Scott. It was therefore a revelation to me as a classicist to discover the joys of the Analytical Lexicon, various editions of which are readily available for New Testament Greek. Every word of the New Testament is in it—you simply look up what you see and it tells you the parsing. Some may well feel that this is an unacceptable level of "cheating", but the student still needs to know the implication of the imperfect, the perfect, the aorist, and so on, for translation. Moreover, for students who are non-linguists, it is important that they feel that they are getting somewhere and translating some Greek as soon as possible, since they do not have the love of language learning in itself to keep them motivated. In our end of year examination, students are given an extremely compact lexicon (not analytical) to use, and so we do practise the techniques of word finding in class.

Another point to remember is that non-linguists may never have learned any vocabulary in any kind of structured manner. This too is a technique like any other and can be taught. There are fun little programs you can download from the web which will suddenly pop up on your computer screen at random moments and test you on Greek vocabulary (I am not sure whether this is an attractive prospect or not). There are also books available that list vocabulary in the order of its frequency within the New Testament. I think it would be a keen student who used them, but they are extremely helpful for the teacher when assigning vocabulary to be learnt.

There is another step in support beyond the Analytical Lexicon and that is the Grammatical Analysis, which verse by verse parses almost every word in the New Testament and explains grammatical idioms. I must confess that the classicist still lurking within me is aghast at this level of help (while wishing I had had it for Aeschylus), but it can be a huge aid to learning if used as a support for the student's own efforts rather than a substitute for them.

So far I have mostly dealt with printed resources—what about the web? Interactive on-line material can be great fun to use and I have listed a couple of useful gateway sites on the bibliography. There are grammar-learning sites where you can practise parsing. There are sites containing the whole of the New Testament where you can click on any word and have it parsed for you. There are invaluable sites for the teacher where you can define the grammatical category you want to see (e.g. second aorist subjunctive or third person singular) and you will see listed on the screen all the occurrences in a particular book.

I cannot resist a rather sentimental ending: all of the above are useful resources but the greatest resource is the language teacher, with his or her patience, sense of humour, and frank admission that the aim of the class is to shoehorn students through their compulsory exam as efficiently as possible. At the end of every year, I have students who come up to me and say, "I didn't expect to enjoy the Greek, but in the end I really did." One or two of them even decide to carry on with more Greek in their second year and this is what, of course, makes it all worthwhile.

The following is intended just to give a flavour of the resources available.

English grammar:

S. Russell, Grammar, Structure and Style: A Practical Guide to A-level English, (Oxford 1993).

Readable and helpful section on "the grammatical structure of English"

L. Jones, Progress to Proficiency (Cambridge, 1991).

Aimed at foreign language students—very readable, good as reference work (there is a teacher's and a student's edition).

Help with vocabulary and grammar:

Analytical Lexicon of the New Testament—there are editions by Mounce and by Perschbacker.

Enables students to look up the form as it appears and get the parsing. Especially useful for those who will be continuing Greek on their own (e.g. vicars!).

M. Zerwick, SJ, and M. Grosvenor, *A Grammatical Analysis of the Greek New Testament* (Editrice Pontificio Istituto Biblico, 1996).

Parses, translates difficult phrases, comments on implications for meaning.

C. L. Rogers Jr. and C. L. Rogers III, *The New Linguistic and Exegetical Key* to the Greek New Testament (Zondervan Publishing House, 1998)

Similar aims to the Grammatical Analysis. Better laid out; but does not always explain the points beginners find difficult. Useful references to commentaries and other dictionaries.

Resources on the Web:

http://www.christianorigins.org Maintained by Dr Justin Meggitt, University of Cambridge

The New Testament Gateway http://www.ntgateway.com

Site maintained by Dr Mark Goodacre, Department of Theology, University of Birmingham

The author of this site describes it as "the web directory of internet resources related to the New Testament". Its coverage is extremely comprehensive, ranging from material on Christian art and film to links to societies of biblical scholars, but for the purposes of this review, I shall focus on the linguistic tools available through the site (with just a brief survey at the end of the other kinds of resources covered, for those who might be interested to explore further).

The site is a gateway site, in other words, it is fundamentally a collection of links to other websites. A good gateway site saves the internet surfer a great deal of time by performing something of a quality assurance role: gathering together useful sites and telling you a little about what they offer. This site is excellent in that it is clearly laid out, easy to navigate, and gives a brief description of every link which enables you to home in on the material useful to you and also alerts you to any quirks of the particular site (for example: whether you need a particular font in order to view Greek characters).

The linguistic material is gathered together under the main menu option *Greek NT Gateway*, and contains many links invaluable to the language teacher and to students. Under *Greek New Testament Texts* are links to twelve (at the time of writing) on-line Greek New Testaments, plus Dr Goodacre's "all-in-one" facility allowing the user to search several of these texts from one page. The site I've found invaluable in teaching is the late Tony Fisher's on-line New Testament search tool. This will display selected chapters, and you can then highlight words with the cursor and have them parsed for you; or, you can enter a desired word or form (e.g. aorist active imperatives) and it will display all occurrences in a specified text, such as John's gospel. A marvellous site for painlessly constructing handouts on particular aspects of grammar, such as the subjunctive!

The Learning New Testament Greek section has links to on-line textbooks and courses, to sites aimed at developing vocabulary, and even to sites which test your knowledge of Greek accents. Under Grammars and Lexica you can support this learning by using on-line resources such as the Liddell-Scott-Jones lexicon, or a Bible Dictionary keyed to Kittel and the TDNT. The beginner and intermediate student can obtain guidance on printed texts from the Bibliography section, which has links to sites listing and describing the major dictionaries and grammars. This is useful: often students who have taken a Beginner's NT Greek course are given little indication of the resources they'll need for more advanced independent study. Incidentally, the Bookshelves section accessible from the main menu enables the user to order on-line-Dr Goodacre states that he includes books that are recent, that have been recommended by others, that he has found helpful or that he thinks will be useful to those using the site. Featured books also appear at the relevant menu levelsfor example, Mounce's book on the Basics of Biblical Greek currently features on the Greek NT Gateway page

Turning to the *Language* option, the student can obtain detailed "applied" help on the text—notes, parsing and diagramming. If after all this you are still foxed by a tricky verse, there is a discussion list focussing on analysis of the Greek New Testament and the Septuagint where you can converse with real live people.

Both teachers and students will appreciate the links to sites offering free software. The *Fonts* section leads you to a range of Greek fonts, many available free, an especially useful link for students. Under the *Computer Software* menu option is a range of programs—computerised flashcards, a Greek "hangman" game, and a particularly (to me) entertaining free program to be downloaded onto your computer, where it sits as an icon on the screen and every so often pops up to test your vocabulary. I described this program to my Greek class, and strange to say, they were rather less enthusiastic about the idea than I am.

I have also found useful another collection accessed from the main menu, *Bible Translations*, which links to sites offering collections of searchable translations, so that you can for example compare the King James Version of a passage with the Worldwide English New Testament. This is a great resource for producing hand-outs which get students to think about *why* translations vary.

I have described above only three of the main menu items there are a dozen or so more offering links to material on specific New Testament books (e.g. on-line articles, discussion lists) and on apocryphal texts; your surfing can take you from maps of Paul's missionary journeys, to a whole section on the Synoptic Problem (featuring diagrams and texts coloured to show their relationships), to on-line galleries of religious art.

Dr Goodacre's site is, I think, an outstanding resource. Credit should also go to Viola Goodacre who has carried out the design work, making it a site that is both attractive and easy to use. I do have a warning for users however—such is the site's range and scope that it is far too easy to wander in it for hours ...

About the Journal

Subscriptions: The *PRS-LTSN Journal* is free to all individuals working in higher education in the UK and is freely distributed to all those registered as interested parties in our subject areas. You may register at

http://www.prs-ltsn.ac.uk/registration/index.html

For institutions and overseas individuals the rates are as listed below:

UK individuals—no charge Individual subscribers outside the UK—£20 p.a. Library subscriptions—£35 p.a.

Submissions to the journal can be sent via our website (http://www.prs-ltsn.ac.uk/) or by post or email to the address below. We reserve the right to publish articles submitted for publication in both printed and digital forms unless a prior agreement is made otherwise. Articles should be no more than 8000 words and should comply with the *Notes for Authors* guidelines available at: http://www.prs-ltsn.ac.uk/journal/authors/index.html

Advertising rates are:

Full page—£250 Half page—£150 Other rates negotiable—contact the editor

Copyright All published articles, discussion pieces and reviews are the copyright of the PRS-LTSN, unless otherwise indicated. It is a condition of publication in either the printed *PRS-LTSN Journal* or in digital form on the PRS-LTSN website that authors assign copyright to the PRS-LTSN. Despite assigning copyright, authors may use their own material in other publications, if and only if they include a full reference to the journal or website, and acknowledge the PRS-LTSN copyright.

The PRS-LTSN Journal

PRS-LSTN School of Philosophy University of Leeds Leeds LS2 9JT United Kingdom Tel: +44(0)113 343 1166 david@prs-ltsn.ac.uk

Published by the PRS-LTSN, Leeds (The Philosophical and Religious Studies Subject Centre of the Learning and Teaching Support Network)

Printed in Wales by Cambrian Printers, Aberystwyth

© Copyright PRS-LTSN, 2002