

The PRS-LTSN Journal

Philosophical and Religious Studies
Subject Centre of the
Learning and Teaching Support Network
Vol. 2, No. 2, Winter 2003

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The PRS-LTSN Journal

Volume 2, Number 2, Winter 2003

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

Contents

NEWS AND INFORMATION

The LTSN and the PRS-LTSN	7
LTSN	8
Activities.....	8
The LTSN Generic Centre.....	8
The PRS-LTSN	8
General Activities.....	9
Projects and Funding	10
ETHICS (update).....	11
Employability (update).....	13
Departmental Visits and Contacts	14
Contacts.....	14
Workshops, Events and Networks	15
Forthcoming Events	15
Other Events	17
Networks.....	18
Other LTSN Subject Centres	19
The LTSN Generic Centre.....	21

ARTICLES

John Sellars	
Teaching Ancient Philosophy	23
Louise Jarvis and Joe Cain	
Posters and Oral Presentations in Undergraduate History of Science ...	50

Rosemary Beckham	
A Preliminary Study of Group Learning/Teaching in the Culture of Religious Studies	73
Appendices A and B (merged) – General Staff Survey and Results	140
Appendices C and D (merged) – Student Survey and Results	153
Tonie L. Stolberg and Peter Fulljames	
An Analysis of the Conceptual Frameworks Utilised by Undergraduate Theology Students when Studying Science & Religion	167
Sophie Gilliat-Ray	
Breaking Down the Classroom Walls: Innovative Teaching and Learning Methods in Religious Studies and Theology	200
Julie Collar	
Third Colloquium on Learning and Teaching Support in Theology and Religious Studies: BA to MA Student Progression	211
About the Journal	224

Process and Development

Welcome to the latest issue of the *PRS-LTSN Journal*. This is the fourth edition of the journal that it is continuing to grow and develop into a unique resource, providing the latest in learning and teaching scholarship in our subject areas, reports on some of our recent events, and news information about our current and future activities.

We are receiving increasingly good feedback for the journal and I hope that this will continue with this issue which, once again, includes output from the projects and mini-projects that we have been funding over the last eighteen months. Indeed, these have been so successful that we will shortly be announcing the fourth tranche of funding, again for projects up to £3,000 (see the separate leaflet). In addition to the expertise and hard-work displayed by the project grant-holders, one of the reasons why this funding stream has been so successful is that the original subject areas that were selected were chosen as a result of a questionnaire sent out during the early stages of the PRS-LTSN's existence. The results of this early questionnaire were very informative and helped shape the direction of the Subject Centre; indeed the very existence of this journal was in response to an overwhelming majority of respondents who said that they would welcome it. Now, two years later, we feel that it is once again time to discover what *you* want from *your* journal. To this end we have enclosed a reader survey with this issue that we hope will help us develop the publication as it becomes an established part of the scene. Could I please ask that you spend a few minutes

to complete and return it to us. We will be publishing the results of the questionnaire in the next issue of the journal.

In this issue of the journal we are very pleased to publish the second part of Jarvis and Cain's series on the diversification of forms of undergraduate assessment in the History of Science. Building on their previous article on examinations and essays, this time they concentrate on assessment using posters and oral presentations. Once again their paper contains much that could be of use to those teaching beyond the History of Science. Indeed, I know that many of you are thinking about new ways of assessment as a means of tackling plagiarism. Jarvis and Cain offer us some excellent insights into how oral assessment can be implemented effectively. Posters are not a medium that we have traditionally used as a means of assessing undergraduate students in PRS. Nevertheless, Jarvis and Cain discuss the benefits of using posters in this way as well as providing some excellent advice on how they can be used.

Sellars presents an overview of the teaching of ancient philosophy. In addition to providing us with a number of useful resources, especially web-based resources, he examines a wide-range of historical and contemporary approaches. Of particular relevance is his discussion of the interdisciplinary nature of ancient philosophy and his addressing difficult issues such as the extent that classical languages should be taught to undergraduates in an age where relatively few possess such skills.

Beckham examines the use of group work in religious studies. In a wide-ranging article she presents the results of a survey that aims to examine the role of group work in the subject, and gives us an insight into its benefits in the cultivation of key skills such as critical thinking, and in the development of student-centred learning. In examining the results of the survey Beckham provides us with a useful analysis of how both departments and individuals view the use of group work in religious studies, and gives us some examples of good practice in this important area. She follows this up with a more in depth analysis of practice in a number of specific case studies. Together these approaches help us to understand the usefulness of group work in a religious studies context.

Stolberg and Fulljames highlight the recent increase in the number of science and religion courses in UK Higher

Education. They question the expectations that student learners bring to such courses and ask whether these are the same as their teachers, especially their understanding of the dialogue between science and religion. Stolberg and Fulljames provide us with a great deal of information taken from a survey of students taking courses in science and religion, presenting us with an invaluable insight into their attitudes and expectations. This, I am sure, will be of great help to those involved in the development of science and religion courses and modules to design them with the student in mind.

I hope that you enjoy reading this issue of the journal, but whatever you think of it, I hope that you will let us know by returning the survey.

Simon G. Smith,
PRS-LTSN Centre Manager

For up-to-date information on all
developments at the PRS-LTSN:

<http://www.prs-ltsn.ac.uk>

Welsh access:

<http://www.rhcda-aac.ac.uk>

News and Information

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

<http://www.ltsn.ac.uk/genericcentre/index.asp>

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.

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 mission of the PRS-LTSN is to enhance teaching quality and improve the student learning experience for all in the context of a changing educational environment.

More specifically, we aim:

- to be the accepted source of information and advice to PRS subject communities on subject-specific and relevant generic educational issues;
- to promote the discovery, development and brokerage of good and innovative practice in learning, teaching and assessment;
- to develop and maintain a national and international profile;
- to identify and disseminate current and future national policy objectives in learning and teaching and to assist departmental implementation where appropriate.

We provide the following services and resources:

- individual consultations;
- departmental visits;
- grants and funding for learning and teaching projects;
- a comprehensive website of electronic resources and reviews;
- the *PRS-LTSN Journal*;
- national and regional workshops and conferences.

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.

Other Contributions

Additionally we rely 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.

Please see the enclosed leaflet on our past and current projects and on the next round of funding opportunities.

Ethics Teaching Highlighted in Contextualised Scenarios (ETHICS) (update)

The PRS-LTSN has been awarded development funding from the LTSN Executive for a collaborative project involving six subject centres, to examine, collate and disseminate best practice in the teaching of subject-specific ethics. The PRS-LTSN is the lead subject centre for this project. The other partner subject centres are:

- Bioscience
- Health Science and Practice
- Law (UK Centre for Legal Education)
- Medicine, Dentistry and Veterinary Medicine
- Psychology

We have appointed a Project Coordinator for the Centre to oversee the whole project, Dr Susan Illingworth, a specialist in ethics and political philosophy.

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ETHICS Overview

The requirement to teach ethics is a growing one throughout the higher education sector. HE departments must increasingly make provision for the teaching of ethics in relation to their particular subject area(s). Pressure on departments to meet this requirement comes from a number of sources:

- most benchmarking statements make specific requirements for the teaching of ethics;
- professional associations place a requirement on the inclusion of ethics in curricula;

- the embedding of ethics into HE curricula is being seen as an excellent way of providing students with key transferable skills to meet government employability needs.

Yet while the imperative to teach ethics increases, it seems that little has been done to systematically develop the provision of ethics teaching in HE. This has often resulted in situations where either practitioners with little background in general ethics (or moral theory) are teaching it within their own units, or ethicists—very often based in departments of theology and religious studies or philosophy—are engaged in the service teaching of ethics for a variety of diverse departments within their own institutions. The result is that the teaching of ethics across subject communities is often, at best, uneven and is not always specific to the particular discipline.

The purpose of this project is to allow us collectively to examine the current provision of professional ethics teaching across a number of cognate subject disciplines. This will not only identify key concerns and problems, but also help to identify evidence of good practice that can be collected. This will be achieved principally through the identification of suitable contextualised scenarios teaching that will be analysed, disseminated, and embedded through an online and interoperable database, hard copy guides, events, and through the establishment of cross- and sub-disciplinary networks.

To supplement this, the subject centres involved in this collaboration will make money, from their recurrent funding, for mini-projects in pedagogical research. This combination of resources will provide departments and individuals with a ‘one-stop shop’ that can be regarded as the principal service provider in supporting HE practitioners and departments in the learning and teaching of ethics.

Look out for future developments from ETHICS and opportunities to apply for mini-project funding. All publications from ETHICS will be made freely available to the all the subject communities involved, and to the whole of HE.

If you currently teach ethics (moral theory, applied ethics or religious ethics in any form) using case studies (contextualised scenarios) of issues or applied examples please contact us and let us know what you do and how you measure the effectiveness of your course, unit or programme.

Employability (update)

The PRS-LTSN has been given extra funding by the LTSN Generic Centre to survey and analyse current trends in employment for graduates of all the PRS disciplines over the next six months. Analysis of the outcomes of the surveys will lead to development of strategies for improving the employability of graduates in PRS disciplines through enhancements in learning and teaching and making key skills more explicit in current practice. Special attention will be paid to groups of students who are perceived as disadvantaged.

From our initial investigations we believe that successful PRS graduates have a broad-based set of key generic skills that are of high value in many non-vocational careers. The challenge is to build on this insight and to make explicit and enhance the acquisition of these skills. We shall stress throughout that key skills for employability are already deeply embedded in the teaching of PRS disciplines. What is needed is a clearer articulation of these skills (both by academics in writing programme specifications, and by students in applying for jobs), and a more explicit focus on them in teaching and assessment.

All the outcomes will be disseminated through the PRS-LTSN website and journal, and through national and regional conferences and workshops. Please check the website and this journal for developments and future events.

The LTSN Generic Centre has produced a *Directory of Employability Resources* from, which we shall be distributing in hard copy to all departments in the very near future. Extra copies are available from the PRS-LTSN—please contact us. Additionally, we shall be surveying all departments on employability issues. If you would like any further information, support or advice on related issues, please do get in touch.

Departmental Visits and Contacts

Departmental Visits

We have now visited over half the departments in our subject communities. We have contacted all the departments (either via your departmental PRS-LTSN representative or your Head of Department) and if we have not yet set up a face to face meeting then please do not hesitate to contact us at the address below to arrange one. The aim of the visits is to gather information about existing effective practice and to find what the most pressing issues for your department and for individual lectures and tutors are, so that we can better direct our resources and efforts to serve the PRS community in all learning, teaching and assessment matters.

We are open to invitations at any time. 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, please contact:

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Workshops, Events and Networks

Forthcoming Events

Plagiarism Day Conference and Workshop

University of Newcastle-upon-Tyne

Tuesday 8th April 2003

This one-day conference and workshop will explore a range of issues arising from the increased incidences of plagiarism in our subject areas. These will include:

- how to best deter plagiarism through assessment design;
- identification of the root causes of plagiarism;
- how to find the best means of detecting and verifying plagiarism.

Speakers will include:

- Andrew Brooks, University of Leeds;
- Sheila Webber, Information Studies, University of Sheffield;
- Representatives from the the JISC Plagiarism Advisory Service.

Plus materials for a self-directed session from Jude Carroll, Staff & Learning Development, Oxford Brookes University.

To register, please return a copy of the enclosed form or visit:

<http://www.prs-ltsn.ac.uk/events/index.html#plagiarism>

There is a £15 early bird registration fee until 14th March, the fee is £25 thereafter.

Distance Learning Conference and Workshop

University of Newcastle-upon-Tyne

Wednesday 9th April 2003

This one-day conference and workshop will explore all aspects of open and distance learning and will cover:

- programme design and delivery;
- student support;
- assessment.

Confirmed speakers include:

- Peter Harvey, Religious Studies, University of Sunderland ;
- Jon Dorbolo, Philosophy, Oregon State University;
- Robert Timko, Philosophy, Mansfield College (Treasurer & former President, AAPT)—"Caught in the Web: Some Entanglements of Distance Education".

To register, please return a copy of the enclosed form or visit:

<http://www.prs-ltsn.ac.uk/events/index.html#distance>

There is a £15 early bird registration fee until 14th March, the fee is £25 thereafter.

Other Events

Other events include:

- Teaching Hebrew – 26th March 2003, Glasgow
- Progression in Philosophy – 12th May 2003
- A one day workshop on the implications of the Special Educational Needs and Disability Act (SENDA) – date to be announced, London
- Teaching Islam – date to be announced, Leeds

Visit the website for further details:

<http://www.prs-ltsn.ac.uk/>

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 and funding opportunities.

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**
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
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Articles, Discussion and Practical Teaching

Project Report: Teaching Ancient Philosophy

John Sellars

*Centre for Research in Philosophy and Literature,
Department of Philosophy,
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1. Introduction

In what follows I present some of the results of a research project I have recently undertaken for the Philosophy and Religious Studies subject centre of the Learning and Teaching Support Network (PRS-LTSN). This project has been principally concerned with pedagogical issues specific to the teaching of ancient philosophy. Central to it has been a survey of the existing scholarship devoted to teaching ancient philosophy and a review of the currently available teaching resources, in the form of textbooks and online material. As well as this print article, further results of this work may be found at the ‘Teaching Ancient Philosophy’ website via the address

<http://www.ancientphilosophy.org.uk>

2. What is ‘Ancient Philosophy’?

For the purposes of this study I shall use the phrase ‘ancient philosophy’ to refer to the philosophy of the ancient Mediterranean world, written in either Greek or Latin, between the dates 585 BC (Thales’ famous prediction of an eclipse) and AD 529 (Justinian’s closure of the last philosophical schools in Athens).¹ Within this period I shall use ‘Greek philosophy’ to refer to philosophy from the first Presocratics through to

¹ As Jonathan Barnes notes (*Early Greek Philosophy* [Harmondsworth: Penguin, 1987], p. 9), although an oversimplification, these dates offer a convenient pair of boundaries for the history of ancient philosophy. Some scholars of medieval philosophy date the beginning of their period to the conversion of Constantine to Christianity in AD 312 (see e. g. D. Luscombe, *Medieval Thought* [Oxford: Oxford University Press, 1997], p. 2). Thus there is a something of an overlap between the end of ‘ancient philosophy’ and the beginning of ‘medieval philosophy’.

Aristotle; ‘Hellenistic philosophy’ to refer to philosophy during the period of the Hellenistic Empires (i.e. *c.* 330—30 BC) and also in first two centuries AD; and ‘Late Ancient philosophy’ to refer to philosophy from *c.* AD 200 to the end of antiquity (i.e. Plotinus, the later Neoplatonists, and Augustine). In philosophy departments the teaching of ancient philosophy has often been confined to Greek philosophy, namely the Presocratics, Socrates, Plato, and Aristotle. However, these are the products of only the first quarter of this millennium of philosophical history. Here I shall also address the teaching of not only Hellenistic philosophy but also Neoplatonism and later Latin philosophical authors such as Augustine and Boethius.

There are, however, more substantial issues surrounding the definition of ancient philosophy beyond mere chronological considerations. One might understand the question ‘what is ancient philosophy?’ as asking ‘how was philosophy conceived in antiquity?’. This latter question is usually closely connected to concerns about how an ancient conception of philosophy might differ from conceptions of the nature and function of the modern academic subject.

Some modern scholars of ancient philosophy have been keen to point out the argumentative nature of ancient philosophy and the characteristics that it shares with modern Anglo-American academic philosophy, as if it were necessary to make an *apologia* for continuing to read ancient philosophical texts.² Others have been more concerned to draw attention to the differences between ancient and modern philosophy, paying attention to the ‘existential’ dimension of the ancient philosophical life.³ However, broad definitions of ‘ancient philosophy’ rarely manage to encompass the diverse range of practices characterised as ‘philosophical’ during the course of such a long period of time. Ancient philosophy included scientific (the Presocratics, Aristotle), argumentative (the dialogues of Plato and Cicero), scholastic (late Aristotelian Commentators), therapeutic (Epictetus, Sextus Empiricus), reverential (Epicureans, late Pythagoreans), mystical (late Neoplatonism), and politically revolutionary (Sophists, Socrates of the *Apology*) dimensions at various times and in various combinations. Any attempt to capture all of these aspects of ancient philosophy under a single umbrella definition is, I suspect, likely to fail.

² See e.g. J. Annas, *Ancient Philosophy: A Very Short Introduction* (Oxford: Oxford University Press, 2000).

³ See e.g. P. Hadot, *Philosophy as a Way of Life*, ed. A. I. Davidson, trans. M. Chase (Oxford: Blackwell, 1995).

Nevertheless, it may be helpful to be sensitive to these sorts of questions in order to have at least some framework within which one might approach one's teaching of ancient philosophy. Such metaphilosophical questions will inform more specifically pedagogical questions such as 'of what should an introduction to ancient philosophy consist?' or 'what are the most important characteristics of ancient thought of which students should be made aware?'

3. Teaching the History of Philosophy

Although perhaps obvious, it is important always to bear in mind that ancient philosophy is part of the history of philosophy. With this in mind it should be remembered that just as 'the philosophy of history' is a philosophical investigation into the nature of history, so 'the history of philosophy' is an historical investigation into the past of philosophy. While its subject matter is philosophical, its methodological approach is principally historical.⁴

Some academic philosophers may not have much sympathy with such a claim. For them, the study of the history of philosophy must always be subordinated to contemporary philosophical concerns. 'One reads Plato only insofar as this might shed light on a current philosophical problem'.⁵ Yet, as Jonathan Barnes has observed, the problem with such an approach is that, firstly, any *serious* study of an ancient philosopher will soon involve historical and philological questions, and, secondly, if one's study is motivated solely by the desire for philosophical inspiration then there is little incentive 'to get one's subject right'.⁶ A balance must surely be struck, then, between philosophy and history. Again, as Barnes has noted, those who read ancient philosophy claiming to have a purely philosophical goal will

⁴ See the discussions in É. Gilson, *History of Philosophy and Philosophical Education*, Aquinas Lecture 1947 Fall (Milwaukee: Marquette University Press, 1948), esp. pp. 24-34; H. Phillips, 'Special Problems in the Teaching of Modern Philosophy', *Teaching Philosophy* 13/3 (1990), 217-26; R. A. Watson, 'What is the History of Philosophy and Why is it Important?', *Journal of the History of Philosophy* 40/4 (2002), 525-28.

⁵ See e.g. the account in C. Cowley, 'Cultivating Transferable Skills in Philosophy Undergraduates', *PRS-LTSN Journal* 1/1 (2001), 39-51, at p. 40: "The ancient philosophers *may* be studied as a closed and dusty history of who said what when; but the normal approach in the English-speaking world is to see the [ancient] author in question as *suggesting* something [...] here and now as if he were a colleague".

⁶ See J. Barnes, ed., *The Cambridge Companion to Aristotle* (Cambridge: Cambridge University Press, 1995), pp. xvi-xviii. Note also Gilson, *History of Philosophy and Philosophical Education*, pp. 30-34.

simply produce poor scholarship, while those who define themselves as historians may think that this absolves them of any need for philosophical insight.⁷

A course in ancient philosophy should do more than simply report who said what when. It should stimulate students to reflect for themselves on the philosophical issues explored by their antique forebears. But that should not allow philosophy teachers to deny the essentially historical nature of such a course or to neglect the need for a sensitivity to historical and philological issues that the subject matter deserves. However, a sensitivity to historical issues need not limit one to a dry report of the ideas of past masters. In fact, one would expect such sensitivity to lead one to pay due attention to the often vigorous philosophical debates from antiquity, such as those between the Stoa and the Sceptical Academy. Moreover, a historically sensitive approach would, for instance, place the ideas of Plato and Aristotle within the broader philosophical context out of which they grew. It would also pay attention not just to *what* they said but also to *why* they said it and to the philosophical problems that provoked their ideas. In sum, teaching ancient philosophy historically need not mean teaching it unphilosophically.

Indeed, Ofelia Schutte has suggested that a historically orientated course in philosophy may often provide a *better* stimulus to critical thinking than a ‘contemporary problems’ orientated course.⁸ Students who follow the latter, she reports, often fail to develop any real critical distance from their own cultural presuppositions and the debate of the ‘real philosophical issues’ tends to take place *within* the confines of the students’ own cultural context. Students come with their pre-existing opinions, repeat them, and search the contemporary literature for arguments to justify them. By contrast, students who follow a historical introduction to philosophy begin to develop a historical awareness and a certain critical distance from their own culture. One obvious example relevant here is Plato’s anti-democratic political philosophy in the *Republic* and the way in which this calls into question current widespread assumption (in the liberal West) that democracy is the only credible political system.⁹ Thus one could make an argument for the claim that a

⁷ See Barnes, *The Cambridge Companion to Aristotle*, p. xviii, n. 5.

⁸ See O. Schutte, ‘Overcoming Ethnocentrism in the Philosophy Classroom’, *Teaching Philosophy* 8/2 (1985), 137-44, esp. pp. 141-42.

⁹ A similar point is made by R. Talaska, ‘Philosophical Reasoning in Ethics and the Use of the History of Philosophy’, *Teaching Philosophy* 20/2 (1997), 121-41.

course in the history of philosophy (ancient or otherwise) offers a better *philosophical* education than a course devoted to ‘contemporary philosophical problems’.

4. The Interdisciplinary Nature of Ancient Philosophy

There is, then, a balance that must be struck between doing history and doing philosophy. But ancient philosophy is not only an episode in the history of philosophy; it is also part of the culture of the classical world and so also part of the study of Classics. It is, I hope, generally agreed that the best contemporary research in ancient philosophy is interdisciplinary, by which I mean that it is sensitive to both classical and philosophical questions, and draws upon the resources of both disciplines.¹⁰ Should ancient philosophy teaching also be interdisciplinary? Should philosophy students bother themselves with information about a thinker’s historical and cultural context? Should they be made aware of textual problems such as variant readings in different manuscripts or the processes by which texts have been transmitted from antiquity? Or should they read modern translations of Aristotle in plain wrappers, so to speak, as if they are no different to the works of, say, Kant or Davidson? I suspect that some philosophers will prefer this latter approach, focusing as it does solely upon the philosophical arguments of an ancient author and free from the risk of falling into either a sterile history of who said what when or a painstaking philological analysis that is unable to see the wood for the trees.¹¹

However, the principal problem with such an approach is that it will tend to assess ancient philosophical ideas and arguments from a modern perspective. It will apply current criteria regarding what should and should not be considered ‘philosophical’. It will be unlikely to pay attention to the way in which philosophy was conceived in antiquity and how ancient conceptions of philosophy might differ from our own. For instance, the Stoic philosopher Euphrates of Tyre does not appear to have produced any original ideas of his own and yet was praised by his contemporaries as one of the most famous philosophers of his day.¹² By

¹⁰ For a spirited discussion of the differences between ‘classical’ and ‘philosophical’ readers of ancient philosophical texts see J. Gucker, ‘Critical Study’ (a review article on the first two volumes of *Oxford Studies in Ancient Philosophy*), *Philosophia: Philosophical Quarterly of Israel* 16 (1986), 389-436.

¹¹ See e.g. Cowley, ‘Cultivating Transferable Skills in Philosophy Undergraduates’.

¹² See M. Frede, ‘Euphrates of Tyre’, in R. Sorabji, ed., *Aristotle and After* (London: Institute of Classical Studies, 1997), pp. 1-11.

modern standards he is of slight philosophical standing, but he was clearly assessed according to quite different standards in antiquity. Euphrates is a particularly obscure example, but the general point is worth bearing in mind, especially when considering the role played by the ‘schools’ in ancient philosophy. In sum, one needs to pay attention to the cultural and intellectual context in which ancient philosophical texts were produced. Is it fair to dismiss Cicero as a serious philosopher in his own right because he did not create his own philosophical system comparable to that of Plato? Was this ever Cicero’s intention? Would that have been part of what it meant to be ‘a philosopher’ at the time that Cicero wrote? I do not want to claim definitive answers to these questions, but I do want to suggest that these sorts of questions should be addressed.¹³ In order to do this one must pay attention to more than simply the ‘modern’ arguments that can be extracted from the surviving philosophical texts.

As well as ancient conceptions of philosophy, one must also be sensitive to wider issues relating to ancient culture that are properly the domain of the Classicist. Some teachers of the history of modern philosophy have acknowledged that it is necessary to pay attention to the historical context within which philosophical ideas were formed.¹⁴ This is even more important when teaching ancient philosophy given the greater temporal and cultural distance that exists between the subject matter and modern readers.¹⁵ In particular, Hollibert Phillips has suggested that while it may be legitimate for more advanced courses to focus upon a close reading of a text and a careful analysis of its arguments, in an introductory course it may be equally legitimate to pay due attention to the cultural context in which the philosophical material under discussion was produced.¹⁶

¹³ By way of a preliminary answer to these questions, it should be noted that it was with the Romantic movement of the early nineteenth century that the notion of ‘originality’ took centre stage in such assessments. In antiquity it appears that one could be a well-respected philosopher without necessarily being an original thinker. The obsessions with originality and creativity appear to be very much post-romantic concerns.

¹⁴ See H. Phillips, ‘Special Problems in the Teaching of Modern Philosophy’; J. J. McDermott, ‘The Teaching of Philosophy – Historically’, in T. Kasachkoff, ed., *In the Socratic Tradition: Essays on Teaching Philosophy* (Lanham: Rowman & Littlefield, 1998), pp. 169-80.

¹⁵ See e.g. M. Beard & J. Henderson, *Classics: A Very Short Introduction* (Oxford: Oxford University Press, [1995] 2000), esp. pp. 6-8, who define the study of ‘Classics’ as, in part, an exploration of this cultural distance between antiquity and ourselves.

¹⁶ See Phillips, ‘Special Problems in the Teaching of Modern Philosophy’.

Beyond such cultural and historical issues, there are also philological matters that should be taken into account. Students need to be made aware of the nature of the texts with which they are dealing and the processes by which they have come down to modern readers. In an appendix to the volume *Philosophie grecque* entitled ‘Ce qu’il faut savoir avant d’aborder l’étude de la pensée antique’ (‘What it is necessary to know before one begins the study of ancient thought’), Monique Canto-Sperber and Luc Brisson outline a whole range of textual issues of which they suggest the student of ancient philosophy should be aware.¹⁷ These include the circulation of texts in antiquity, papyrology, doxography, the medieval transmission of manuscripts, the evaluation of variant readings, and a beginner’s guide to understanding the typical critical apparatus that one might find in an Oxford, Teubner, or Budé text. Although there is clearly room for debate concerning just how soon such issues should be introduced to students, I take it that it is generally agreed that a familiarity with all of these issues is essential to more advanced study (i.e. at doctoral level). As Étienne Gilson has commented, before one can assess the value of the philosophical arguments of a pre-modern author, one must first determine what that author actually wrote, which are the best manuscripts, which are the most probable textual readings, and what the author is most likely to have meant by what they wrote.¹⁸ Only then can the philosophical conversation begin. While undergraduate students of philosophy are hardly to be expected to undertake such philological work themselves, they should at least be made aware of the necessity and value of such work.

5. Introducing Classical Languages

The typical philosophy student is unlikely to arrive at university with any great familiarity with Greek or Latin, although there may, of course, be exceptions.¹⁹ Some philosophy students may study the subject in combination with Classics and benefit from a formal introduction to these languages. However, it is probably fair to assume that the majority

¹⁷ See M. Canto-Sperber *et al.*, *Philosophie grecque* (Paris: Presses Universitaires de France, 1997), pp. 781-826. This volume is published in the PUF series ‘Collection Premier Cycle’ and so is aimed at first and second year undergraduates in France.

¹⁸ See Gilson, *History of Philosophy and Philosophical Education*, p. 30.

¹⁹ However, the current political drive to expand access to Higher Education in the UK is likely to reduce the size of the proportion of those who are familiar with these languages even further. This should not necessarily be lamented, but it should be borne in mind by those who teach ancient texts.

of philosophy students who study ancient philosophy have little or no knowledge of the languages in which ancient philosophical texts are written.

To what extent, if any, should the teacher of ancient philosophy address this issue? One school of thought assumes that exposure to, say, Greek within the context of a philosophy course will simply confuse and intimidate students who may well already be somewhat confused and intimidated. More and more publications in the field make use of transliteration as authors (or publishers?) assume that using the Greek alphabet will make their work inaccessible to a substantial number of potential readers. Some classical scholars working in the field lament this trend, but then follow it themselves.

I suggest that teachers of ancient philosophy should not be afraid to introduce their students to classical languages where it may be relevant to do so. At a minimum I propose that all students of ancient philosophy should be expected to learn, or at least become familiar, with the Greek alphabet. After all, if a student is capable enough to secure a university place and to write an essay on, say, Aristotle's form-matter distinction, then they should have no difficulty in learning two dozen letters, many of which differ little from their English counterparts.²⁰ A student who has mastered the Greek alphabet will be able to navigate through secondary literature that does not employ transliteration, will be less intimidated (and hopefully more curious) when they come across extended passages of Greek (in, say, 'Kirk, Raven, & Schofield' or a Loeb volume), and will be able to use a lexicon to look up the occasional technical term.²¹ For those who might plan to continue at graduate level, such a rudimentary knowledge will at least form some foundation for the language skills that they will need to acquire in order to do graduate research.²²

It is hoped that those students who want to continue studying ancient philosophy will also want to learn more about the classical languages. An early exposure to the Greek alphabet will certainly be of benefit here. If some students do want to learn more it may be possible

²⁰ It should be noted that teachers of logic do not hesitate to give their students a whole host of unusual symbols to learn during an introductory course.

²¹ For further discussion of the gradual introduction of Greek terms when teaching texts in translation see J. Parker, 'Teaching with KeyWords', HCA-LTSN Briefing Paper No. 5, available as a PDF file at http://hca.ltsn.ac.uk/resources/Briefing_Papers/bp5.php.

²² For discussion of the necessity of mastery of ancient languages for the serious study of ancient philosophy see Glucker, 'Critical Study', esp. pp. 434-36.

to direct them to a formal course in a Classics department, if there is one locally. However, even where there is, this would be a significant addition to the student's workload, especially if taken in addition to a full compliment of philosophy courses. Perhaps a better alternative is to direct students to resources where they can learn more about Classical languages at their own pace and according to their own need and interest. There are a number of 'teach yourself' books that are designed for private study; one recent volume that I would recommend is Peter Jones' *Learn Ancient Greek*.²³ This volume assumes no prior knowledge and covers a good amount of ground in twenty short chapters. One could even arrange an informal and optional course for those interested, taking a chapter a week during one academic year. As with many of these sorts of books, the volume also contains a summary of grammar and a basic vocabulary list, making it a useful basic reference work as well.

It is no doubt optimistic to expect that large numbers of philosophy students will want to learn ancient Greek in their spare time. But those who become particularly interested in ancient philosophy and want to pursue it further may well want to learn more about the languages in which ancient philosophical texts are written. My principal suggestion here is that students should at least be made aware of this as a possibility. One might be surprised by how many do express an interest.²⁴

I have focused here on Greek. This is not only because it is the dominant philosophical language of antiquity but also because it poses the most problems. Students do not need to transliterate Latin in order to be able to look up a technical term in a Latin dictionary, for instance. Again, I suggest that teachers should not be afraid of exposing students to Latin terminology where relevant and encouraging them to learn more about the language. So long as it is made clear that it is not a course requirement to learn these languages, then the whole process can remain motivated solely by curiosity and interest as these languages are first introduced.

By way of postscript, it is also worth noting that while a classics student may enjoy the study of ancient languages for its own sake, the

²³ P. Jones, *Learn Ancient Greek* (London: Duckworth, 1998).

²⁴ For those who do, J. H. Lesher, *The Greek Philosophers: Selected Greek Texts from the Presocratics, Plato, and Aristotle* (London: Bristol Classical Press, 1998) offers a selection of short extracts in Greek with a close commentary designed to aid the beginner. Indeed, this volume might form an excellent introductory reader for philosophy students learning Greek for the first time.

ancient philosophy student may have a more instrumentalist approach. Here the latter may share something in common with students of the New Testament. Both the theology student reading the Gospels and the philosophy student reading Plato are not primarily linguists and probably approach the study of Greek as merely a means to an ends. Teachers of New Testament Greek have produced a number of resources for students of Greek whose principal academic concerns are not with the language itself.²⁵ Indeed, some of the best online resources for Greek beginners have been produced with New Testament students in mind.²⁶ Both teachers and students of ancient philosophy may benefit from consulting such material.

6. Bringing the Past to Life

It is easy for the teacher long familiar with ancient philosophy to forget that the subject matter of their courses may initially appear quite alien to students new to the subject. We are, after all, dealing with foreign names from an alien culture long past. One of the tasks of the ancient philosophy teacher is to try to bring some of these distant figures back to life in the imagination of one's students. There are a number of seemingly trivial, yet I think effective, ways in which this may be achieved. The use of maps, images of statues and busts, and archaeological findings can all help to add colour and form to the foreign names on the page.²⁷ Similarly, students are often fascinated by the process by which ancient texts have come down to us. A brief introduction to the transmission of ancient texts, perhaps including images of manuscripts and papyri, can help not only to capture their imagination but also to introduce them to some of the sorts of problems involved in the editing of a classical text.²⁸ It may also serve to emphasise

²⁵ See e.g. J. McLarty, 'How to Cheat in *Koine* Greek', *PRS-LTSN Journal* 1/2 (2002), 169-75. This article includes details of a number of useful online resources.

²⁶ See e.g. the NT Gateway at

<http://www.ntgateway.com/greek/learning.htm>

²⁷ For one such suggestion along these lines see R. S. Brumbaugh & J. P. Burnham, 'Coins and Classical Philosophy', *Teaching Philosophy* 12/3 (1989), 243-55.

²⁸ I have already noted the appendix in Canto-Sperber *et al.*, *Philosophie grecque*. A good guide to the transmission of ancient texts is L. D. Reynolds & N. G. Wilson, *Scribes and Scholars: A Guide to the Transmission of Greek and Latin Literature* (Oxford: Oxford University Press, 1968). The POxy website based at Oxford includes images of a wide range of philosophical finds (at <http://www.csad.ox.ac.uk/POxy/>). A good general introduction to papyrology is E. G. Turner, *Greek Papyri: An Introduction* (Oxford: Clarendon Press, 1968).

the highly contingent nature of the surviving record for ancient philosophy. One could, for instance, note that Lucretius' *On the Nature of Things* and Epictetus' *Discourses* both appear to have survived the Middle Ages via only a single copy, while other texts such as Aristotle's *Constitution of Athens* and Epicurus' *On Nature* have only been discovered more recently in papyri from Egypt and Herculaneum. Reference to the recent Empedocles find, published for the first time in 1999, will serve to emphasise that the body of surviving evidence for ancient philosophy is far from static.²⁹

Looking at images of manuscripts and papyri, busts and archaeological sites, may not contribute directly to a student's understanding of ancient philosophy, but they may well help to bring to life ancient philosophers and ancient texts in a way that will encourage students to explore the subject further.

7. Links between Ancient and Modern Philosophy

Some students of philosophy may not be as attracted as others to the prospect of reading ancient philosophical texts. Their assumption is often that such texts are unlikely to have much relevance to the living philosophical issues of the contemporary scene. One way to counteract this assumption is to draw attention to the way in which a wide range of modern philosophers have been drawn to and commented upon ancient philosophers.

In a course on the Presocratics, for instance, one might mention the uses to which these early philosophers have been put in works by Nietzsche, Heidegger, and Popper.³⁰ A class devoted to Socrates could also consider relevant works by Kierkegaard and Nietzsche.³¹ In a course on Plato, one might make reference to Popper again, this time along with

²⁹ See A. Martin & O. Primavesi, *L'Empédocle de Strasbourg* (Berlin: De Gruyter, 1999). However, for some doubts about the value of such finds see C. Osborne, 'Rummaging in the Recycling Bins of Upper Egypt', *Oxford Studies in Ancient Philosophy* 18 (2000), 329-56.

³⁰ See F. Nietzsche, *Philosophy in the Tragic Age of the Greeks*, trans. M. Cowan (Washington: Regnery, 1962); M. Heidegger, *Early Greek Thinking*, trans. D. Farrell Krell & F. A. Capuzzi (New York: Harper & Row, 1975); K. R. Popper, 'Back to the Presocratics', now reprinted in *The World of Parmenides: Essays on the Presocratic Enlightenment* (London: Routledge, 1998), pp. 7-32.

³¹ See S. Kierkegaard, *The Concept of Irony, with Continual Reference to Socrates*, trans. H. V. & E. H. Hong (Princeton: Princeton University Press, 1989); F. Nietzsche, *The Birth of Tragedy*, trans. S. Whiteside (Harmondsworth: Penguin, 1993).

Derrida.³² Lectures on Aristotle’s ethics might benefit from a discussion of MacIntyre or Williams,³³ while those on Hellenistic philosophy could include reference to Foucault’s later works and perhaps also the work of Charles Taylor.³⁴ These sorts of connections may do much to show the sceptical student that a knowledge of ancient philosophy is essential if one wants to understand the work of a whole series of modern philosophers, both ‘analytic’ and ‘continental’, and the debates to which they have contributed.

8. Other Strategies

The wider pedagogical literature includes a number of suggestions regarding the use of non-philosophical texts with students new to the academic study of philosophy. In particular, a number of authors have suggested that the use of media already familiar to students—novels and films especially—may help students engage with philosophical material that otherwise would appear forbidding and inaccessible.³⁵ Some may have doubts about the excessive use of such material in the classroom. Nevertheless the use of these sorts of materials may well be the most effective way to engage new students who would gain little from being thrown into the deep end by, say, reading Aristotle’s *Categories* on ‘day one’. In sum, it is probably simply a question of determining the most appropriate strategy for a particular group.

Such an approach has been employed with regard to ancient philosophy by William Stephens, who reports considerable success.³⁶ In a course devoted to Stoicism, students supplemented their reading of Epictetus and Seneca by reading Tom Wolfe’s novel *A Man in Full* and

³² See K. R. Popper, *The Open Society and its Enemies: 1 The Spell of Plato* (London: Routledge, 1945); J. Derrida, ‘Plato’s Pharmacy’, in *Dissemination*, trans. B. Johnson (London: Athlone, 1981), pp. 61-171.

³³ See A. MacIntyre, *After Virtue: A Study in Moral Theory* (London: Duckworth, 1981); B. Williams, *Ethics and the Limits of Philosophy* (London: Fontana, 1985).

³⁴ See M. Foucault, *The Care of the Self: The History of Sexuality 3*, trans. R Hurley (Harmondsworth: Penguin, 1988); C. Taylor, *Sources of the Self: The Making of the Modern Identity* (Cambridge: Cambridge University Press, 1989).

³⁵ See e.g. L. S. Bowlden, ‘They Read Novels, Don’t They?’ Using Novels in Teaching Philosophy’, *Teaching Philosophy* 13/4 (1990), 359-64; E. V. Torisky Jr, ‘Dalton Trumbo’s *Johnny Got His Gun*: Literature in the Philosophy Classroom’, *Teaching Philosophy* 23/3 (2000), 255-68.

³⁶ I would like to thank Dr Stephens for discussing his experiences with me.

watching Ridley Scott's film *Gladiator*.³⁷ Assigned readings for the course began with sections of *A Man in Full*, gently supplemented with extracts from Epictetus as the course progressed, and only later being replaced by extended readings from Epictetus and Seneca. For Stephens, the objective behind this pedagogical strategy was not only to make use of materials culturally familiar to his students but also to consider the influence of Stoicism on contemporary culture. This enabled students to see the continuing relevance of the ancient texts that they were studying. But perhaps most importantly of all, it offered students who had never read ancient philosophical texts before a gentle introduction to the subject matter of the course before being exposed to the primary sources.

Obviously the quantity of material in these popular media directly relevant to the study of ancient philosophy is extremely limited. But it may be worth noting that two films have been made devoted to the life and death of Socrates; *Socrate* (1970), directed by Roberto Rossellini, and *Barefoot in Athens* (1966), starring Peter Ustinov.³⁸

9. Courses in Ancient Philosophy

a) Guthrie versus Hadot

When a department of philosophy offers an 'Introduction to Ancient Philosophy' course the syllabus usually begins with the earliest Presocratics, touches upon the Sophists, devotes most of its attention to Plato, and then concludes with a survey of Aristotle. No doubt this claim, like all generalisations, is subject to numerous exceptions and objections. Nevertheless it forms a reasonable point of departure. This is, for instance, the approach embodied in the Hackett anthology *Readings in Ancient Greek Philosophy: From Thales to Aristotle*.³⁹ I shall call this 'the Guthrie approach', as its syllabus corresponds to the material covered in Guthrie's magisterial six-volume history of Greek

³⁷ For full details visit

<http://puffin.creighton.edu/phil/Stephens/HRS-PHL-403-Honors-Stoicism.htm>

³⁸ See J. Solomon, *The Ancient World in the Cinema* (New Haven: Yale University Press, 2001), p. 42. Rossellini's *Socrate* is currently available on an Italian issue DVD with English subtitles (Istituto Luce, 2002).

³⁹ See S. M. Cohen, P. Curd, & C. D. C. Reeve, eds, *Readings in Ancient Greek Philosophy: From Thales to Aristotle*, 2nd edn (Indianapolis: Hackett, 2000). A similar plan is followed in J. H. Lesher, *The Greek Philosophers*.

philosophy.⁴⁰ I have no intention to criticise either this approach or the masterly work of the individual whose name I shall use to refer to it. However, in what follows I shall attempt to propose a number of other approaches that might stand alongside ‘the Guthrie approach’ as equally worthy models for courses in ancient philosophy.

Perhaps the clearest alternative to ‘the Guthrie approach’ may be found in the works of the French scholar Pierre Hadot. In one of his more recent works—*What is Ancient Philosophy?*—what I shall call ‘the Hadot approach’ finds its clearest expression.⁴¹ Here, Hadot begins his account of ancient philosophy not with the earliest Presocratics but rather with Socrates. For Hadot, it is with Socrates and his immediate disciples that the concept of ‘philosophy’ first appears. Although Plato and Aristotle receive due attention, their philosophies are placed within the wider context of the other Hellenistic schools and the narrative continues into Neoplatonism and early Christian thought. Perhaps more significantly, whereas ‘the Guthrie approach’ tends to focus upon epistemological and metaphysical themes, ‘the Hadot approach’ places ethical themes centre-stage in the form of the ideal of the philosophical life.

While both of these approaches are equally justified, ‘the Hadot approach’ may appeal more to those who want to introduce Hellenistic philosophy to students. It also has the advantage of a unifying theme—the Socratic question ‘how should one live?’—that a number of teachers have reported to be especially appealing to students.⁴²

b) Thematic Approaches

Despite their differences, the ‘Guthrie’ and ‘Hadot’ approaches both follow a broadly chronological approach. An alternative approach can be found in two recent anthologies, both of which arrange their material

⁴⁰ See W. K. C. Guthrie, *A History of Greek Philosophy*, 6 vols (Cambridge: Cambridge University Press, 1962-81). Note also his brief guide to the same material, *The Greek Philosophers: From Thales to Aristotle* (London: Routledge, [1950] 1997).

⁴¹ See P. Hadot, *What is Ancient Philosophy?*, trans. M. Chase (Cambridge, MA: Harvard University Press, 2002), a translation of *Qu’est-ce que la philosophie antique?* (Paris: Gallimard, 1995).

⁴² A number of contributors to *Teaching Philosophy* have reported that students new to philosophy are particularly drawn to the figure of Socrates as he is presented in Plato’s *Apology*. A major factor in this appeal is that Socrates addresses the question ‘how should one live?’ instead of the sorts of abstract technical questions that often dominate in contemporary academic philosophy. See e.g. J. D. Harrison, ‘Keeping it Alive’, *Teaching Philosophy* 8/3 (1985), 201-06; P. McKee, ‘Philosophy and Wisdom’, *Teaching Philosophy* 13/4 (1990), 325-30.

thematically rather than chronologically. These are Terence Irwin's *Classical Philosophy* and Julia Annas' *Voices of Ancient Philosophy*.⁴³ Annas modestly notes at the end of her volume that "Irwin's book is more comprehensive and less introductory than this one".⁴⁴ Irwin's volume is indeed impressive, but some teachers may prefer Annas' book insofar as it generally offers extended excerpts rather than brief quotations and the commentary is less obtrusive. In Irwin's book it is easy to find oneself reading more of Irwin than of the primary sources. Thus the two volumes embody slightly different approaches and in certain respects Annas' may be more flexible as a textbook.

Alternatively, one might prefer to follow a suggestion made by Priscilla Sakezles, who outlines a thematic approach to ancient philosophy that focuses upon just one philosophical problem.⁴⁵ Sakezles' own course focuses upon the debate between Stoics and Peripatetics concerning fate and responsibility. Following Sakezles' lead, it is possible to outline a number of thematically orientated courses in ancient philosophy. Consider, for instance, the following suggestions:

Fate, Freewill, and Responsibility. As I have already noted, Sakezles has outlined a course devoted to the debate between Stoics and Peripatetics concerning fate and responsibility.⁴⁶ Beyond the texts that she suggests, one might also like to consider Cicero's *On Fate*, Alexander of Aphrodisias' *On Fate*, and Plotinus' *On Providence* (= *Enneads* 3.2 and 3.3).⁴⁷ Annas and Irwin offer further selections.⁴⁸

⁴³ See T. Irwin, ed., *Classical Philosophy* (Oxford: Oxford University Press, 1999); J. Annas, ed., *Voices of Ancient Philosophy: An Introductory Reader* (New York: Oxford University Press, 2001).

⁴⁴ Annas, *Voices of Ancient Philosophy*, p. 454.

⁴⁵ See P. K. Sakezles, 'Bringing Ancient Philosophy to Life: Teaching Aristotelian and Stoic Theories of Responsibility', *Teaching Philosophy* 20/1 (1997), 1-17. A number of other authors have outlined the benefits of course based around a single philosophical problem, although usually with reference to the history of modern philosophy; see e.g. V. A. White, 'The Single-Issue Introduction to Philosophy', *Teaching Philosophy* 13/1 (1990), 13-19; V. A. White & J. A. Chern, 'Teaching Introductory Philosophy - A Restricted Topical Approach', in T. Kasachkoff, ed., *In the Socratic Tradition: Essays on Teaching Philosophy* (Lanham: Rowman & Littlefield, 1998), pp. 21-28; A. Perovich, 'A Comprehensive and Comprehensible Survey of Modern Philosophy', *Teaching Philosophy* 13/3 (1990), 227-31.

⁴⁶ See P. K. Sakezles, 'Bringing Ancient Philosophy to Life'.

⁴⁷ For details of textbook editions of Plotinus see n. 68 below. Among these, *Enneads* 3.2 and 3.3 only appear in the Penguin abridged edition of MacKenna's translation.

⁴⁸ See Annas, *Voices of Ancient Philosophy*, § 1 'Fate and Freedom'; Irwin, *Classical Philosophy*, § 9 'Free Will'.

Ancient Epistemology. This is an especially rich topic upon which to focus. The most obvious material can be found in Plato's response to Protagorean relativism, and later scepticism, both Academic and Pyrrhonic. Then there are the various replies to scepticism by Aristotle, the Stoics, and the Epicureans. Key texts would include Plato's *Theaetetus* and Cicero's *Academius*, among others. Further suggestions can be found in the collection of essays by Everson.⁴⁹

Ancient Philosophy of Science. This is closely related to the last topic and could perhaps be combined with it. Obvious places to begin might be Karl Popper's work on the origins of science in the Presocratics, Aristotle's reflections on scientific method in the *Physics* and elsewhere, and Galen's essays on the status of medical expertise.⁵⁰

Ancient Physics. The study of nature is a recurrent theme in ancient thought. Beyond the natural philosophy of the earlier Presocratics, relevant material may be found in Plato, Aristotle, Epicurus, and the Stoics. Key texts might include Plato's *Timaeus*, Aristotle's *Physics*, Epicurus' *Letter to Herodotus*, and Cicero's *On the Nature of the Gods*. Irwin offers some further material.⁵¹

Ancient Philosophy of Religion. There are a number of different approaches that one could take to 'ancient philosophy of religion'. One could focus upon ancient arguments concerning the existence of the traditional pagan gods, one could examine more theoretical accounts of God as first principle made by ancient philosophers, or one could look at material in the early Church Fathers more akin to recent philosophy of religion. Perhaps a combination of these approaches could be used. Relevant texts would include the fragments of Critias' *Sisyphus*, Cicero's *On the Nature of the Gods*, and a whole range of texts by Augustine.⁵² Irwin offers further material.⁵³

⁴⁹ See S. Everson, ed., *Epistemology*, Companions to Ancient Thought 1 (Cambridge: Cambridge University Press, 1990). See also Annas, *Voices of Ancient Philosophy*, § 3 'Knowledge, Belief, and Skepticism'; Irwin, *Classical Philosophy*, §§ 3-5 & 7.

⁵⁰ See K. R. Popper, *The World of Parmenides: Essays on the Presocratic Enlightenment* (London: Routledge, 1998); R. Walzer & M. Frede, *Galen, Three Treatises on the Nature of Science* (Indianapolis: Hackett, 1985).

⁵¹ See Irwin, *Classical Philosophy*, §§ 2 & 6. Note also the following studies: S. Sambursky, *The Physical World of the Greeks* (London: Routledge & Kegan Paul, 1956); M. R. Wright, *Cosmology in Antiquity* (London: Routledge, 1995).

⁵² See V. J. Bourke, ed., *The Essential Augustine* (Indianapolis: Hackett, 1974), § 2 'Faith and Reason'.

⁵³ See Irwin, *Classical Philosophy*, § 15 'Philosophy and Theology'. Note also the following studies: A. B. Drachmann, *Atheism in Pagan Antiquity* (Chicago: Ares, [1922] 1977); W. Jaeger, *The Theology of the Early Greek Philosophers* (Oxford: Clarendon Press,

Ancient Philosophy of Mind. Although some might find this phrase somewhat anachronistic, it is nevertheless helpful when referring to ancient theories concerning the nature of the *psyche*. In fact, I borrow this phrase from Annas' study *Hellenistic Philosophy of Mind*.⁵⁴ The material covered by Annas in this volume may well be a good place to begin. Platonic and Aristotelian psychology are also fertile ground, with Aristotle's *On the Soul* being an obvious text to include. A helpful collection of essays edited by Everson may also be of use.⁵⁵

The Good Life. A number of contributors to the existing pedagogical literature have noted that students are often drawn to Socrates in the *Apology* because his concern is not with some obscure technical philosophical problem but rather the more fundamental question 'how should one live?'.⁵⁶ Moreover, I have already noted that for Hadot this is perhaps the most important philosophical topic in antiquity. Drawing upon this student enthusiasm and Hadot's groundwork one could easily construct a course orientated by this theme, drawing upon texts such as Plato's *Apology*, Aristotle's *Nicomachean Ethics*, Epicurus' *Letter to Menoecus*, Epictetus' *Handbook*, and Cicero's *On Ends*. Annas offers some further suggestions.⁵⁷

Ancient Political Philosophy. There are a number of anthologies devoted to ancient political philosophy.⁵⁸ The most obvious texts are, of course, Plato's *Republic*, *Statesman*, *Laws*, and Aristotle's *Politics*. But note also Cicero's *Republic* and *Laws*, Augustine's political writings, as well as the fragments of the Sophists.

These are just some of the more obvious ways in which one might construct a course in ancient philosophy orientated by a particular philosophical theme or topic. No doubt there are other possibilities. Whether a course restricted to a single philosophical topic would be adequate as a general introduction to ancient philosophy is another

1947); L. P. Gerson, *God and Greek Philosophy: Studies in the Early History of Natural Theology* (London: Routledge, 1990).

⁵⁴ See J. Annas, *Hellenistic Philosophy of Mind* (Berkeley: University of California Press, 1992).

⁵⁵ See S. Everson, ed., *Psychology*, *Companions to Ancient Thought* 2 (Cambridge: Cambridge University Press, 1991).

⁵⁶ See e.g. J. D. Harrison, 'Keeping it Alive'; P. McKee, 'Philosophy and Wisdom'.

⁵⁷ See Annas, *Voices of Ancient Philosophy*, § 5 'How Should You Live?'.

⁵⁸ See M. Gagarin & P. Woodruff, eds, *Early Greek Political Thought from Homer to the Sophists* (Cambridge: Cambridge University Press, 1995); P. J. Steinberger, ed., *Readings in Classical Political Thought* (Indianapolis: Hackett, 2000). Note also Annas, *Voices of Ancient Philosophy*, § 6 'Society and the State'; Irwin, *Classical Philosophy*, § 14 'Political Theory'.

matter. But at intermediate or advanced levels this sort of approach might prove very effective.

c) Beyond Aristotle

At the outset of this section I made reference to what I call the ‘Guthrie’ approach. Although a perfectly reasonable way to structure a course on ancient philosophy, one drawback is that it neglects those ancient philosophers who came after Aristotle. The increase in scholarly interest in Hellenistic and Late Ancient philosophy during the last three decades or so is beginning to percolate down into the classroom, but only slowly. A number of the approaches that I have touched upon already involve Post-Aristotelian material but it may be helpful to address this issue directly here.

Hellenistic Philosophy. Hellenistic philosophy is now well served by two collections of fragments in translation: Inwood and Gerson’s *Hellenistic Philosophy* and the first volume of Long and Sedley’s *The Hellenistic Philosophers*.⁵⁹ Alternatively one could structure an introduction to all three Hellenistic schools around a close study of one of Cicero’s dialogues (see below). For an ancient sourcebook, one could read Books 7, 9, and 10 of Diogenes Laertius (all in the second volume of the ‘Loeb Classical Library’ edition). Sharples’ recent introduction offers a thematic guide to the philosophical topics of this period.⁶⁰

Roman Philosophy. Traditionally, very few scholars have claimed that the Romans made any significant contribution to philosophy. However, more recent studies have attempted to challenge (or at least qualify) this claim. According to the ancient sources, philosophy was introduced to the Romans by the famous embassy of three Athenian philosophers in 155 BC, and this forms a natural point of departure for a course devoted to Roman philosophy. It might be appropriate for such a course to concentrate upon Latin philosophical works, including those of Cicero, Lucretius, and Seneca. However, one might prefer to extend the story to include works by Philodemus, Musonius Rufus, Epictetus, and Marcus Aurelius. A recent collection of essays and an introductory survey may prove useful.⁶¹

⁵⁹ See B. Inwood & L. P. Gerson, eds, *Hellenistic Philosophy: Introductory Readings*, 2nd edn (Indianapolis: Hackett, 1997); A. A. Long & D. N. Sedley, eds, *The Hellenistic Philosophers, Volume 1: Translations of the Principal Sources with Philosophical Commentary* (Cambridge: Cambridge University Press, 1987).

⁶⁰ See R. W. Sharples, *Stoics, Epicureans, and Sceptics: An Introduction to Hellenistic Philosophy* (London: Routledge, 1996).

⁶¹ See M. Griffin & J. Barnes, eds, *Philosophia Togata: Essays on Philosophy and Roman Society* (Oxford: Clarendon Press, 1989); M. Morford, *The Roman Philosophers: From the*

Philosophy at the End of Antiquity. The works of Augustine form one of the largest body of philosophical texts to survive from antiquity. Alan Perreiah has argued eloquently that Augustine's *Confessions* form an ideal text with which to introduce students to medieval philosophy.⁶² He also acknowledges that in order to understand Augustine one must also be familiar with a number of earlier ancient philosophical movements, including Neoplatonism, Stoicism, and the work of Cicero.⁶³ Thus a course built around the *Confessions*, looking both backwards and forwards, might offer a perfect bridge between the study of ancient and medieval philosophy. A similar argument could perhaps be made for Boethius, equally dependent on the Neoplatonic and Stoic traditions and equally influential in the Middle Ages. The *Consolation of Philosophy* offers itself as an equally readable text around which such a course might be constructed.

The Commentators. Under the direction of Richard Sorabji, the vast corpus of late antique commentaries on Aristotle are currently being translated into English for the first time. From the numerous volumes that have been published to date, materials will be extracted in order to form three sourcebooks under the common title *The Philosophy of the Commentators 200-600 AD: A Sourcebook*. The three volumes will be dedicated to 'Psychology', 'Physics', and 'Logic and Metaphysics'. Although not yet available (due 2003), these are likely to be useful textbooks for intermediate or advanced courses. They may perhaps be most useful when adopting one of the thematic approaches outlined above.

d) Major Texts

When one thinks of 'major texts', worthy of a course to themselves, perhaps the most obvious candidates are Plato's *Republic* and Aristotle's *Nicomachean Ethics*. While these two works certainly do merit detailed study, they are by no means the only ancient philosophical works to

Time of Cato the Censor to the Death of Marcus Aurelius (London: Routledge, 2002). Note also an older study: M. L. Clarke, *The Roman Mind: Studies in the History of Thought from Cicero to Marcus Aurelius* (London: Cohen & West, 1956).

⁶² See A. Perreiah, 'St. Augustine's *Confessions*: A Preface to Medieval Philosophy', *Teaching Philosophy* 12/1 (1989), 13-21.

⁶³ Similarly J. J. McDermott, 'The Teaching of Philosophy—Historically', p. 171: "To study Augustine intelligently, one must know Manichaeism, Plato, Plotinus and the Greek and Roman Stoics. The philosophy of the High Middle Ages—of Scotus Erigena, Anselm, Bonaventure, Duns Scotus, and even Ockham—requires a knowledge of the thought of Augustine".

deserve close attention in the classroom. Consider, for instance, the following:

Cicero. A number of Cicero's philosophical dialogues offer excellent introductions to the philosophical debates current in the Hellenistic period. Although there exist useful anthologies of texts for Hellenistic philosophy, these have certain drawbacks when used as textbooks. Perhaps the most obvious of these is the somewhat disjointed portrait that students receive from reading a large number of short extracts from a wide variety of ancient authors. By contrast, many of Cicero's philosophical works offer a unified dialogue centred around a single philosophical topic. This literary unity and philosophical focus make these texts easier for students to work with, compared to an anthology of short quotations taken from a wide range of otherwise unknown authors.⁶⁴ Of these philosophical works I suggest that four stand out as texts worthy of detailed study: *Academics*, *On Ends*, *On the Nature of the Gods*, and *Tusculan Disputations* (all produced within a single year, 45 BC).⁶⁵ Each of these texts offers a thematic dialogue between characters from different philosophical schools who argue for opposing positions and raise objections to each other's claims. A course built around any one of these texts will, of course, need to introduce the relevant protagonists (Stoics, Epicureans, Academic Sceptics, Antiochus) and so will also function as a general introduction to Hellenistic philosophy. However, that introduction will remain orientated by the philosophical topics central in the chosen dialogue.

Sextus Empiricus. The *Outlines of Pyrrhonism* is a philosophical text of some importance and Sextus' works formed a vital influence on early

⁶⁴ This may be especially true of beginner students. Obviously more advanced students (at MA level, for instance) should have no problem addressing questions of doxography.

⁶⁵ Recent translations suitable as set texts include J. Annas & R. Woolf, *Cicero, On Moral Ends*, Cambridge Texts in the History of Philosophy (Cambridge: Cambridge University Press, 2001); P. G. Walsh, *Cicero, The Nature of the Gods*, Oxford World's Classics (Oxford: Oxford University Press, 1998). For *Academics* and *Tusculan Disputations* one must turn to the Loeb Classical Library editions. Teachers will also want to note editions of these texts with commentaries that may be of use when preparing lectures: T. W. Dougan & R. M. Henry, *M. Tullii Ciceronis Tusculanarum Disputationum Libri Quinque*, 2 vols (Cambridge: Cambridge University Press, 1905-34); W. M. L. Hutchinson, *M. Tullii Ciceronis De Finibus Bonorum et Malorum Libri Quinque* (London: Edward Arnold, 1909); A. S. Pease, *M. Tullii Ciceronis De Natura Deorum*, 2 vols (Cambridge, MA: Harvard University Press, 1955-58); J. S. Reid, *M. Tullii Ciceronis Academica* (London: Macmillan, 1885)

modern philosophy.⁶⁶ Book One of the *Outlines* introduces the sceptical method, placing it within the context of Pyrrhonism's primarily ethical orientation. Books Two and Three consider the opinions of the 'dogmatists' in the three domains of logic, physics, and ethics. The Stoics are Sextus' principal targets here, but other dogmatists also figure in the discussion. A course centred around the *Outlines* would need to introduce not only the origins of scepticism (Academic and Pyrrhonic) but also the dogmatists to whom Sextus is opposed. Thus a course centred around the *Outlines* would also form an introduction to Hellenistic philosophy in general. An excellent annotated translation by Annas and Barnes exists (under the title *Outlines of Scepticism*) and this has recently been reprinted in the series 'Cambridge Texts in the History of Philosophy'.⁶⁷

Plotinus. The surviving works of Plotinus probably constitute the most important body of Greek philosophical texts to survive beyond those of Plato and Aristotle.⁶⁸ Moreover, these texts come in the form of relatively brief essays or 'tractates', each with its own philosophical theme. As such they may well be ideal texts to use in the classroom. In general, there are two approaches one might use: teach the philosophy of Plotinus via selections of *Enneads*, or select particular *Enneads* for use within a thematically orientated course.

e) Multicultural Ancient Philosophy

A number of contributors to the existing pedagogical research have explored ways in which it might be possible to make courses in philosophy—usually the history of early modern philosophy—more multicultural.⁶⁹ One of the pedagogical reasons behind this is to make the subject matter more accessible to an increasingly diverse student population. For these authors, the history of philosophy as it is usually taught is a story exclusively about 'dead white European males'.

⁶⁶ See R. H. Popkin, *The History of Scepticism from Erasmus to Spinoza* (Berkeley: University of California Press, 1979).

⁶⁷ See J. Annas & J. Barnes, *Sextus Empiricus, Outlines of Scepticism*, Cambridge Texts in the History of Philosophy (Cambridge: Cambridge University Press, [1994] 2000).

⁶⁸ For teaching purposes there are currently three inexpensive paperback collections: Plotinus, *The Enneads*, ed. J. Dillon, trans. S. MacKenna (Harmondsworth: Penguin, 1991); E. O'Brien, *The Essential Plotinus* (Indianapolis: Hackett, [1964] 1997); J. Gregory, *The Neoplatonists: A Reader* (London: Routledge, [1991] 1999). The first of these is probably the most useful. For a complete text in English one must turn to the Loeb Classical Library edition by A. H. Armstrong. Note also J. Dillon & L. P. Gerson, eds, *Neoplatonism: Introductory Readings* (Indianapolis: Hackett), forthcoming.

⁶⁹ For further discussion and references see J. Sellars, 'Some Reflections on Recent Philosophy Teaching Scholarship', *PRS-LTSN Journal* 2/1 (2002), 110-27, esp. 113-15.

A history of Greek and Roman philosophy might run the risk of appearing to be such a story, despite the ethnic diversity of the ancient Mediterranean world. One could simply draw attention to the Middle Eastern origins of many a Hellenistic philosopher—Diogenes of Babylon, for example—or that, for instance, Augustine was by birth an African. A more unusual departure might be to preface a course on early Greek philosophy with an account of Near Eastern and Egyptian thought. Indeed, Jay Lampert has taught a course devoted to ancient Egyptian and ancient Greek philosophy in equal measure, as well as a course devoted entirely to ancient Egyptian philosophy.⁷⁰ At the other end of the chronological spectrum, one might do well to pay attention to transmission of ancient philosophy into the Islamic world. One way in which Arabic authors might be incorporated into an undergraduate course on ancient philosophy is by making use of the texts and commentaries by al-Farabi or Averroes when teaching Plato and Aristotle.⁷¹ Such material may also be relevant to a course on Neoplatonism, given the Neoplatonic flavour of much of Islamic philosophy. While both of these suggestions involve stretching the—albeit arbitrary—chronological boundaries laid out at the outset of this article, it may in some circumstances be worth doing so if it helps to engage students who might otherwise remain only marginally interested in the material at hand.

f) A Note on Plato

Plato is, as we all know, one of the most important philosophers ever to have lived, to whom the history of Western philosophy is famously but a

⁷⁰ See J. Lampert, ‘Teaching Ancient Egyptian Philosophy’, *The American Philosophical Association Newsletter on Teaching Philosophy* 95/1 (1995), available on-line at

<http://www.apa.udel.edu/apa/archive/newsletters/v95n1/teaching.asp>

This article includes a full course outline and details for prospective textbooks. The author suggests that initially it is not necessary to know Hieroglyphics in order to teach such a course, although obviously it would be useful to gain at least some familiarity with the language.

⁷¹ A number of such works are available in English translation, including *Averroes’ Commentary on Plato’s Republic*, ed. & trans. E. I. J. Rosenthal (Cambridge: Cambridge University Press, 1956), *Averroes’ Middle Commentaries on Aristotle’s Categories and De Interpretatione*, trans. C. E. Butterworth (Princeton: Princeton University Press, 1983), and al-Farabi’s *Philosophy of Plato and Aristotle*, trans. M. Mahdi (Ithaca: Cornell University Press, [1962] 2001). For further references see S. H. Nasr & O. Leaman, eds, *History of Islamic Philosophy*, Routledge History of World Philosophies 1 (London: Routledge, 1996).

series of footnotes.⁷² To study philosophy seriously will involve, at some point, becoming acquainted with the Platonic dialogues. Thus it is only natural that he should figure heavily in courses devoted to ancient philosophy. Having said that, however, one might argue that an excessive focus upon Plato may have a number of detrimental effects.

Firstly, devoting a large amount of time to Plato in the context of an introductory course will deny time to other ancient philosophers and so perhaps fail to convey the range and diversity within ancient philosophy. For instance, a course that devotes, say, a quarter or half of its time to reading the *Republic* but then ignores Hellenistic philosophy altogether due to 'lack of time' will not give students a balanced introduction to the subject. Plato's *Republic* is no doubt a very important text and certainly one that deserves close study, but a similar argument could equally be made for Sextus Empiricus' *Outlines of Pyrrhonism*, Plotinus' *Enneads*, and a number of other ancient texts. Rather than devote a substantial portion of one's time to this one text, perhaps it might be more appropriate to save this for a separate 'major text' course.⁷³

Secondly, an introductory course that devotes a substantial amount of time to a text such as the *Republic* will inevitably devote much of its philosophical energy towards understanding issues arising from Plato's idealism. For some students—especially those brought up in an increasingly secular and scientific culture—Plato's philosophy may have little appeal and an excessive focus upon it may put them off ancient philosophy altogether. However, these same students may find Stoic or Epicurean materialism more congenial. A course that includes all of these competing philosophical positions is more likely to offer something that will capture the interest of everyone in the class.

Without wanting to diminish either the philosophical or historical importance of Plato, one could advance these sorts of scholarly and pedagogical arguments against an *excessive* focus upon his works, at least in an introductory course. Rather than teach the *Republic* at length, one could instead focus upon one of Plato's shorter dialogues, such as the *Protagoras* or *Euthyphro*.⁷⁴ These would give a good taste of Plato's

⁷² This well-known phrase by Alfred North Whitehead comes from *Process and Reality: An Essay in Cosmology* (New York: The Free Press, [1929] 1978), p. 39.

⁷³ For an example of what an introduction to ancient philosophy might look like where Plato is reduced to but one name among many see Hadot's *What is Ancient Philosophy?*

⁷⁴ Indeed, M. Glouberman, 'Euthyphro: A Guide for Analytic Instruction', *Teaching Philosophy* 15/1 (1992), 33-49, has argued that the *Euthyphro* forms an excellent introduction to philosophy and to modern analytic philosophical method.

intellectual and literary genius, while leaving time for plenty of non-Platonic material as well.

10. Teaching Resources

a) Books

The most important teaching resources are, of course, books. These fall into three categories: translations of individual works, anthologies of translated texts, and introductory secondary literature suitable for reading lists. The range of material available to the teacher of ancient philosophy has exploded in recent years (simply note the number of items on the bibliography of textbooks below published since 1995). There are now a considerable number of anthologies, translations, and introductory studies produced by some of the leading scholars in the subject. I have already noted, for instance, the two thematic anthologies by Irwin and Annas. The bibliography included at the end of this article lists a range of readily available volumes that may be worth considering before issuing one's next reading list. A number of comparative reviews are available at the 'Teaching Ancient Philosophy' website.

b) The Internet

There are also an increasing number of online resources, including texts, language aids, and encyclopedia entries, among others. Many of these are included in the collection of online recourses in the 'Teaching Ancient Philosophy' website. However, a number of these deserve special mention here.

A variety of ancient philosophy electronic texts are available online. Although these are rarely an adequate substitute for a printed edition, nevertheless students may find it useful to be able to download for free the complete works of Plato and Aristotle in English, enabling them to refer to passages perhaps not included in the specified course books and perhaps in heavy demand at the library. Two sites worth mentioning are the *Greek Philosophy Archive* and the *MIT Internet Classics Archive*, both of which supply out of copyright translations of the principal ancient philosophical authors (Jowett for Plato, Ross for Aristotle, MacKenna for Plotinus).⁷⁵ A third, and significantly more impressive source for texts, is the *Perseus Project*, where students can find texts by Plato and Aristotle in both English and Greek, jump between

⁷⁵ <http://graduate.gradsch.uga.edu/archive/Greek.html> and <http://classics.mit.edu/>

the English and Greek at any point in the text, jump to passages by using Stephanus or Bekker references, and look up Greek words via hyperlinks to an online version of Liddell and Scott's *Greek-English Lexicon*.⁷⁶ The Greek texts are available in transliteration or in Greek font.

Two sources of online encyclopedia articles are *The Internet Encyclopedia of Philosophy* and the *Stanford Encyclopedia of Philosophy*.⁷⁷ The former already contains a number of helpful articles devoted to ancient philosophy and more are on their way. It looks set to become a very useful resource. The latter has, to date, fewer articles available but looks set to become a significant work of reference. Contributions are, in general, invited from established scholars and forthcoming contributions will include Richard Kraut on Plato, Anthony Long on Epictetus, David Sedley on Lucretius, and Lloyd Gerson on Plotinus. It may well be worth checking the Stanford Table of Contents occasionally to watch its progression. Also worthy of note is the *MacTutor History of Mathematics Archive*, based at the University of St Andrews, which includes entries on a number of ancient philosophers and scientists not represented elsewhere.⁷⁸

These are but a few of the wide range of online resources available. Other sites worthy of note include *The Archelogos Project*, offering detailed commentaries on works by Plato and Aristotle by a number of well-known scholars in the field, and *The Last Days of Socrates*, a site "designed to help first year philosophy students read the *Euthyphro*, *Apology*, *Crito*, and the death scene from the *Phaedo*".⁷⁹ These and many other sites are all listed at the 'Teaching Ancient Philosophy' website (<http://www.ancientphilosophy.org.uk>).

11. In Conclusion

I have attempted to offer a fairly full survey of both pedagogical issues relevant to the teaching of ancient philosophy and approaches that one might adopt when teaching ancient philosophy. The problem with such a wide survey is that teachers of ancient philosophy vary considerably, from those who are acknowledged experts in the field, to those whose own research interests lie elsewhere but are obliged to teach it as part of

⁷⁶ <http://www.perseus.tufts.edu/>

⁷⁷ <http://www.utm.edu/research/iep/> and
<http://plato.stanford.edu/>

⁷⁸ <http://www.groups.dcs.st-and.ac.uk/history/>

⁷⁹ <http://www.archelogos.com/> and
<http://socrates.clarke.edu/>

a broader introduction to the history of philosophy. Contexts will also vary with regard to institution, department, and degree schemes. No doubt some of my comments will be obvious to some and too specific to be of help to others. Nevertheless I hope that all of those who teach ancient philosophy will have found something here of interest.

12. Bibliography of Prospective Textbooks

I close with a bibliography of prospective textbooks currently readily available in the UK, focusing upon anthologies of texts and general introductions. I make no claims to completeness and I have not attempted to list all of the translations of individual works or secondary literature on individual philosophers currently in print. Comparative reviews of some of these volumes may be found at the ‘Teaching Ancient Philosophy’ website.

- Ackrill, J. L., ed., *A New Aristotle Reader* (Oxford: Clarendon Press, 1987)
- Annas, J., *Hellenistic Philosophy of Mind* (Berkeley: University of California Press, 1992)
- Annas, J., *Ancient Philosophy: A Very Short Introduction* (Oxford: Oxford University Press, 2000)
- Annas, J., ed., *Voices of Ancient Philosophy: An Introductory Reader* (New York: Oxford University Press, 2001)
- Barnes, J., ed., *Early Greek Philosophy* (Harmondsworth: Penguin, 1987)
- Cohen, S. M., P. CURD, & C. D. C. REEVE, eds, *Readings in Ancient Greek Philosophy: From Thales to Aristotle*, 2nd edn (Indianapolis: Hackett, 2000)
- Curd, P. ed., *A Presocratics Reader* (Indianapolis: Hackett, 1996)
- Gagarin, M., & P. Woodruff, eds, *Early Greek Political Thought from Homer to the Sophists*, Cambridge Texts in the History of Political Thought (Cambridge: Cambridge University Press, 1995)
- Gill, C. *Greek Thought*, Greece & Rome New Surveys in the Classics 25 (Oxford: Oxford University Press, 1995)
- Gregory, J., ed., *The Neoplatonists: A Reader*, 2nd edn (London: Routledge, 1999)
- Guthrie, W. K. C., *The Greek Philosophers: From Thales to Aristotle* (London: Routledge, [1950] 1989)
- Inwood, B., & L. P. Gerson, eds, *Hellenistic Philosophy: Introductory Readings*, 2nd edn (Indianapolis: Hackett, 1997)
- Irwin, T., *Classical Thought*, A History of Western Philosophy 1 (Oxford: Oxford University Press, 1989)
- Irwin, T., & G. Fine, eds, *Aristotle: Introductory Readings* (Indianapolis: Hackett, 1996)
- Irwin, T., ed., *Classical Philosophy*, Oxford Readers (Oxford: Oxford University Press, 1999)

- Kirk, G. S., J. E. Raven, & M. Schofield, *The Presocratic Philosophers: A Critical History with a Selection of Texts*, 2nd edn (Cambridge: Cambridge University Press, 1983)
- Leshner, J. H., ed., *The Greek Philosophers: Selected Greek Texts from the Presocratics, Plato, and Aristotle* (London: Bristol Classical Press, 1998)
- Long, A. A., *Hellenistic Philosophy: Stoics, Epicureans, Sceptics*, 2nd edn (London: Duckworth, 1986)
- Long, A. A., & D. N. Sedley, eds, *The Hellenistic Philosophers, Volume 1: Translations of the Principal Sources with Philosophical Commentary, Volume 2: Greek and Latin Texts with Notes and Bibliography* (Cambridge: Cambridge University Press, 1987)
- McKirahan, R. D., ed., *Philosophy Before Socrates: An Introduction with Texts and Commentary* (Indianapolis: Hackett, 1994)
- Morford, M., *The Roman Philosophers: From the Time of Cato the Censor to the Death of Marcus Aurelius* (London: Routledge, 2002)
- Sharples, R. W., *Stoics, Epicureans, and Sceptics: An Introduction to Hellenistic Philosophy* (London: Routledge, 1996)
- Waterfield, R., ed., *The First Philosophers: The Presocratics and Sophists* (Oxford: Oxford University Press, 2000)

Project Report: **Diversifying Assessment 2: Posters and Oral Presentations in Undergraduate History of Science**

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Introduction

This paper is the second in a series on strategies for diversifying assessment within the practical constraints of operating BSc degree programmes. The first paper considered improvements to set essays and final examinations, as well as alternative projects within these general formats (Jarvis and Cain, 2002). The present paper focuses on posters and oral presentations. It also introduces assessment via role-playing projects.

Our underlying methodology was an extensive survey and synthesis project that made use of a wide range of relevant material in the education literature. In collating this material we sought practical advice on the design, implementation, and likely problems associated with introducing these project types into an overall assessment strategy.

Posters

Posters are self contained visual displays of information created either by groups or individuals. Posters can represent an alternative assessable product in projects that typically lead to traditional outcomes such as essays. They can combine varying amounts of text and images. When material is affixed to a backboard, posters are portable. The same project can be undertaken using notice boards or display cases.

Submission of posters can be combined with oral presentations or other assessment tools. Presentation also can be organised into public displays, with wider audiences invited to view the results and discuss the underlying projects with the student creators. Posters can be assessed as the finished product of a course project. They also can function in

formative assessment, either presenting research-in-progress in a finished poster or presenting work using a display that is partially complete. Different stages of a poster project can support peer and self assessment.

Benefits: Though uncommon in humanities courses, posters are common assessment tools in science programmes, and they are a common means for professional communication in the sciences. Often a science student's first professional presence occurs through a poster session at a conference. Professional societies frequently run student poster competitions. The standard of production can be excellent, even when undertaken by novices. The widespread culture of poster production in science means experienced colleagues and samples are nearby. (Posters made for professional meetings normally can be found on display in the corridors of most science departments.) A great deal of advice is available in print and on-line for tutors and students alike and for all stages of the process.

Posters can be set as the outcome for the same kinds of projects normally producing essays or reports. They simply focus work towards a different written outcome. The presumption is false that topics for posters must be inherently visual. Students will find creative solutions when tutors demand more than an essay glued to a backboard. Underlying projects for posters can be predominately descriptive, but posters work better for projects demanding analysis or synthesis (on the cognitive distinctions, see Biggs, 1999). The limited space of a poster forces students to prioritise and focuses their effort on key arguments and evidence, key themes, or key conclusions. Posters provide opportunities to emphasise schematic structures for narrative and argument. Though a great deal of descriptive effort may occur in preparation for a poster, the restrictive format forces students to leave this aside and press further. Brown and Knight (1994) argue the quality of student learning through posters parallels the learning achieved through set essays. The added value of poster assessment occurs in the additional skills the assessment promotes as well as through the demands the project places on condensed exposition.

Posters are designed to be public objects. Students will be keenly aware that their audience may extend beyond the tutor. This promotes student ownership of their work while also placing a subtle additional pressure on them to work to a higher standard. Their friends are watching. In this context, a tutor's praise of student competence and learning achievements in such displays can have important long-term

consequences for student motivation and engagement (Fallows and Ahmet, 1999).

Poster projects represent an excellent response to problem areas often raised in curriculum debates. Compared with essays, posters not only develop research and analytical skills, they also promote key skills related to presentation and the visual display of information (UCL, 1999–2000; Fallows and Steven, 2000; Murphy, 2001). They promote active learning (*c.f.* Berger, 1998). They have practicality for large groups and can reduce overall marking time (Rust, 2001). They can involve students in the assessment process (Race, 2001). Poster projects are ideal for group work and collaboration (Thorley and Gregory, 1994; Hunter, et al., 1996; Jaques, 2000; Nicholson and Ellis, 2000).

Importantly, poster projects promote some skills rarely developed in university education outside specialty arts courses. The chance to use rarely credited skills—such as visual and oral presentation skills—enhances overall impressions of fairness (Gipps, 1994). The hands-on approach promotes creativity on both visual and compositional levels without compromising other course demands on content and methodology.

For tutors, use of posters reduces the risk of plagiarism and simplifies detection (Carroll and Appleton, 2001; Stefani and Carroll, 2001). Assessing posters requires less time than essays, especially when checklists are used as rubrics or when marking is undertaken in a session format. Posters completed for one course can serve as models for another. They also can serve as displays in the department and can be used both for recruitment and reinforcement of good practice. More important, the display of completed posters promotes an environment of learning outside the lecture.

Recommendations and Implementation: Posters function as an assessable product linked to a course project. Students often confuse means for ends when producing course work, and this is especially common with unfamiliar products such as posters. Some might think that “making the poster” is the central task to be undertaken; provided “it looks nice,” a slight product will receive high marks. (The same confusion certainly occurs in essay writing.) Students who focus their attention solely on their performance skills forget that examiners use the presentation as a way to access performance regarding the underlying project. Clear instruction and criteria for assessment will reinforce a tutor’s interest in substance.

Expectations for the underlying project should be placed in the foreground. What learning does the tutor expect to occur in the underlying project? What cognitive skills (such as description, analysis, or synthesis) represent the aims for the project? What observable actions (compare and contrast, assess, argue, identify, locate, prioritise, and so on) can a student use to demonstrate their mastery of the expected cognitive skills? What are the expectations for research and sources? These instructions are common to all projects. Projects with posters are no different.

The poster serves as a medium for communicating results or demonstrating expected skills. Criteria for assessment for essays normally include aspects of composition and exposition (Crème and Lea, 1997; Rael, 2000). Assessment of posters can follow the same process. Brown, Bull and Pendlebury (1997: 134) provide a prototype marking-scheme for poster presentations. Innumerable rubrics for assessing posters are available on-line. Search using key words “student poster rubric” or “student poster assessment,” but these rubrics tend to be created for primary and secondary level work (for a portal, see e.g. Barnard, 2000). Rubrics should distinguish criteria associated with the underlying project (research methods, content, analysis, and synthesis) as well as criteria associated with display (exposition, clarity of design and visual impact, creativity of display).

Tutors should include in their assessment criteria themes related to the poster as a distinct form of communication or else the default expectation for students may be an essay stapled to a poster sheet. Tosney (2001) is superb as an expression of expectations for visual displays. Purrington (2002) combines general and local guidance for students, including a downloadable template. Gosling (1999) aims for advanced design concepts. When setting the assignment, sample posters should be available for students to examine. They can be asked to identify strengths and weaknesses in these samples as part of their introduction to the assignment. A discussion of strengths and weaknesses can easily lead to an explanation of learning objectives and assessment criteria.

Tutorials or guidance on poster design should be included in the learning schedule. Students should not be left simply to “get on with it.” Tosney (2001) and Levene (1996) provide excellent sources of practical advice. Stoss (2000) presents an useful on-line bibliography for poster projects, including a substantial literature review, tutorials for tutors and students, and sites with sample posters on display. Radel (1999)

combines posters with oral presentations. For basic design concepts related to desktop publishing, Williams (1994) is superb for beginners. Additional materials are available online; search using key words “create an effective poster”.

Tutors can build formative stages into poster projects. To learn design principles, tutorial groups can be asked to create a mock poster from material provided by the tutor. For example, to prepare for posters resulting from descriptive projects, students might be asked to sketch how they might present the rules of a card game, guide tourists around the university, present staff in the department, and so on. For analytical projects, students can be asked to consider core themes from a course lecture, some other course, a current event, a cultural icon, and so on. Tutorials also can focus on evaluation of finished products such as sample posters, products from previous years, or those borrowed from colleagues. This offers an ideal forum for negotiating criteria for assessment and easing students into an unfamiliar project.

Focusing on the students’ own projects, tutorials can proceed sequentially through design stages. First, construction of content plans and concept maps provide a means for identifying the substance to be displayed and setting priorities. Second, presentation strategies can be discussed, practiced, and tested on peers for their effectiveness. Advice can be shared through formative peer assessment. Third, components for the finished product can be drafted and considered. The point here is that formative stages can be included in the poster construction process. These training stages are likely to result in increased engagement in the learning process and finished projects closer to tutor expectations. A sequenced approach also reduces student anxiety about an unfamiliar form of assessment.

Producing the text and layout for a poster requires students to reflect on what constitutes the core results of their research, the thesis to be argued, or the analysis to be provided. Encourage students to make choices and set priorities. Their research phase may produce considerable volumes of data and analysis, but posters require selectivity and reflection. Remind students that this is one of the learning objectives for the project. Tutors might consider the submission of research notebooks as a complement to ensure students feel they receive credit for work done. Use of research notebooks also can aid reflection within the project (Davis, 1998) Examples of this approach are described in Rusnock (1999). Students might be tempted to supplement posters with

written essays. Tutors should reflect on how this might subvert the project's original objectives.

Guidance should be given on adequate and appropriate layout and graphic design. Overall design should contribute a fixed amount to the overall assessment to preserve a relative balance between style and substance. Sample posters or displays will help students visualise plausible products and to draw distinctions between use of design principles and overuse of elaborate tools. Assistance or additional training may be needed for more elaborate graphic design or desktop publishing approaches.

Combining posters with oral presentations allows examiners to probe depth and breadth of research and analysis. It also promotes selectivity in poster design as students need not feel limited by choosing to omit material from their posters. Expectations for presentations should stress a need to avoid mere recitation of poster content. Assessment of oral presentations also provides an immediacy of feedback that not only plays formative roles for students but also reduces marking time. Alternatively, posters might be displayed in a room with their creators present. Examiners and peers can then circulate through the exhibit asking questions. In this case a standard feedback form can be used. Both oral presentation and display are suitable for peer assessment, too. Standard assessment forms can bring uniformity to this process, and student assessors can be marked on the soundness of their assessment or value of their comments (see Brown and Knight, 1994: 79 for an example).

Identifying the audience for the poster is key for project expectations. In most cases, the intended audience will be peers or academic examiners. Alternative audiences can be defined. For example, projects aimed towards descriptive processes—skills such as identifying, describing, locating, and so on—can create posters directed to an audience of secondary school students. A poster assignment also could be built into projects to evaluate or supplement course material for secondary schools. They also can be linked to special events, such as commemorations.

Potential problems: Because posters are visual products, assessment will involve some aesthetic criteria (Brown and Knight, 1994). Student concerns about fairness will focus on the potential for subjective decisions by examiners, the natural aptitudes of their classmates for art and graphic design, and their relative facility with production software.

The use of multiple markers reduces the influence of any one examiner's assessment. A developmental approach to poster design improves the sense of student participation in setting aesthetic criteria and negotiating their concerns. More important, full marks for design or aesthetic features should be awarded for *sufficient* quality or for meeting *minimal* design standards rather than for extraordinary display of a skill. This approach counterbalances perceptions of unfairness because both excellent and sufficient displays receive the same result. (They do so because both achieve the specified outcome even though one might achieve it elegantly and another might achieve it haphazardly.)

An emphasis on sufficiency also compensates for any unevenness students may have in their access to or facility with complex production technologies. Caution students not to leap into complex production technologies—such as professional desktop publishing or graphic design software—to produce their posters. This uses a sledgehammer where a mallet will do. Unless learning objectives specifically identify the facility with a production technology as an assessed outcome, poster assessment should have a mechanism for keeping the focus on other outcomes and their sufficient attainment of actual criteria. Open-ended or vague criteria for marking should be avoided.

Large presentation sessions can be logistically difficult to organise. Auditing by additional and visiting examiners can be incorporated in a session format but co-ordination of schedules can prove difficult. Additional class or tutorial time will be required for guidance on project-specific elements, such as principles of visual display, effective design, development, and negotiating assessment criteria.

Oral Presentations

Oral presentations require students to deliver prepared information at a scheduled moment during a course in a format largely of their own design and direction. This moment is both personal (students undertake the task in person) and substantially verbal (though other modes of communication can be involved, too). Oral presentations differ from class “participation,” such as in discussion groups, where participation normally is unscheduled and occurs in settings where other people design and direct the interaction. Presentations range in length, purpose, and expectation. They may pursue formative or summative ends (Knight, 2001). They may involve individual or group work, and assessment can

incorporate self and peer assessment. They may supplement another project or serve as a stand-alone project. Oral presentations normally involve delivery in a formal setting where the audience knows relatively little beforehand about what is to be said or accomplished. Strict time limits govern the interaction.

Benefits: The obvious benefit of presentations focuses on developing key skills related to communication. Most careers require communication skills along these lines; some require them far more than the kind of written skills fostered through written exams and essay assessments (Macintosh, 1974; UCL, 1999–2000; Murphy, 2001). Oral presentations also promote other personal skills, such as self-confidence. The formative experiences derived from first attempts at presentations reduce anxiety and improve performance in subsequent attempts.

Race (1995) argues students are encouraged by the demands of a presentation to undertake deeper revision of content and to increase their overall grasp of a subject. This results from an internal desire to present themselves well in public demonstrations of their abilities and to avoid embarrassment in front of peers and tutors. Learning outcomes, therefore, are more likely to be accomplished through presentations, especially when they include greater attention to research, greater engagement with the sources and overall deeper approaches to learning course material.

For the tutor, presentations serve as a check against irregularities. Presentations supplementing written projects override the rewards of plagiarism because students are forced to learn the presentation's content. They also will benefit little if plagiarising from a script or visual aids because the presentation format sets a functional task: what can the student communicate about the subject at hand? Examiners are free to set rules for presentations that prohibit the use of scripts and to use discussion periods to probe a student's depth and breadth of knowledge. This flexibility increases the validity of presentations as an assessment strategy.

Presentations generate positive student appraisals regarding fairness (Murphy and Torrance, 1988). Despite the anxiety many express at the moment of delivery, students report appreciating the opportunity to demonstrate their knowledge outside the constraints of written work (Race, 1995). This type of assessment provides rewarding opportunities for students who believe they have an aptitude for oral expression and communication. It also rewards students who work to refine those skills,

and it challenges those who attempt to specialise solely in skills related to set essays and examinations. Crediting students for broader skills is a key motivation underlying diversifying assessment. It enhances perceptions of equality and improves the overall validity of assessment across the range of abilities and personal aptitudes (Fallows and Ahmet, 1999).

Recommendations and Implementation: Within the overall assessment strategy for a course, oral presentations can be combined with other projects or set as stand alone outcomes for individual projects. However, students often object when a major project is assessed solely on the basis of an oral presentation. Their concern is the validity of this test as a measure of their mastery of the learning objectives. It places too many eggs in one basket. They fear inexperience or clumsiness with performance skills might muddle their delivery and thus prevent a tutor from appreciating their understanding of the topic.

Combined with other course work, presentations can be used for several purposes. They can form the capstone to a finished project in which students present their results and discuss their implications. Sivasundaram (2001) used oral presentations as a capstone examination for a course. In this setting, students were asked to reflect on course content and its reading list, then deliver a 15 minute presentation. This asked students to identify key themes in the course and elaborate some of those themes using particular case studies. An open-ended written component supplemented this delivery.

Alternatively, presentations can function as work-in-progress reports. This nicely combines multiple purposes: a presentation for developing communication skills simultaneously provides formative assessment for the underlying project (Cain, 2002: presentation notes). This use of presentations forces students to reflect on project design, project strengths and weaknesses, and the relative development of various components.

As another alternative, presentations can be combined with other project work, such as posters, Web work, or group projects. This provides a setting for students to describe their planning and research in preparation for the project as well as their reflections on their relative success in accomplishing the learning objectives. A presentation in this context also provides a means for examiners to probe the depth and breadth of student understanding and check for irregularities such as plagiarism. In group work, students can be asked to speak individually on components of the collective work. Allocation of topics can be made

beforehand by the tutor, left to the group to decide, or determined on the day of the presentation. Some of these approaches provide convenient checks on the relative balance of contributions within the group. When presentations are used to supplement other projects, tutors should stress the supplemental purpose of the presentation and make clear that they do not want a repetition of information provided in the other project.

As with all other assessed course work, criteria for assessment must be made clear from the start. To increase involvement, marking criteria can be negotiated. To begin their thinking about the nature of effective presentations, students might be asked to reflect on the relative strengths and weaknesses of their tutors' presentation skills. Students with past experience of presentations can be asked to reflect on the experience.

A great many rubrics for marking presentations are available online and in print. For a general discussion, see Race (1995). Barnard (2000) provides a portal to many rubric schemes. Brown, Bull and Pendlebury (1997: 159) provide a fine example of a rubric for the undergraduate level. Cain (2002: presentation marking sheet) provides another working example. Rubrics tend to divide assessment of presentations into several major categories:

- content (project aims and value explained, major findings identified, details presented clearly, skills displayed (description, analysis, synthesis), methodology explained)
- presentation skills (presentation aims made clear, overall organisation, pace, information presented clearly and concisely, kept on track, sense of preparation, easy to hear, easy to see)
- visual aids (visuals appropriate, saturation and competition avoided, is technology used well or distracting)
- questions (knowledgeable answers to questions, clarity, composure during answers)
- overall impressions (what sense do I have of the overall project from this presentation?)

Students often confuse means for ends when preparing presentations. They obsess about their performance skills while ignoring presentation content. Where content aims are primary, tutors can reinforce this priority in the relative weight of each category in the overall project mark. Tutors should discuss their assessment criteria with students, explaining their priorities and underlying aims. Is the tutor expecting to learn something about an underlying project (and thus will

look past fine points in the mechanics of delivery), or is the tutor testing oral communication skills (and thus willing to overlook weaknesses in content, methodology, or analysis)?

To advise students on communication and presentation skills, general guides for presentations offer varying levels of value. Though dated about technology, Mambert (1968) and Turk (1985) offer useful mixtures of practical and principled advice. Both place a heavy emphasis on clear thinking about the underlying project as the foundation for a presentation. Goodlad (1990) and Grant (1997) offer little more than a list of tips for improving performance skills. These tips are useful for refining skills after self-assessment but offer little help for novices. Grant (1997) and Radel (1999) provide a beginner's "how-to" guide for presenters, with presentations divided into core delivery skills—e.g., visual aids, physical skills, script-reading skills, question and answer sessions. For intermediate skills, Wood (1971) focuses on performance skills related to voice, stance, and presence as a drama coach might. Tutorials should be offered in which communication skills can be discussed generally and presentation skills can be discussed specifically. Analysis of videotapes or demonstrations provides fertile ground for reflection and learning by example. Students are quick to offer advice on what seems effective to them and what does not.

Advise students to practice their presentations. Most will think reading through their notes is sufficient, but encourage them to press further into full-scale, timed rehearsals. Access should be provided to the room where presentations are assessed so practice can take place in a realistic setting. This is especially useful for presentations involving technology, where the mechanics of operation need to be rehearsed. Practice in the space to be used during the assessment increases familiarity and comfort particularly as the perspective of a speaker in a room is much different from that of the student's typical perspective in the audience. Practice in speaking a presentation—delivering the talk in the actual voice—improves elocution and pacing.

Tutors should consider recording presentations for several reasons. First, owing to their ephemeral nature, presentations are difficult to audit by internal or visiting examiners without a more permanent record. Second, students can be encouraged to self-assess their communication skills. The perspective of a presenter-at-work normally is a poor one for assessment purposes. Recordings can be studied later. They also can form a library for later demonstrations. Finally, tutors can

study recordings to gauge their overall marking preferences and monitor consistency in their assessment.

Students are often “unduly negative” when evaluating their own performance. This is especially true when they undertake novel tasks (Brown, et al., 1997: 156). With this negativity in mind, tutors should make a point of providing at least some positive feedback, such as encouraging applause at the end of all presentations. Having a printed marking sheet in use will help students evaluate their performance more realistically, particularly where they will see that they can only lose a limited amount of marks for nervousness or stumbling over words. The weighting of the award scheme on the content of presentations should be made apparent.

Listening skills are correlated with communication skills, though they rarely are identified as key skills. The QAA benchmark statement for philosophy emphasises listening skills such as the ability to (i) listen attentively to complex presentations; (iv) reflect clearly and critically on oral and written sources, employing powers of imagination as well as analysis; (vii) construct cogent arguments in the evaluation of this material; and (viii) present, in both oral and written forms, a clear and well-structured assessment of relevant considerations (Altham, et al., 2000 [their numeration]). Presentation sessions provide ideal opportunities to assess listening skills because the examiner shares the experience with students and is not biased by knowing the speaker’s intentions. A project based on listening might ask students to listen to several presentations and identify their key elements, such as the thesis, argument, and evidence.

Tutors need not restrict presentations to conference-style talks. Alternatives can include debates, mock trials (MacKay, 2000), panel presentations, video recordings as in an interview, or in fish bowls (described by Brown, et al., 1994).

Potential problems: One key objection to presentations is the resulting stress (Race, 1995). However, students normally describe all types of assessment as stressful. Stress management skills can be introduced in the preparation process. Repeated exposure to the demands of presentations also tends to reduce anxiety and improve resilience. Students could be given several opportunities to record their presentation on video for later examination. This would allow them to select what they consider to be their best effort rather than placing all their anxiety on a one-off opportunity.

For tutors, a practical concern focuses on the length of time this assessment can take, especially if long presentations are required of each individual in a class (Race, 1995). Running presentations as group tasks, with each individual speaking for only a short time, reduces the overall load. Also, presentations can be carried out in class time, with all class members present. In this way the content of the presentations constitutes teaching for other class members who have not researched the same area as those making the presentation. In this way the formative element is greatly increased as students acquire increased material knowledge and also gain an impression of how presentations are done well or badly.

Two concerns focus on fairness. First, the lack of anonymity this assessment demands might lead to favouritism (Race, 1995). This criticism can be avoided if criteria are made clear, if peer assessment is introduced, and if a standard and available marking scheme is used. Secondly, oral presentations tend to favour students who have assertive or extrovert personality traits (Beard and Hartley, 1984). Using sufficiency criteria for the presentation skills component of assessment will limit the impact of any differences in this regard. Also, when combined with other non-interactive assessment forms, this benefit to certain students is balanced. On the other hand, a healthy balance of assessment tools will improve fairness overall, allowing students moments of relative comfort and relative challenge in comparable proportion.

Recording students' presentations raises issues related to student privacy. These recordings should be treated confidentially during the marking process and should only be seen by examiners. Permission of the student is required for other uses, such as for later peer assessment or demonstration, and anonymity should be maintained as a default rule. To avoid unauthorised use or copying, tutors should maintain physical control of recordings at all times.

Role-Play

In role-play “participants take on the role of individuals representing different perspectives (e.g. a mock interview) to meet specific learning objectives, such as to promote empathy or to expose participants to a scenario ...” (Fry, et al., 1999: 398). Role-play may be designed as a written project (such as correspondence) or used in combination with presentation skills for either individual or group performances. These can involve one-way presentations (such as a letter, performance,

interview, or poster session) or interactions (such as in debate or exchange of letters).

Benefits: Role-play encourages student engagement with a research task by promoting personal interest (Habeshaw, et al., 1993). Walker and Warhurst (2000) report use of debate format increases student knowledge of course content and skills such as teamwork. This success probably results from the work requiring different approaches to problem solving than normally are used and has the effect of encouraging students to be flexible and creative in their approaches to other work. The personal investment students can make in role-play also promotes deep learning. In addition, students sometimes feel more compelled to undertake more thorough work when they can identify personally with the historical characters and moments represented in role-play.

Role-play tasks provide ample room for promoting key skills. Hall and Rainier (2001) link role-play to drama and literacy. More important, role-play fosters empathy, which Fletcher, et al. (2000: 3) emphasise among the historian's "qualities of mind" and Haydn, Arthur and Hunt (2001: 124–151) emphasise as a strategy for promoting "historical understanding". Van Ments (1989), Shemilt (1984) and Lee (1984) agree. Historical role-play encourages students to consider the motivations of historical characters who often seem remote and divorced from their understanding of personal motivation (Fairclough, 1994). Appreciation for the complexities of decisions and historical contexts thus is enhanced through the new perspective offered by role-play tasks.

Interestingly, role-play also promotes skills useful in careers. Companies sometimes include assessed role-play tasks in their recruitment process (Van Ments, 1989). It can promote a supplier's appreciation for the needs of clients and competitors, an advocate's appreciation for their opposition's perspective, and so on. Role-play improves an individual's ability to respond sensitively and productively.

Role-play allows students to gain credit for creative work. This improves impressions of fairness, as students with an aptitude for this kind of work are given the opportunity to gain credit for their frequently overlooked skills. This kind of assessment may also appear more enjoyable and rewarding to students. This improves their appraisal of the task and increases their engagement.

Recommendations and Implementation: For history of science, role-play using correspondence projects is promoted by Chang (2002) to promote

knowledge of course content and by Marston (2000) to promote critical studies in biography. Jeckells (n.d.) presents material for role-play on Galileo's trial that is useful for both debates and presentations. Allchin's (2000) portal provides several other examples. (For other examples, search on-line using keywords "role-play" and "history of science".) For role-play examples in other disciplines, Granada Learning (n.d.) and Duff (1998) present a compact designs for debate over political issues. Alden (2000) provides a role-play project on environmental economics. Vincent and Shepherd (1998) present a role-play project on Middle Eastern politics that uses Web-mediated interaction. Fadali, Robinson and McNichols (2000) consider role-play opportunities in engineering. Role-play also is useful for learning projects in policy and ethics. AAS (n.d.) present the case of rabbit calicivirus in a role-play format where students are assigned particular advocacy roles. Role-play is a common element of active learning and assessment in primary and secondary education with many examples described on line (keywords "role-play projects") and in the journal, *Teaching History*.

Role-play connects with drama. BSHS (n.d.) emphasises drama as a way to explore "human qualities" in history of science. Tucker-Griffith (n.d.) implements dramatic projects for the topics spontaneous generation and *Microbe Hunters*. Dramatic work also has potential in projects emphasising story-telling (Rosen, 1993; Grugeon and Gardner, 2000).

For designing role-play projects, Van Ments (1989) and Chester and Fox (1966) provide extremely useful overall guidance for planning and preparation. Sutcliffe (2000) provides brief but useful advice on-line. McVitte (n.d.) focuses on pedagogical foundations in the design of role-play projects. Duff (1998) emphasises the importance of scenario building in pre-activity instruction. Haydn, Arthur and Hunt (2001: 82) provide a concise plan for implementing role-play projects in which the tutor constructs most of the material used; this can be adapted as a plan for students to manage their own projects. Ip's (2002) Web site provides a portal and bibliography for considering role-play as a general topic. Bolton and Heathcote (1999) defend a far less structured approach.

A key but subtle distinction in the design of role-play involves the distinction between tasks where a student assumes the personality and identity of a particular historical person versus tasks where the student retains their own identity but considers situations in the role of a passive but more knowledgeable observer (Van Ments, 1989). The appropriate selection of role-play type is therefore contingent upon the

material available and the desired learning objectives. This first approach is more appropriate to encourage in-depth appraisals such as in a complete biographical study. The second approach is more appropriate as a task by which to illuminate context and alternative perspectives.

Tutors should describe their expectations for role-play before undertaking these activities, with clear criteria for assessment (Van Ments, 1989). This can be done with student assistance, perhaps by showing them a sample of the material they will be producing. Student work improves when they understand the underlying learning objectives of this type of task; this prevents a impression that role-play is somehow detached from the syllabus. Assessment criteria should balance breadth and creative freedom with high academic standards for research, preparation, and accuracy. Students should have wide latitude to use creativity and imagination if their role-play is to be effective (Van Ments, 1989). Tutors need to be flexible and willing to accept experimentation within the overall framework of role-play.

Most guides emphasise a de-briefing session following role-play projects. These sessions provide opportunities for students to analyse interactions and interpret actions in terms of the role-play and in terms of their wider knowledge of the subject. Members of the audience can discuss what they observed and consider relevant empathies. Post-performance interviews in character can be useful mechanisms for de-briefing. Tutors should be sure that inaccuracies are corrected. Debriefing also plays a formative role for discussing presentation skills. Van Ments (1989) suggests a plan for debriefing sessions.

Potential problems: One major problem associated with written versions of the role-play task is the tendency for authorship to become sloppy or flippant (Habeshaw, et al., 1993), to fly into fantasy, or to treat such tasks “as too entertaining or frivolous” (Van Ments, 1989: 16). The sense of release from the normal constraints of essay style can produce a lapse of rigour. This can be countered effectively by the careful design of assessment criteria and good preparation. The forum for the imagined text should remain specific and explicit, and this should inspire appropriate style. For instance, projects to write newspaper articles should be directed to specific outlets, and letters should be written to influential characters, political figures, or again newspapers. Samples for comparison help steer this process. Expressed and specific marking criteria keep projects from diverging too far off the syllabus.

Tutors must appreciate that role-play, especially presentations, can be time consuming. Attention to group structuring and careful briefing of students can reduce the load, but the demands remain high. For examination purposes, oral presentations should be witnessed by multiple examiners or should be videotaped for record.

Tutors should make provision for scrutiny of assessment by additional examiners, especially for presentations, interviews, and debates. In these cases, class activities can function as formative assessment in preparation for submission of written materials. Alternatively, presentations can be videotaped and made available to additional examiners. A permanent record must be maintained in every case.

As an aside, role-play has a substantial constituency in fantasy or alternative worlds gaming communities. These are extensive in on-line and board or card game settings. This activity is not considered relevant to the present project and reflection on its pedagogy is hard to find.

Conclusions

As with our other papers in this series, we realise our survey and synthesis approach only begins to engage the detailed issues concerning these alternative assessment tools. We don't aim to be exhaustive. We simply hope to contribute to ongoing discussions about objective-focused active learning and to ongoing considerations about the appropriateness of the assessment tools we choose to use in our courses. Rather than re-invent wheels for this project, we have assimilated the relevant literature into this discussion. The next paper in this series will consider other assessment methods, such as Web evaluation and construction. Another will examine ways to implement group work.

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Bibliography

- AAS, "The Calicivirus Controversy: A Role Play", (Australian Academy of Science, n.d.) last modified: n.d.; accessed: 10 April 2002, location: <http://www.science.org.au/nova/001/001act05.htm>
- Alden, Dave, "A Role Play for Environmental Economics", (Department of Economics, University of Melbourne, 2000) last modified: 20 June 2000; accessed: 10 April 2002, location: <http://www.economics.unimelb.edu.au/roleplay.html>
- Allchin, Douglas, "Curriculum Modules", (Resource Center for Science Teachers using Sociology, History and Philosophy of Science, 2000) last modified: 15 Oct 2000; accessed: 10 April 2002, location: <http://www1.umn.edu/ships/modules/>
- Altham, J E J, Bowie, A S, Cameron, J R, Chadwick, R, Clark, S R L, Evans, J D G, Hooker, B, Hursthouse, R, Knowles, D R, Lloyd, I, Monk, R, Ree, J, Sorell, T, Trigg, R H, Wolff, J and Horton, D, *Philosophy* (Gloucester: Quality Assurance Agency for Higher Education, 2000), 9 pp.
- Barnard, Paula, "Rubric Resources", (Paula Barnard's Educational Resources for a Global Community of Learners, 2000) last modified: 30 January 2002; accessed: 15 March 2002 2002, location: <http://www.asd.wednet.edu/EagleCreek/Barnard/sites/ed/rubric.htm>
- Beard, R. and Hartley, J., *Teaching and Learning in Higher Education, 4th edition* (London: Harper and Row, 1984), 333 pp.
- Berger, Pam, *Internet for Active Learners: Curriculum-based Strategies for K-12* (Chicago: American Library Association, 1998), 189 pp.
- Biggs, John, *Teaching for Quality Learning at University: What the Student Does* (Buckingham: Open University Press, 1999), 250 pp.
- Bolton, Gavin M. and Heathcote, Dorothy, *So You Want to Use Role-play? : A New Approach in How to Plan* (Stoke-on-Trent: Trentham, 1999), 187 pp.
- Brown, George, Bull, Joanna and Pendlebury, Malcolm, *Assessing Student Learning in Higher Education* (London: Routledge, 1997), 317 pp.
- Brown, Sally and Knight, Peter, *Assessing Learners in Higher Education* (London: Kogan Page, 1994), 161 pp.

- Brown, Sally, Rust, Chris and Gibbs, Graham, *Strategies for Diversifying Assessment in Higher Education* (Oxford: Oxford Centre for Staff Development, 1994), 317 pp.
- BSHS, “Using Drama to Bring Out the Human Qualities in Scientific Reasoning”, (British Society for the History of Science, n.d.) last modified: n.d.; accessed: 10 April 2002, location: <http://www.chstm.man.ac.uk/bshs/drama.htm>
- Cain, Joe, “Staff ... Dr Joe Cain”, (Department of Science and Technology Studies, University College London, 2002) last modified: Feb 2002; accessed: 8 March 2002, location: <http://www.ucl.ac.uk/sts/cain/index.htm>
- Carroll, Jude and Appleton, Jon, *Plagiarism: A Good Practice Guide* (Oxford: Oxford Brookes University and Joint Information Systems Committee, 2001), 43 pp.
- Chang, Hasok, “HPSCB218: History and Philosophy of the Physical Sciences Syllabus”, (Department of Science and Technology Studies, University College London, 2002) last modified: 8 January 2002; accessed: 8 March 2002, location: <http://www.ucl.ac.uk/sts/admin/syllabus/>
- Chester, Mark and Fox, Robert, *Role-playing Methods in the Classroom* (Chicago: Science Research Associates, 1966), 86 pp.
- Crème, Phyllis and Lea, Mary R., *Writing at University: A Guide for Students* (Buckingham: Open University Press, 1997), 160 pp.
- Davis, Mary Beth L., “Interactive Learning Within the Self: Writing the Research Notebook to Heighten Critical Thinking Skills”, (Department of Medieval Studies, Central European University, 1998) last modified: 29 March 1998; accessed: 4 April 2002, location: <http://www.cep.org.hu/teachandlearn/szeged98/davis.htm>
- Duff, Robin, “Appeasement Role Play: the Alternative to Munich”, *Teaching History*, 90, 1998, 17–19.
- Fadali, M. Sami, Robinson, Mike and McNichols, K., “Teaching Engineering to K–12 Students Using Role Playing Games”, (2000) last modified: n.d.; accessed: 10 April 2002, location: <http://www.asee.org/conferences/search/20603.pdf>
- Fairclough, John, *History Through Role Play* (London: English Heritage, 1994), 36 pp.
- Fallows, Stephen and Ahmet, Kemal (ed), *Inspiring Students: Case Studies in Motivating the Learner* (London: Kogan Page, 1999), 180 pp.
- Fallows, S. and Steven, C., *Integrating Key Skills in Higher Education* (London: Kogan Page, 2000), 251 pp.
- Fletcher, A, Arnot, M, Bates, D, Clark, C, Daunton, M, Dickinson, H, Doran, Susan, Doyle, W, Eastwood, D, Evans, E, Jones, A, Lloyd-Jones, R, McFarland, E, Porter, A, Stafford, P and Tosh, J, *History* (Gloucester: Quality Assurance Agency for Higher Education, 2000), 12 pp.

- Fry, H, Ketteridge, S. and Marshall, S., *A Handbook for Teaching and Learning in Higher Education* (London: Kogan Page, 1999), 408 pp.
- Gipps, Caroline, *A Fair Test? Assessment, Achievement and Equity* (Milton Keynes: Open University Press, 1994), 308 pp.
- Goodlad, Sinclair, *Speaking Technically: A Handbook for Professional Scientists and Engineers on How to Improve Technical Presentations* (London: Sinclair Goodlad, 1990), 75 pp.
- Gosling, Peter J., *Scientists' Guide to Poster Presentations* (London: Kluwer Academic, 1999), 139 pp.
- Granada_Learning, "Treaty of Versailles Role Play", (YITM, n.d.) last modified: n.d.; accessed: 10 April 2002, location:
http://www.granada-learning.com/yitm/ww1/case_studies/role_play/
- Grant, Alastair, *Presentation perfect: how to excel at business presentations, meetings and public speaking* (London: The Industrial Society, 1997), 107 pp.
- Grugeon, Elizabeth and Gardner, Paul, *The Art of Storytelling for Teachers and Pupils: Using Stories to Develop Literacy in Primary Classrooms* (London: David Fulton Publishers, 2000), 128 pp.
- Habeshaw, S., Gibbs, G. and Habeshaw, T., *53 Interesting Ways to Assess Your Students* (Bristol: Technical and Educational Services Ltd., 1993), 191 pp.
- Hall, Nigel and Rainier, John, *Being in Role: Literacy, Drama and Role Play* (Reading: Reading and Language Information Centre, University of Reading, 2001), 28 pp.
- Haydn, Terry, Arthur, James and Hunt, Martin, *Learning to Teach History in the Secondary School: a Companion to School Experience, 2nd edition* (London: RoutledgeFarmer, 2001), 301 pp.
- Hunter, Dale, Bailey, Anne and Taylor, Bill, *The Facilitation of Groups* (Aldershot, Hampshire: Gower, 1996), 212 pp.
- Ip, Albert, "Role Play Simulation for Teaching and Learning", (Albert Ip, 2002) last modified: n.d.; accessed: 10 April 2002, location:
<http://www.roleplaysim.org/papers/>
- Jaques, David, *Learning in Groups: A Handbook for Improving Groupwork, 3rd edition* (London: Kogan Page, 2000), 310 pp.
- Jarvis, Louise and Cain, Joe, "Diversifying assessment 1: essays and examinations in undergraduate history of science", *PRS-LTSN Journal*, vol. 2, no. 1, 2002.
- Jeckells, David, "The Retrial of Galileo", (Nottingham Trent University, n.d.) last modified: n.d.; accessed: 10 April 2002, location:
http://education.ntu.ac.uk/resources/ict_resources/Galileo/
- Knight, Peter, *A Briefing on Key Concepts: Formative and Summative, Criterion and Norm-Referenced Assessment* (York: Learning and Teaching Support Network, 2001), 28 pp.

- Lee, P. J., “Historical Imagination”, in Dickinson, A. K., Lee, P. J. and Rogers, P. J. (ed), *Learning History* (London: Heinemann Educational Books, 1984), pp. 85–116.
- Levine, Marilyn A., “Creating Posters for Humanities and Social Sciences”, (Division of Social Sciences, Lewis-Clark State College, 1996) last modified: 4 September 2001; accessed: 15 March 2002, location:
<http://www.lcsc.edu/ss150/poster.htm>
- Macintosh, Henry Gordon (eds), *Techniques and Problems of Assessment* (London: Edward Arnold, 1974), 285 pp.
- MacKay, Charles, “The Trial of Napoleon: A Case Study for Using Mock Trials”, *Teaching history*, 25, 2000, 59–68.
- Mambert, W. A., *Presenting Technical Ideas: A Guide to Audience Communication* (New York: John Wiley and Sons, 1968), 216 pp.
- Marston, Paul, “Great Astronomers in History”, (Department of Physics, Astronomy, and Mathematics, University of Central Lancashire, 2000) last modified: 13 September 2000; accessed: 10 April 2002, location:
<http://193.61.251.88/pasm-dlearning/info/AA1066.htm>
- McVittie, Janet, “Epistemology and Sociology of Science for Teaching”, (College of Education, University of Saskatchewan, n.d.) last modified: n.d.; accessed: 10 April 2002, location:
<http://www.usask.ca/education/coursework/mcvittiej/edcur421/syll421.html>
- Murphy, Roger, *A Briefing on Key Skills in Higher Education* (York: Learning and Teaching Support Network, 2001), 20 pp.
- Murphy, R. and Torrance, H., *The Changing Face of Educational Assessment* (Milton Keynes: Open University Press, 1988), 126 pp.
- Nicholson, Tony and Ellis, Graham, “Assessing Group Work to Develop Collaborative Learning”, in Booth, Alan and Hyland, Paul (ed), *The Practice of University History Teaching* (Manchester: Manchester University Press, 2000), pp. 208–219.
- Purrington, Colin, “Advice for Designing Scientific Posters”, (Swarthmore College, 2002) last modified: 2002; accessed: 15 March 2002 2002, location:
<http://www.swarthmore.edu/NatSci/cpurri1/posteradvice.htm>
- Race, Phil, “The Art of Assessing”, *New Academic*, 4 (3), 1995,
- Race, Phil, *A Briefing on Self, Peer and Group Assessment* (York: Learning and Teaching Support Network, 2001), 24 pp.
- Radel, Jeff, “Effective Presentations”, (Kansas University Medical Centre, 1999) last modified: July 1999; accessed: 15 March 2002, location:
<http://www.kumc.edu/SAH/OTEd/jradel/effective.html>
- Rael, Patrick, “Reading, Writing, and Researching for History”, (History Department, Bowdoin College, 2000) last modified: August 2000; accessed: 4 April 2002, location:
<http://academic.bowdoin.edu/WritingGuides/>

- Rosen, Betty, *Shapers and Polishers: Teachers as Storytellers* (London: Collins Educational, 1993), 189 pp.
- Rusnock, Andrea (eds), *Women, gender, and the history of science syllabus sampler* (Seattle, WA: History of Science Society, 1999), 150 pp.
- Rust, Chris, *A Briefing on Assessment of Large Groups* (York: Learning and Teaching Support Network, 2001), 25 pp.
- Shemilt, D, “Beauty and the Philosopher: Empathy in History and Classroom”, in Dickinson, A. K., Lee, P. J. and Rogers, P. J. (ed), *Learning History* (London: Heinemann Educational Books, 1984), pp. 39–84.
- Sivasundaram, Sujit, “HPSCC399: Colonial Geographies of Science Syllabus”, (Department of Science and Technology Studies, University College London, 2001) last modified: 1 December 2001; accessed: 15 March 2002 2002, location:
<http://www.ucl.ac.uk/sts/>
- Stefani, Lorraine and Carroll, Jude, *A Briefing on Plagiarism* (York: Learning and Teaching Support Network, 2001), 12 pp.
- Stoss, Fred, “Designing Effective Poster Presentations”, (Science and Engineering Library, University of Buffalo Libraries, 2000) last modified: 27 January 2002; accessed: 15 March 2002, location:
<http://ublib.buffalo.edu/libraries/units/sel/bio/posters.html>
- Sutcliffe, Mark, “Using Role-play in Teaching Economics”, (Economics LTSN, 2000) last modified: 2000; accessed: 10 April 2002, location:
<http://www.economics.ltsn.ac.uk/advice/roleplay.htm>
- Thorley, Lin and Gregory, Roy (eds), *Using Group-Based Learning in Higher Education* (London: Kogan Page, 1994), 194 pp.
- Tosney, Kathryn, “How to Create a Poster that Graphically Communicates Your Message”, (Department of Biology, University of Michigan, 2001) last modified: March 2001; accessed: 23 February 2002, location:
<http://www.biology.lsa.umich.edu/research/labs/ktosney/file/PostersHome.html>
- Tucker-Griffith, Gail S., “An Adaptation of *Microbe Hunters*”, (Access Excellence, n.d.) last modified: n.d.; accessed: 10 April 2002, location:
http://www.accessexcellence.org/AE/AEC/AEF/1994/tucker-griffith_microbe.html
- Turk, Christopher, *Effective Speaking: Communicating in Speech* (London: E & FN Spon, 1985), 275 pp.
- UCL, “Key Skills”, (University College London, 1999–2000) last modified: 2000; accessed: 10 April 2002, location: **http://www.ucl.ac.uk/key_skills/**
- Van Ments, Morry, *The Effective Use of Role Play, 2nd edition* (London: Kogan Page, 1989), 186 pp.
- Vincent, Andrew and Shepherd, John, “Experiences in Teaching Middle East Politics via Internet-based Role-Play Simulations”, *Journal of Interactive Media in Education*, 98, 1998, 1–35.

- Walker, Melanie and Warhurst, Chris, ““In Most Classes You Sit Around Very Quietly at a Table and Get Lectured at...”: Debates, Assessment and Student Learning”, *Teaching in Higher Education*, 5, 2000, 33–49.
- Williams, Robin, *The Non-designer’s Design Book* (Berkeley, CA: Peach Pit Press, 1994), 144 pp.
- Wood, Millett, *The Art of Speaking* (Newton Abbot: David and Charles, 1971), 179 pp.

Project Report: **A Preliminary Study of Group Learning/Teaching in the Culture of Religious Studies**

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1. Introduction

1.1. Preface

Most educational theory is generalised and not tied to any specific subject area. The PRS-LTSN¹ has 'recognised that, in comparison with other subject areas, very little has been published about teaching at HE level in philosophical and religious studies'.² This project is a response to that lack. The intention is to provide a preliminary view of group learning/teaching in RS by looking at how the overall learning/teaching culture affects teaching in small groups. It attempts:

- to consider the trends and patterns of group learning/teaching practice;
- to contextualise group learning/teaching in relation to the overall culture of learning/teaching in RS departments;
- to highlight innovative group learning/teaching practice;
- to suggest possible strategies for group learning/teaching.

The project consists of three parts:

- a quantitative or general survey of learning/teaching in RS departments;

¹ *Philosophical and Religious Studies Learning and Teaching Support Network.*

² PRS-LTSN major grant website areas, August 2001.

- a set of case studies consisting of questionnaires, class observations, and interviews (of teachers and their students) in three RS departments;³
- an interpretation of results, conclusions and suggestions.

1.2. Key concerns of RS

The questionnaires and case studies are broad-ranging and suggestive. They make no claims to be scientific or prescriptive. They have been designed using education theory on learning/teaching styles and on teaching in small groups and constitute a first attempt to compare attitudes against practice, looking at some of the complex inter-relational overlaps between the different learning/teaching styles of teachers and students. Some preliminary conclusions have been drawn from the broad patterns which have emerged.⁴ This is a halting step towards understanding the problems involved in group learning/teaching in RS.

Some of the key concerns highlighted in the PRS-LTSN survey, 2001, have been incorporated into both the survey and its conclusions, in particular:

- the importance of critical thinking;
- student-led discussion in student-centred learning;
- key skills and employability in a non-vocational discipline.⁵

The research sets out, at both the design level and in its conclusions, to relate the relevance of these key concerns to the role of group learning in overall learning/teaching strategies.

1.3. Critical thinking and group learning

The prioritisation of critical thinking is one thing that distinguishes RS from other disciplines. This was highlighted in the PRS-LTSN questionnaire in 2001:

One of the more distinctive features of our disciplines is an emphasis on critical thinking, rather than on the mere absorption of facts or the acquisition of technical skills.⁶

³ The universities of Bristol, Exeter and University College of St Mark and St John, Plymouth.

⁴ The sample is not large. Returns of the general survey were received from about one third of RS departments. Case studies looked at five group learning sessions across three levels. But, inevitably, such broad ranging questionnaires and case studies cannot account for all the differences between individual teachers and students.

⁵ PRS-LTSN Major Grant Areas drawn from 2001 questionnaire.

As a discipline, we aim to encourage students in the development of the ‘more elusive skills’⁷ that are essential to the kind of critical thinking specifically required in our discipline.

The teaching aims can be summarised as follows:

- the development of the students’ intellectual skills;
- the comprehension of key concepts;⁸
- the ability to critically analyse and interpret key ideas and issues.

As well as the ability to critically read primary texts and to assimilate difficult abstract concepts, students must develop an ability to question and to relate difficult materials and concepts to previous knowledge and experience. They have to learn how to demonstrate the synthesis of these skills in the presentation of arguments (both verbal and written).

But how are these skills best taught? Or, alternatively, how are these skills best *learned*? Ramsden describes the ‘depressing picture [that] emerges from studies of the quality of students’ understanding ... It seems that many students often do not change their understanding in the way that lecturers would wish.’⁹ Student-centred approaches to learning/teaching encourage us, as practitioners, to look at education through their eyes. As active discussion by students in formalised group situations is undoubtedly a major constituent in the RS HE educational process, closer scrutiny of the joint experience of group learning/teaching may help to understand how students will develop their skills in three qualitatively different areas:¹⁰

- acquiring knowledge;
- thinking critically;
- thinking as a theologian, biblical scholar, philosopher *etc.*

I have considered the status of group learning in the overall process of learning/teaching in RS because it is in this particular learning/teaching environment that the development and expression of critical thinking can be most visibly observed and shared by teachers and students. One of the clearest results of the general survey to teachers in RS, is that critical thinking is our most highly prized development aim. In 80% of departments surveyed, this was rated our highest priority.¹¹

⁶ *ibid*, Area 5.

⁷ *ibid*.

⁸ Ramsden Paul, *Learning to Teach in Higher Education* (London, Routledge) 1992, p20.

⁹ Ramsden, p30.

¹⁰ Ramsden, p18.

¹¹ *Staff Survey*, question 4. C.f., Appendix A.

Paul Ramsden suggests that the most important competence in academic disciplines can be summed up as the development of ‘understanding’. He adds:

By understanding, I mean the way in which students apprehend and discern phenomena related to the subject, rather than what they know about them or how they can manipulate them.¹²

But what part does group discussion and interactivity play in its development?

In the survey results, 85% of teachers see group work and discussion as the best means to develop critical thinking and a personal sense of reality.¹³

This adds weight to David Jacques’ statement that:

Teaching and learning in small groups has a valuable part to play in the all-round education of students. It allows them to negotiate meanings, to express themselves in the language of the subject, and to establish a more intimate contact with academic staff than more formal methods permit. It also develops the more instrumental skills of listening, presenting ideas and persuading.¹⁴

Small group learning (a teaching strategy of working with groups of less than 30 students)¹⁵ seems, therefore, to provide the perfect learning/teaching format in which students will be able learn what we want them to learn—that is, the development of an understanding of our subject in the way that the RS discipline understands it.

Traditionally, however, group learning/teaching has been used as an adjunct to lectures. Often viewed as less demanding, requiring fewer skills as well as less informational or authoritative than lectures, this approach would not seem to prioritise group learning.¹⁶

A range of typical problems are associated with the practice of group learning/teaching. These can be summarised as follows:

- Students show a reluctance to discuss issues.
- Students tend to respond only when directly questioned by a teacher.

¹² Ramsden, p4.

¹³ *Staff Survey*, question 18.

¹⁴ Jacques D., *Learning in Groups* (London, Kogan Page) 1992, p9.

¹⁵ On considerations of size, c.f., Jacques, pp116 ff, Ramsden, pp156.

¹⁶ C.f., Ramsden, p 157.

- Students do not prepare for sessions (except when giving presentations).
- One or two students dominate discussion.
- Students expect solutions to problems to be provided by the teacher rather than through their own discussion.¹⁷
- The teacher dominates to the point of discouraging dialogue.

These problems, I suspect, will be recognisable to anyone who has applied group learning/teaching techniques and yet I am convinced that imaginative group learning/teaching practice that encourages the dynamic interactivity between peers (and tutors) offers one of the most potentially effective tools of learning/teaching.

1.4. Teaching styles and group learning

According to Ramsden the types of problem outlined above reflect a particular type of teaching style. This is called the transmission or transfer theory, in which teachers' overriding concern is to instil in students the subject content.¹⁸ According to this theory the teacher is viewed as 'the source of undistorted information', which the student will observe, absorb, assimilate and emulate through individual effort. The lecture provides the bed-rock of learning whilst in individual study the student will learn to understand and evaluate the subject content.¹⁹ This will be articulated in, and assessed by, written essays and examination questions. Discussion may help in this process but only in so far as the individual student is prepared to make contributions to it. To what extent does Ramsden's transmission or transfer model of teaching represent the dominant RS teaching practice?

There is a second, related theory of teaching in which the teacher aims to 'shape' student learning and which Ramsden suggests may equally create those problems typically encountered in group learning/teaching. In the shaping model, the teacher articulates the techniques required to learn and then supervises the learning process, aiming to provide a fail-safe set of methods.

In this theory, as long as students follow the procedures, reflection, understanding and the application of knowledge will be the natural outcome of their application. Ramsden, however, sees this

¹⁷ *ibid.*

¹⁸ C.f., Ramsden, p111 and Fox Dennis, "Personal Theories of Teaching" in *Studies in Higher Education*, Vol 8, No 2, 1983, pp 151-163.

¹⁹ Ramsden, p111.

approach to teaching as ‘about extending a lecturer’s repertoire of techniques rather than changing his or her understanding’ of the learning/teaching process.²⁰

Few would like to think that they have not moved away from traditional transfer or shaping models of teaching. Does RS teaching practice in any way reflect these models? The following extract from the PRS-LTSN document on major grant areas highlights some of our key concerns about discussion:

PRS disciplines lay greater stress than most on the importance of active discussion by students; but one of the most difficult problems faced by teachers is that of creating a framework within which fruitful discussion will take place. New students (especially some international students) are used to an educational model in which they are given information by teachers as authority figures. How can they be brought round to accepting a reversal of roles? How can students be trained in the art of contributing effectively to discussion in different ways, such as chairing, minute-taking, and making positive contributions in accordance with different personality types? What techniques are there for ensuring that students arrive in the discussion room primed with the necessary information and ideas? What is the role of student-only discussions, and how should they be managed? What use can be made of hybrid methods, such as buzz-groups within a lecture? Is it possible to devise a fair, objective, and unburdensome way of assessing student performance in discussion? How should one handle equal opportunities issues over less assertive students, or those whose culture discourages independent thinking, especially on religious, moral, or philosophical issues? How should one deal with offensive or insensitive interventions, whether or not the teacher is present?²¹

This statement highlights the genuine concern to improve learning/teaching in groups (with a particular emphasis on student-led discussion in group work). Implicit in the concerns expressed above, is the desire to move away from transfer or shaping teaching types towards what Ramsden terms as a ‘compound view of instruction’ in which teaching is seen as ‘a process of working cooperatively with learners to help them change their understanding.’²² The survey results, however,

²⁰ C.f., Ramsden, pp113-114.

²¹ Area 2: Student-led discussion, *PRS-LTSN* evaluation of concerns in their document on research areas, 2001.

²² Ramsden, p114, C.f., Fox, *op cit.*, pp153ff.

indicate that many of us have not changed as much as we might like to think.²³

1.5. Learning styles and group learning

The statement on page 78 highlights the other side of the learning/teaching equation—that of student attitudes to learning. Student expectations of learning/teaching may equally contribute to difficulties in group learning and confound attempts to change practice. The attitudes and learning experiences of the students, prior to entry into HE have a significant impact on how students behave in groups. These contribute to the kind of mismatch between expectations and outcomes in learning/teaching in groups expressed in Ramsden's list of problems. The individual learning style of students is, therefore, as important as our own teaching styles.

According to Ramsden, the development of critical thinking is only achieved when a 'deep' approach to learning is taken by students. Deep learning strategies lead to 'higher quality outcomes and better grades.'²⁴ A deep approach to learning is constituted by the desire to understand the meaning of texts and lectures, to relate ideas from one subject to another and to real-life experiences. In order to understand new ideas, the student will seek answers to questions which the course material should help to provide, enabling the synthesis and evaluation of previous material with newly acquired ideas and knowledge.²⁵ And yet, the problems expressed above suggest that many students still subscribe to a 'surface' approach to learning, in which recall is prioritised (i.e., the retention of factual content along with an acceptance of 'the statements and ideas of ... lecturers') over the ability to tease out for themselves the complex implications of the subject into some sort of overall picture.²⁶ It is this learning approach that is reflected in the negative experiences of group discussion sessions outlined by Ramsden and suggested by PRS-LTSN findings, suggesting that in the two-way process of learning/teaching, both teachers and students contribute to problems typically associated with group learning.

The genuine concern of RS to develop a student-centred approach to learning/teaching arises from a recognition of the importance of the development of critical thinking through discussion. If

²³ C.f. Results pp29ff.

²⁴ Ramsden, p53 and 57.

²⁵ Ramsden, p52.

²⁶ *ibid.*

group learning works best, as Jacques and Ramsden suggest, when it encourages student-centred learning, are we employing the kinds of techniques that help students to learn what we want them to learn? If not, what can we do to improve our practice?

1.6. Education theory on group learning/teaching

In order to analyse the source of problems in learning/teaching in groups, it is helpful to understand what is meant by a group. This section defines the term, considers the group dynamics and looks at how best to achieve results when working with small groups. David Jacques suggests that,

A group can be said to exist as more than a collection of people when it possesses the following qualities:

- *Collective perception*: members are collectively conscious of their existence as a group.
- *Needs*: members join a group because they believe it will satisfy some needs or give them some rewards.
- *Shared aims*: members hold common aims or ideals that to some extent bind them together. The achievement of aims is presumably one of the rewards.
- *Interdependence*: members are interdependent inasmuch as they are affected by and respond to any event that affects any of the group's members.
- *Social organization*: a group can be seen as a social unit with norms, roles, statuses, power and emotional relationships.
- *Interaction*: members influence and respond to each other in the process of communicating whether they are face to face or otherwise deployed. The sense of 'group' exists even when members are not collected in the same place.
- *Cohesiveness*: members want to remain in the group, to contribute to its well-being and aims, and to join in its activities.
- *Membership*: two or more people interacting for more than a few minutes constitute a group.²⁷

Jacques points out that whilst no single characteristic defines a group, each one constitutes an important aspect of the group dynamic.

²⁷ Jacques D., p13.

Group activity can be summarised, therefore, as essentially consisting of an interaction between members, in which members manifest the ‘need to influence, share and be responded to’.²⁸

Jacques is providing a definition of the group in its broadest, generic sense. It could refer to any RS department, as the group is defined by the type of social organisation in which clear norms, roles and statuses in any type of learning/teaching situation are first and foremost constituted by membership to the departmental group discipline. After all, the dissemination of RS must be a shared aim and a prerequisite to membership of any RS department. According to this description, any of our teaching activities, from the teacher-led lecture (with or without discussion) the one-to-one tutorial, the group discussion to the traditional seminar involves elements of this definition. This helpful reminder highlights that group activities are, in some sense, central to all learning/teaching processes. Understanding this helps to clarify those aspects of the group such as its perceptions of itself, its shared aims, the interdependence of its members, as well as its social organisation and membership. Whereas learning/teaching aims and outcomes will vary according to the type of group teaching strategy selected, all learning/teaching is group learning/teaching. It provides a sense of the overarching rationale of the whole RS group constituency in which smaller learning/teaching forms are situated.

Within the broad generic definition of the group, discussion constitutes one form of activity within the whole. It will tend to take place in small groups. A small group is defined by Ramsden as ‘any teaching strategy involving up to 30 students where student participation is expected’.²⁹ This form is most commonly used as a supplement to a lecture series and is at its most successful when the teaching strategy has been selected to reflect specific goals.³⁰ These will normally be motivated by specific aims in student learning that involve discourse. Relating this to Jacques’ definition of the group, small groups will tend to reflect the characteristics of interdependency (between teachers and students), interaction, cohesiveness within the same shared needs and aims. In this sense, small group learning, what happens beyond the classroom can be as important as what happens in the classroom, as responsibilities to the group are at play even when its members are not collected together.

²⁸ *ibid.*

²⁹ Ramsden, p158-9.

³⁰ on surface learning, c.f., Ramsden, p175.

At its simplest, any small group will include the following elements:

- the encouragement of skills that connect knowledge to thinking critically about issues arising out of the subject;
- the sharing and communication of ideas and questions.

At this level, a collegiate approach is expected from the group members but it does not necessarily (at least, not from Jacques' definition above) imply a collaborative one. Individual students may be expected to prepare and present papers, or to play a part in a formal debate, whilst their remaining colleagues are expected to respond critically in a general discussion. But this need not involve collaboration as such. Individual and surface learning approaches may still persist, as may tutor-centredness.³¹

At a more complex level, small groups provide students with the opportunity:

- to learn cooperatively (individual tasks and ideas contributing to a team effort, both in and beyond the classroom);
- to develop a sense of joint responsibility.

For the teacher they provide the opportunity:

- to share ideas with students;
- to hear and see the way in which students set out to understand their subject;
- to observe how they relate ideas across from one topic to another, how they question the material that has been presented to them and how, in turn they present their ideas, problems and conclusions to other members of the group, including the tutor;
- to learn from students.

Ultimately, and ideally, this more complex view of small group learning will lead to 'a gradual shift away from dependence [on the tutor] to independence [between the tutor and the student]' and reflect a deep learning strategy.³²

It is at this level that the stated needs of employers are most clearly related to group learning practice. Their demand for well-rounded, adaptable people with a grounding in high-level analytical skills, able to learn within a team, would seem to invite the development of

³¹ C.f., Ramsden, p52, in which he suggests that the surface learner will re-present material from the lecturer (or from secondary reading) without necessarily questioning it.

³² C.f., Ramsden p175 and p52 respectively.

skills that involve working both with and alongside each other to agreed goals. Whereas students may still prepare independently beyond the classroom, in this approach, they are encouraged to relate their personal findings to those of their teacher and their peers. A collaboration is developed between teachers and students, in which teachers cooperate with learners in the planning and distribution of tasks (within clearly defined roles) as well as in the class discourse. A prerequisite in small group learning of this type is the achievement of a consensus on the accepted aims of the production, assimilation, distillation, evaluation, and finally, the presentation and defence of material within a more or less formal discourse. In small group learning/teaching, listening and spoken skills are tested within the group as well as the ability to present material formally and informally.

The kind of process in which students and teachers work together is recognised in the Dearing Report³³, where it asserts that student-centred learning

... requires information and the opportunity to engage in 'learning conversations' with staff and other students in order to understand and be able to use new concepts in a particular field. (8.6)

Group learning activity seems, therefore, to be best reflected by Ramsden's third theory of teaching in which 'the subject content is actively constituted by the learner ... [and where] [l]earning is [understood as] applying and modifying one's own ideas' and where the teacher works cooperatively with the learner to facilitate that process.³⁴

Whilst Jacques' generic definition of the group reflects any component of learning/teaching (including personal study) and is able to accommodate traditional transfer and shaping teaching theories, small group learning/teaching seems to reflect Ramsden's compound view of learning/teaching in which the learning needs of the students can be brought together. It would also seem to develop the types of transferable skills demanded by the needs of a wider world.

Ramsden's definition of a small group is one that numbers no more than thirty. Lecture formats and those seminar groups arranged around general discussion and individual presentations, often accommodate larger numbers and whilst they may seem to allow greater pedagogic control and leadership, these larger groups have been shown to develop tensions due to fragmentation, greater anonymity and

³³ C.f., n 42 below.

³⁴ Ramsden, p114.

passivity amongst the students. It is more difficult for the teacher to differentiate between different types of learners. Both teachers and students may be prone to project a sense of hostility or to stereotyping of one another. This introduces the issue of increases in both the type and number of students. For some of us, the desire to introduce effective small group learning formats may simply increase pressures on learning/teaching structures and formats. This is acknowledged by Jacques who states

the limits imposed on educational procedures by logistics, such as disposition and availability of rooms and timetabling of other classes, frequently make the reality of curriculum development an untidy compromise. More often than not, educational ideals are decimated by timetables which organize course programmes into a fragmented collection of learning experiences for the student and give a similar sense of disconnectedness to the teachers.³⁵

As in its various forms, group learning involves a spectrum of factors such as, authority, dependency, responsibility, boundaries and the potential for projected hostility, the size of groups in relation to all of these factors will affect the characteristics of group dynamics. It is, therefore, fair to say that size matters.³⁶ According to Jacques, larger groups make it more difficult to encourage committed interactivity in discussion.³⁷ Smaller groups, however, make it easier to develop a sense of cohesion and trust and in these circumstances greater commitment to and a higher level of discussion are shown to result. A group of seven or less will cohere more easily than a group of more than seven. In the larger small group, clear structural parameters, role differentiation and positive leadership are necessary to help the group to work effectively together.

One way round the issue of size is to break the group up into smaller units within the classroom.

Jacques comments that

[c]ontemporary life places a premium on the ability of people to get on with each other, to be able to handle interpersonal problems rather than to avoid them, and to do so constructively and creatively. Nowhere is it more

³⁵ Jacques, p141

³⁶ C.f., Jacques, pp14-20

³⁷ Jacques, on group size, p 9

possible to practice these qualities than in small-group work when learning is not subject purely to academic limitations.³⁸

Within the broader context, what Jacques reflects what employers require from graduates. Jacques and Ramsden suggest that we can expect to see an improvement in student-centred learning if compound teaching theory is applied to deep learning strategies.³⁹ Learning/teaching in small groups will benefit everyone, if skills' development is considered to be as important to learning as the subject content.

1.7. The broader context of learning/teaching: critical thinking, transferable skills and employability in non-vocational careers

According to Ramsden, research on the attitude of employers on the value of graduates demonstrates that

the majority ... seemed to think that higher education did improve their employees' general skills. They believed that it enhanced academic ability and personal qualities, especially flexibility and motivations; they supported educational experiences that increased general understanding.⁴⁰

A relatively small percentage of RS students remain in higher education after taking undergraduate courses. Whilst employers of professional graduates expect them to come to them equipped with an in-depth knowledge of their subject, recruiters of graduates from non-vocational courses look for a combination of the ability to think critically and those skills needed to be able to work within corporate and team structures. The transferable key skills developed in group learning/teaching are, thus, seen as essential to the world of work beyond the academic institution.

These skills include:

- recognition and solving of problems;
- generation of creative solutions;
- prioritisation of tasks;
- managing time and work;

³⁸ *ibid*, p 21.

³⁹ C.f., Ramsden, p57 on approaches to learning and examination performance.

⁴⁰ Ramsden, p28.

- open-mindedness to new ideas;
- commitment to self-development;
- development of good working relationships;
- development of networks;
- presenting a positive attitude to others;
- effective and accurate exchange of information;
- different techniques of communication;
- active contributions (e.g., negotiating, influencing, receiving and giving feedback).⁴¹

These expectations demonstrate how the ability to think critically connects pragmatically to the type of skills that are best acquired in group learning activities and situates them in the wider context of non-vocational work. The needs and expectations of employers are further reflected in the following statement taken from the ‘Dearing Report’⁴²

Employers emphasised to us in their evidence the importance of high level analytical skills. The development of such skills characterises higher education, and should continue to be one of its primary purposes. Indeed, many employers are seeking individuals with highly specialised knowledge and skills ... But employers are also concerned about the general capabilities and potential of those with higher education qualifications, not just about the subject they have studied. The recruitment patterns of employers demonstrate that they are often looking for rounded but adaptable people who can successfully tackle a range of tasks and be effective members of a team ...[after all], for many years over 40 per cent of jobs advertised for graduates in the UK have been open to applicants from most, if not all, disciplines.⁴³

The ability to work both independently and co-operatively is seen to assist, not only in the student’s ability to process his/her own understanding his/her specialist subject (research, analysis, critical reflection, problem-solving, synthesis, reporting back and so on), but also in his/her ability to negotiate and develop personal strategies that recognise the benefits of working within a critical environment with corporate aims, whether or not academic. This wider context presents

⁴¹ This key skills list is taken from the *Research Council’s Graduate Schools’ Programme* (July, 2000) C.f., <http://www.gradschools.ac.uk>

⁴² *The National Inquiry into Higher Education, 1997* (the ‘Dearing Report’), <http://www.leeds.ac.uk/educol/ncihe>

⁴³ *The National Inquiry into Education, 1997*, otherwise know as “The Dearing Report”, Chapter 9.4.

RS teachers with the challenge to find innovative ways to encourage students to learn the importance of both critical thinking and group or team skills, without compromising the academic aims and outcomes of our own discipline. It is within this wider context that the need to think about group learning is situated throughout the project.

1.8. Pressures and challenges

The assessment of the quality of teaching by the *Quality Assurance Agency* is an area that challenges teachers to introduce innovative teaching practice. The 'Dearing Report' is another. In the recommendations in Dearing which form part of the wider context of teaching in HE, the link between the institution and the world beyond is unequivocally stressed in its summary:

It should, therefore, be a national policy objective to be world class both in learning at all levels and in a range of research of different kinds. In higher education, this aspiration should be realised through a new compact involving institutions and their staff, students, government, employers and society in general.

We see the historic boundaries between vocational and academic education breaking down, with increasingly active partnerships between higher education institutions and the worlds of industry, commerce and public service. In such a compact, each party should recognise its obligation to the others.⁴⁴

Whilst this challenge seems to offer opportunities to develop partnerships with the world beyond the institution, it also places real pressures on us all through an expansion of our frame of reference with regard to learning/teaching in RS, in which there are demands to think about how the content and method of our teaching relates to non-vocational careers beyond the institution. These expansions have created a generally increased expectation for researchers and teachers to understand the broader context in which RS is situated. Simultaneous to this, teachers are expected to produce research to an international standard in order to maintain or increase their funding. The balance between high-level research and professional teaching, administrative and management skills, thus, becomes ever harder to strike.

⁴⁴ *The Dearing Report*, Summary, no 3.

This is accurately reflected in the chapter on teaching, in which the Dearing Report states that a current barrier to improvement in teaching exists and in which

... staff perceive national and institutional policies as actively encouraging and recognising excellence in research, but not in teaching. Although the teaching quality assessments (TQA) carried out by the Funding Bodies, which are designed to measure the effectiveness of teaching, have raised the profile of teaching within institutions, the Research Assessment Exercise (RAE) has been a stronger influence and has deflected attention away from learning and teaching towards research. An analysis of the impact of the 1992 RAE in higher education institutions in England suggests that it has devalued teaching because research assessment is closely linked to the allocation of large sums of money, whereas teaching assessment is not.⁴⁵

Whilst this correctly reflects the concerns of the profession, George MacDonald Ross has subsequently pointed out that:

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.⁴⁶

The lack of real incentives to innovate in teaching is a potentially demoralising factor in which the changing face of higher education is placing enormous demands on all teachers without offering any motivation or increase in rewards.

Pressures include the increase in numbers of students, many more of whom are mature students who, although often equipped with practical non-vocational work experience and a high level of transferable skills, bring their own challenges to teaching, such as different backgrounds, less formal qualifications, and a variable approach to learning. There are more part-timers, as well as increasing numbers of students who have to work to support themselves financially during their time in HE. Teachers have to re-contextualise RS learning/teaching, in order to take all of these changes into account.⁴⁷ In all of this, it is no

⁴⁵ *The Dearing Report*, Chapter 8.17.

⁴⁶ MacDonald Ross G. "External Pressures on Teaching" in *The PRS-LTSN Journal*, Vol.1, No. 2, Winter 2002, pp98-129, p99.

⁴⁷ For an interesting account of how these changes relate to RS, c.f., Drane J W. *Cultural Change and Biblical Faith* (Carlisle, Paternoster), chapter 7, pp129-153 and also his article,

longer enough to produce students with a recognised accreditation in RS. The challenge (and subsequent pressure) is to demonstrate the relevance of the development of rigorous analytical skills to a broader application of transferable skills, in particular, within teams. These factors form part of the wider context into which learning/teaching in general, but arguably group learning in particular, is now situated. Critical thinking, student-centred and group learning, and the development of transferable skills for non-vocational careers all overlap.

The prioritisation of these issues in the PRs-LTSN survey, however, demonstrates a willingness to share information in order to improve our own teaching practice. Part of this process is the ability to understand our attitudes to group learning in the overall strategies on learning/teaching as, in an increasingly challenging and pressurised environment, we question how to incorporate them into our own teaching programmes, in a way that is meaningful to the wider world and to our own academic practice (without reducing the recognisably high standards for which our discipline is known).

2. Project Outline

The focus of the survey is consistently on teaching form, not content. Its interest in group learning/teaching, in relation to overall learning/teaching policies, allows the relative status of group learning to be evaluated against alternative or dominant strategies of teaching. The project, therefore, set out to evaluate whether the concerns of RS departments and their teachers are matched by practice.

Group learning by its nature, demands of students a deep approach to learning. Of teachers, it requires a compound view of teaching theory in which attention is placed on both the student and the teacher. Here, as Ramsden is at pains to point out,

Teaching is comprehended as a process of working cooperatively with learners to help them change their understanding. It is making student learning possible...The content to be taught, and students' problems with learning it, direct the methods he or she uses.⁴⁸

"Theological Education for the Third Millennium" in the *British Journal of Theological Education* 6/3 (1994-5), pp3-8.

⁴⁸ Ramsden, p114.

Whilst student-centred learning is in this theory extremely important, so too, is the ability of the teacher to intervene, guide and act as a catalyst in that process. Throughout, therefore, the questions attempt to ascertain to what extent group learning is seen as an effective tool in developing that cooperative relationship.

An important question was the degree to which the planning and design of courses in relation to student learning and transferable key skills is left to individual teachers or whether departmental strategies exist to demonstrate the integration and monitoring of progressive planning of student learning and key skills. Another was the extent to which we can be certain that students are given a progressive and considered structure of learning/teaching over three levels which guarantee the inclusion of all transferable key skills.⁴⁹

2.1. Format

The first part of the project consisted of a general questionnaire sent out to individual teachers in thirty-five out of forty-nine departments of RS listed in the Association of University Departments of Theology and Religious Studies' Handbook, 2001.⁵⁰

Questions about teaching styles and methods were based on the education theories outlined above and aimed:⁵¹

- to acquire a broad view of the culture of RS departments with regard to learning/teaching;
- to gain a view of departmental learning/teaching strategies;
- to examine individual perceptions and practice of learning/teaching;
- to contextualise attitudes to group learning within the whole of RS learning/teaching.

⁴⁹ In the section on conclusions, I have suggested that a clear strategy on learning/teaching of key skills can be an aid in the development of student portfolios, in which progressive development is a key factor. C.f., also, George MacDonald Ross, *art. cit.*, p126-128

⁵⁰ *AUDTRS* is collated by the PRS-LTSN Subject Centre in Leeds. 35% represents 70% of the total number of institutions. NB I was concerned to gain views from a majority in order to reflect the discipline with reasonable accuracy.

⁵¹ Theories used were deep and surface learning, types of teaching, learning types, from Gibbs, Habeshaw, Jacques and Ramsden and were built into questions on learning/teaching in order to gain an overall view of perceptions and practice.

The results have been presented in percentage form in tables. They have then been interpreted in such a way as to prioritise those concerns set out in the introduction—that is to say,

- the importance of critical thinking;
- student-led discussion in student-centred learning;
- key skills and employability in a non-vocational discipline.⁵²

The questionnaire⁵³ is made up of 50 questions divided into 3 sections.

The first and third sections look at the cultural philosophy of departments and their corporate approach to undergraduate learning/teaching practice. Participants were asked to rank or prioritise the constituent parts of their respective RS departments.⁵⁴ These two sections have been drawn together in the results. They cover the following:

- general aims of an RS department;
- departmental vision;
- departmental strategies on learning/teaching;
- patterns of learning/teaching practice;
- group learning practice.

The remaining section considers the views of the individual teacher on his/her own learning/teaching practice. It is divided up as follows:

- aims of teachers;
- characteristics of and influences on teachers;
- skills needed to fulfil those aims;
- how those aims are best achieved;
- teaching formats;
- assessment priorities;
- considerations in the development of course programmes;⁵⁵
- group learning.

⁵² PRS-LTSN Major Grant Areas drawn from 2001 questionnaire.

⁵³ C.f., Appendix A.

⁵⁴ I would like to thank all participants for their time and patience. Many contributed additional information in the form of additional comments and questions, as well as course outlines and articles.

⁵⁵ Skills development, that is to say, form, *not* content.

In presenting the results of the survey, the sections have been organised sequentially.⁵⁶

A questionnaire of this size could be analysed and interpreted in a variety of ways. In this report, I have opted to look for patterns and trends that will provide a broad view of the following:

- the cultural pattern of RS departments as a whole;
- learning/teaching practice;
- the place of group learning in departmental strategies.

Questions asked participants either:

- to rate particular issues in rank order;
- to flag the most important areas in learning/teaching;
- to indicate methods and techniques most commonly used;
- to indicate the existence of support systems and strategies.

In the analysis, a percentage rate has been provided for each question with rankings according to prioritisation.⁵⁷

Although we have received returns from a cross-section of types of department, individual institutions or types of institution have not been singled out for scrutiny in the presentation of results.⁵⁸ The sample was too small to draw clear conclusions about differences between types of institution and anonymity was an important consideration in the presentation of results.

The second part of the research consisted of a qualitative study of the learning/teaching practice gained through observations of classes in which group learning/teaching took place. It aimed to provide a window on group learning/teaching practice, in which teachers and students are given a voice. Once again, the intention has been to contextualise and evaluate group learning within the context of the whole learning/teaching process.

Participants were drawn from volunteers from the Universities of Exeter, Bristol and the University College of St Mark and St John, Plymouth.⁵⁹ All three levels are represented.⁶⁰

⁵⁶ C.f., Appendix B, with Parts One and Two (departmental attitudes and culture) followed by Part Three (perceptions and practice of individual teachers).

⁵⁷ Appendices provide a full breakdown of figures.

⁵⁸ It is, however, an interesting exercise and a modified and improved questionnaire might prove to be a useful tool in departmental self-reflexive exercises.

⁵⁹ This latter institution includes the teaching of philosophy. C.f., bibliography for details of departmental websites.

⁶⁰ I would like to thank the staff and students for their enthusiasm and frankness, without which it would not have been possible to carry out this part of the research.

The University of Exeter's participation consisted mainly of students from Levels 1 and 2.⁶¹ The first year class was in Old Testament studies. This represented the whole year's intake, including some students in Classics. The Level 2 class was again in Old Testament Studies. Both courses are compulsory. The University of Bristol's participation consisted of Levels 2 and 3, one in Biblical Parables, one in Islamic Studies. These courses are optional. The University College of St Mark and St John's participation consisted of a Level 3 course in Christian Ethics. It is an optional course.

The case studies consisted of:

- observation of group learning practice 'in action';
- interviews with staff and students about group learning within the context of the whole learning/teaching picture;
- a questionnaire to students on their attitudes and experience of learning/teaching;
- feedback forms on group learning experiences and learning journals.⁶²

The case studies are designed to counter-balance any tendency to lose sight of the issues surrounding actual group learning/teaching practice. They provide a window on the benefits, as well as the problems of learning/teaching in groups, from the perspective of both students and staff. In interviews, participants were encouraged to articulate, not only their experiences, but also their ideas for improving practice. The three departments represent a cross-section of RS types.

The student questionnaire is in five parts:

- perceptions of the group learning process;
- perceptions of the teaching process;
- perceptions of key study skills needed in group learning ;
- the learning/teaching methods of the students' own;
- the students' past and present experience of key study skills;
- support mechanisms available to help them develop these further;

⁶¹ In the case of Exeter, I participated in the teaching process, acting as both teaching assistant and observer.

⁶² In all cases, staff and students were interviewed. Staff/student questionnaires were able to provide an anonymous perspective on learning/teaching experience in addition to interviews and observations. As with the general questionnaire, all results are presented without naming individuals.

The analysis seeks out:

- general patterns from which to evaluate the status of group learning/teaching in the overall strategies of RS learning/teaching;
- an overall picture of the predominant techniques used in group learning;
- the predominant attitudes of students to group learning, again emphasising the key concerns outlined in the introduction.

The final part of the study interprets the results, raises questions and presents suggestions on innovative group learning/teaching practice drawn, in the main, from the case studies.

2.2. Interpreting results

The project is very much a first attempt to understand and contextualise the traditions, changes and concerns of our discipline in which group learning can only ever be considered as one part of a whole. In interpreting the findings, levels of agreement, continuity and coherence between individual practice and departmental norms have been flagged, as have apparent mismatches between aims and practice. The case studies have been used to demonstrate the value of taking a nuanced and innovative approach to group learning in relation to the planning and structuring of overall learning/teaching strategies and to affirm its positive effect on individual and interpersonal transferable skills.

2.3. Summary of results

The overall results of the survey on teaching and learning (within which group learning is contextualised) indicate that, of the RS departments surveyed, individual teachers are, in the majority of cases, left to decide their own teaching strategies from within an informal understanding of the corporate whole.⁶³

Most teachers see the discussion as the best forum for developing critical thinking and the majority surveyed believe that the role of teaching is to make learning possible (clearly reflecting a positive attitude to student-centred learning). Approaches to group learning/teaching show that whilst group learning formats constitute an important part of the overall teaching strategy in seminars, in most cases, traditional teaching theories still predominate. Lectures, with seminars as

⁶³ One contributor noted that what strategies exist have been produced, above all, in reaction to TQA.

an adjunct, still constitute the dominant teaching method. Small group work is found in the seminar, as part of a larger lecture series and typically involves a variety of in-class group methods such as, fishbowl and buzz word sessions. RS learning/teaching seems, therefore, to reflect the dominance of tutor-led, transfer and shaping teaching styles that limit a student's ability to engage in the subject or to actively constitute the knowledge of the subject matter by applying and modifying his/her own ideas according to his/her own experience of the world.⁶⁴ This is further reflected in a learning/teaching pattern that prioritises individual learning over corporate or compound learning in which a genuine balance is struck between group and individual learning, suggesting that the enthusiasm for student-centred learning is not matched by employment of methods to foster this.

Throughout the project, students' understanding of the learning process was found to be broadly in line with that of the teachers, with few taking an interest in the relationship between transferable skills, group learning and their future careers. Whilst most are happy enough to work in groups, the majority prefer to study on their own and are uncertain about the prospect of assessed syndicate projects. However, like their teachers, most students think that group learning activities are extremely beneficial to their personal development of interpersonal skills. They also consider group learning to be an important environment for the development of critical thinking. Few, however, prioritise group over individual learning practice. Clearly, in their experience as undergraduates, they had developed an understanding of the learning/teaching process which reflected the teaching methods that they experienced in RSHE learning/teaching. Furthermore, whilst most had experienced a broad range of group learning techniques prior to entering HE, it is clear that, in most cases, group learning had rarely been prioritised at this stage in their education.⁶⁵ And although syndicate work had formed part of many students' previous experience, in few cases did it form part of the assessment process.

From these results, it is possible to suggest that, whilst the development of critical thinking in our students is considered to be the main teaching aim, our teaching methods will tend to produce a

⁶⁴ C.f., Ramsden P. *Learning to Teach in Higher Education* (Routledge, London) 1992, p114

⁶⁵ One of the simplest ways of knowing how seriously a learning method is taken, is to see how it is assessed. A surprising number of students had worked on assessed group projects prior to coming into HE. Over the three levels of students interviewed, about 30% had had group work assessed.

considerable variation in the quality and quantity of skills' achievement in this key area. Our teaching methods, are still, in the main, tutor-led, our learning, centred on the individual working alone. Further, whilst employers are looking for well-rounded people with the ability to think critically and who are able to use this ability to work in teams, there is little evidence that teachers are incorporating into course planning the relevance of these kinds of transferable skills on future employability in non-vocational careers. Nor is it clear that they relate the development of interpersonal skills through group activities either to improvements in overall learning practice or to the wider world of work.

3. Results

The staff survey was distributed to individual teachers in 35 of the 49 RS departments in AUDTRS.⁶⁶ Replies were received from seventeen institutions, with multiple returns in several cases. This represents 49% of the sample.⁶⁷ The return reflects the broad scope of RS departmental types. However, in at least 65%, Christian theology is the central focus, even where World Religions form an important part of the curriculum.⁶⁸ Only 25% concentrate on World Religions without this focus.

3.1. RS culture

The ranking system of the questionnaire provides a means to interpret how a department prioritises its constituent parts to give a view of the vision, aims and outlook of its organisation.⁶⁹

Areas considered:

- the production of specialist research;
- teaching in specialist areas;
- administration and management;
- development of teaching skills;
- development of learning skills;
- development of a departmental strategy on teaching and learning.

⁶⁶ This represents just over 70% of departments. Institutions which concentrate on training for ministry were not sampled.

⁶⁷ 35% of the total number of departments.

⁶⁸ Of these, 40% focus almost entirely on Christian theology.

⁶⁹ For questionnaire, see Appendix A, for results, see Appendix B. Vision, aims and outlook are drawn from questions 2 & 6.

According to their general aims, 90% of the sample considered the production and teaching of specialist research subject areas to be the highest priority. This was followed by the provision of a learning environment to agreed goals (60%) in which good communication between staff and students is developed (50%). 50% of respondents considered the development of student learning skills to be the next most important criterion but the clear provision of student key skills training was considered less important at 30%. The development of individual staff teaching skills was rated at 15%.

The provision of a clear departmental strategy⁷⁰ on learning/teaching was considered to be a key priority by 25%. Within this, staff leadership was rated at 15% and the provision of clear interrogation and review strategies at 5%. Whilst the departmental strategy on learning/teaching is not the first priority of most departments, 65% of the sample have one⁷¹ with regular updates by 60%. Administration and management was only rated by 25% of the sample as a key priority.

Departmental patterns of learning/teaching: These have been subdivided into the following areas:

- learning/teaching aims and priorities;
- overall patterns of learning/teaching;
- group learning/teaching;
- training and reviews.

Learning aims: When it comes to learning aims, 80% of the sample ranked the development of critical thinking highest, followed by the ability to understand abstract concepts (35%). The need to acquire and reproduce knowledge (25%), understand and apply methodologies, and to synthesise these through a personal understanding of the world (25%) all undergird critical thinking, but are seen as less important.⁷²

Teaching priorities: Specialist knowledge of the tutors (65%) and clear course design (50%) outrank assessment procedures (30%) or the

⁷⁰ This question aimed to discover how a department projects itself to prospective members (staff and students) as this will, I hope, give the clearest general articulation of itself. The type of document may include web-sites, course brochures, recruitment notices etc.

⁷¹ C.f., Questions 45-6.

⁷² C.f., Question 4.

requirement for learning skills in students (25%). Numbers in classes are not an issue and the relevance of key skills to academic practice and future careers is only seen as a priority in 5% of departments.⁷³ In planning courses, only 25% of departments actively discuss how to vary course content against student levels and learning skills whilst in 50% this is somewhat considered and in a further 25% it is hardly considered at all.⁷⁴

*Learning/teaching formats:*⁷⁵ 65% of the sample reflects that teaching formats are dominated by the lecture or tutor-led groups of one kind or another. Overall, 75% of departments surveyed teach traditional formats of lecture series and additional seminars, in which general discussion (35%) or individual student presentations (40%) are the norm. Only 15% ask students to give group presentations. 40% rate tutorials as a key format for achieving learning aims. 50% of courses are organised along cognitive, linear lines.⁷⁶ 20% use discursive formats. 10% encouraged students to relate issues to their own experience. 5% of the sample run seminar-only courses, with mini-lectures and group presentations. Other seminar-only formats are not regularly used.⁷⁷ Lectures with seminars in which papers are individually presented by students followed by general discussion are the most common learning/teaching formats in use (40%).

Individual learning is prioritised over group learning.⁷⁸ 60% organise courses with the individual learner in mind, but 30% apply a combination of group and individual learning. 10% have no clear strategy on learning,⁷⁹ whereas 15% of the sample have a recognisable strategy on group learning and a further 15% show little interest in it.⁸⁰

⁷³ C.f., Question 28.

⁷⁴ C.f., Question 36.

⁷⁵ C.f., Question 35.

⁷⁶ C.f., Question 5.

⁷⁷ C.f., Question 35. Other examples were, mini lectures with individual presentations or general discussion, general discussion with individual or group presentations, or general discussion only.

⁷⁸ In addition to previous questions, c.f., Q27.

⁷⁹ Presumably this reflects policies which leave such decisions entirely up to individual teachers.

⁸⁰ C.f., Question 34.

Only 20% of the sample include learning contracts as part of their standard teaching procedures.⁸¹

Group learning

The formats most regularly used in departments are that of open discussion in seminars (100%), followed by informal individual presentations with a class handout (60%) or formal individual presentations (50%). 40% of departments incorporate formal group presentations, and a further 15%, informal group presentations.

80% of departments tend towards a tutor-led format.⁸² Having said this, 75% of departments have some sort of student-led sessions, 50% of which are student-centred.

In sessions in which discussion dominates,⁸³ the most common form (60%) of in-class group work is the 'fishbowl'⁸⁴. A further 50% use brainstorming sessions to elicit discussion, whereas only 30% use snowballing⁸⁵ or step-by-step discussion techniques. Buzz word sessions, crossover groups⁸⁶ or peer tutoring techniques, are used in a minority of cases (25%, 20% and 20%).

Training and Reviews: 20% of the sample indicate that their departments had a clear ongoing staff development plan. 35% of departments discuss learning/teaching policies in staff recruitment interviews.⁸⁷ Learning/teaching strategies were discussed in 65% of staff/student meetings.

75% had policies in which staff training was organised along purely voluntary lines and 5% had no ongoing programmes available to them at all. 10% had no clear formal training programmes or formats. Of those departments in which training is available, the dominant areas for development were in assessment (40%) and group learning/teaching (35%), lecturing and tutorials (15%).

⁸¹ C.f., Question 29 NB Learning contracts are an important constituent of learning/teaching procedures, but can be particularly useful for group learning. C.f., Gibbs and Habeshaw, *op cit*, especially pp82, 96, 136, 138, 142 etc.

⁸² C.f., Question 33.

⁸³ C.f., Question 31.

⁸⁴ Working from small groups back to the main discussion forum.

⁸⁵ Working from pairs to small group to whole discussion.

⁸⁶ Small groups in discussion with other small groups.

⁸⁷ A further 35% of the sample did not know whether or not the strategy was discussed at interviews.

With regard to student development,⁸⁸ 65% of departmental Student Handbooks contain some sort of information on the key skills that students will require and 80% have details in course outlines.

85% of RS departments have recourse to a Study Skills Centre. 15% refer their students to this on a regular basis, but 30% never refer students. Only 65% of departments have a clear referral strategy, and the majority of referrals are for essay skills and private study. None of the sample refer students for the development of individual or group presentation skills.

Many departments have their own skills guides⁸⁹ on some aspects of learning, where individual skills are prioritised: essay writing (75%), examination techniques (35%), note-taking (33%), private study (25%). Few departments have guides on critical reading (15%), individual or group presentations (10%, 15%), or tutorials (5%).

55% of departments hold some sort of key skills events that encourage students to work corporately.

3.2. Personal perceptions of teaching practice

This section⁹⁰ required participants to prioritise their own perceptions of learning/teaching with regard to their own practice.⁹¹

Areas considered:

- influences, styles and skills in teaching
- aims in the development of student learning and skills
- teaching methods
- group learning/teaching
- feedback and assessment

Influences, characteristics and skills in teaching⁹²

In 65% of the sample, teachers considered that their own teaching style was the dominant influence on their approach to teaching. 25% were most influenced by education theory and training. 10% followed what they perceived as the teaching characteristics of the department.

⁸⁸ C.f., Questions 37-44.

⁸⁹ I.e., guides produced for RS, not general learning guides from Study Skills.

⁹⁰ This part of the questionnaire is entitled *Perceptions of Teaching*.

⁹¹ C.f., Questions 7-26 in Appendix B.

⁹² C.f., Questions 7-11.

When asked to describe their teaching style,⁹³ most of the sample thought of themselves as guides (30%) or catalysts (40%). 10% saw themselves as transferring knowledge and 20% saw themselves as shaping or training students.

Ranked in order⁹⁴, the most important attributes of a teacher were seen as the ability to encourage individual learning (65%), followed by encouragement of group learning (45%). These were ranked above the tutor's own specialist knowledge (40%) and the ability to assess work (50%). The ability to lecture well was seen by only 15% as the most important attribute of a tutor.⁹⁵ This was further confirmed in the ranking in which 75% of the sample rated most highly the ability to encourage independent thinking followed by the ability to facilitate independent and group learning (60%) and to lead class discussion (45%).⁹⁶ This is further corroborated in that 90% of the sample described their style in the delivery of material to students as incorporating their own perspectives (40%), or as a combination of their own perspective linked to a value-neutral approach (50%).⁹⁷ In 55% of the sample, a clear course outline was rated more highly than the ability to lecture in a charismatic way (40%) followed by the need for clear topic handouts (40%).

*Aims in the development of student learning and skills:*⁹⁸ In the development of student learning attitudes varied. Making sense of reality in a way that is relevant personally was seen as the most important aim in the categories provided. 30% of the sample saw this as more important than any of the other categories. This was followed by the need to understand abstract concepts (35%). At the lowest end of the rankings, an increase in knowledge, the ability to memorise knowledge and the acquisition, retention and utilisation of facts were seen as the least important developmental aims (60%, 90% and 45%, respectively). However, a

⁹³ C.f., Question 9. NB This question was derived from Fox's theories on teaching style in *Personal Theories of Teaching*, art. cit, p6. These consist of four models: transfer, shaper, guide, gardener and are discussed in the introduction. These are expressed in the questionnaire as transfer, trainer, guide and catalyst, respectively.

⁹⁴ C.f., Question 8.

⁹⁵ Although in Question 10, 25% rated charismatic lecturing above course outlines and handouts.

⁹⁶ C.f., Question 11.

⁹⁷ C.f., Question 13.

⁹⁸ C.f., Question 12 NB This question mirrors teaching styles outlined in Fox's teaching theories.

significant percentage reversed this pattern, with 25% considering an increase in knowledge as the greatest aim, equal to the acquisition, retention and utilisation of facts next in rank order, and 50% ranking an understanding of abstract concepts as least important, along with the aim to make sense of reality in a personal way (30%). In relation to perceptions on teaching styles, these results demonstrate a difference in teaching styles.

Teaching methods: In selecting teaching formats,⁹⁹ 35% of tutors take student levels greatly into account, whereas this taken somewhat into account by 60%. In planning courses, 85% of tutors believe that pre-class preparation should be assigned and 35% think that learning contracts should be structured into courses.¹⁰⁰

As to teaching methods, 70% of the sample opt for lecture series linked to different seminar formats. Of these, only 30% are student-led. Seminars are dominated by traditional formats such as open discussion, debates and individual presentations. Only 10% set group presentation tasks. 25% run seminar-only sessions but only 15% of these are student-led.

When looking at lecture formats, participants were asked to consider what lectures achieve best.¹⁰¹ Multiple answers rather than rankings were asked for. 55% believe that the acquisition of knowledge and 30% that skills and procedures are best developed in lectures. These both undergird transfer and shaping models of teaching. 60% of the sample thought that lectures help to develop critical thinking but only 15% see lectures as developing abstract concepts and 5%, a personal sense of reality.

Group learning/teaching: Given the definition of groups in the introduction, the questions on group learning/teaching were designed around small groups of thirty or less students. This section, therefore, considers the techniques and value of group learning/teaching within seminar formats.

When asked what skills are best developed in group sets or in discussion,¹⁰² 85% of the sample thought that these forms of group learning best develop critical thinking and 60% that of a personal sense

⁹⁹ C.f., Questions 14, 16.

¹⁰⁰ C.f., Question 24. NB It was noted in the first part of the questionnaire results that only 20% actually have a standard departmental procedure on learning contracts.

¹⁰¹ C.f., Question 17.

¹⁰² C.f., Question 18.

of reality. 25% thought that group work assists the development of facts, skills and procedures and 15% that of abstract concepts. None thought that group work helps to develop the acquisition or reproduction of knowledge. And, when asked how students best develop their critical thinking, the results were divided.¹⁰³ 40% believe that written assignments are better than group work in the classroom. Of the remainder, 25% see group discussion in the classroom, with a further 10% seeing discussion in personal study, as the best environment for learning how to think critically. 25% think that the tutorial is the best format for this. Overall this means that 60% see some sort of group work as best developing critical thinking. None, however, see the production of group assignments as developing this quality best.

Significantly, when considering how to organise group learning/teaching, the vast majority (70% or above) take into account intellectual ability in relation to course level, student background, gender, the newness and size of the subject and student learning skills. A further 50% take into account the students' learning type.¹⁰⁴

Feedback and assessment: When asked about areas on which feedback should be provided in tutorial groups, the following results pertained:

- critical thinking – 80%
- course content/acquisition of knowledge – 75%
- reading of primary and secondary material – 80%
- essay structure and style – 75%
- group or individual presentations – 65%
- discussion skills – 50%

This was reflected in formative assessment criteria. 100% of the sample thought that essays should be assessed. 60% thought that both formal and informal individual and group presentations should receive formative assessment and feedback, as should learning journals. 50% and 40% respectively believed that individual contributions to class discussion and tutorials should be assessed. Formal and informal presentations by groups were seen as less important (30% and 35% respectively). Again, group work was seen as less important than individual contributions of whatever kind.

¹⁰³ C.f., Question 21.

¹⁰⁴ C.f., Question 23 NB There are various theories on learning types and there are several questionnaires which assess these (e.g., Honey and Mumford, 1986, in which four types are posited – the activist, reflector, theorist and pragmatist). This links to learning approaches as discussed in the introduction, p 8.

Much the same applied to summative assessment, although 40% thought that group projects should be summatively assessed. There is little evidence (15%) of formal group projects being part of the learning/teaching process, however. The figures for assessment of individual written presentations went up to 70%, however, in this category and a small, but significant proportion think that summative assessment should be applied to journals (25%), individual contributions to class discussion (20%) and even to contributions to tutorials (5%).

3.3. Case studies

This part of the project aims to make the role of group learning/teaching more tangible by looking at practice in five courses across all three levels. The case studies provide a window on practice with perspectives from teachers and learners. Whilst the approach to teaching in groups is dependent on the teaching style of each teacher, the participation of three departments usefully highlights some differences between individuals and between departmental cultures.¹⁰⁵ Studies are drawn from observations, discussions with staff and students, with additional material from students on their group learning experiences.¹⁰⁶ The observation focuses on key concepts for effective group learning.

Case study 1

This consisted of two linked compulsory units in biblical studies across Levels 1 and 2.¹⁰⁷ The department has a mixed intake of students from independent and state schools, with a number of mature students at each level. There were forty students in the Level 1 class, six from other affiliated departments. There were nineteen students in the Level 2 class, the majority at Level 2. The teacher has a background in Classics and Biblical literature and has shown a concern to introduce group learning/teaching methods in order to try and improve levels of student

¹⁰⁵ This may be reflected in student mix, evidence for group learning/teaching strategies and so on.

¹⁰⁶ This includes comments extracted from learning journals and in-house questionnaires on group learning.

¹⁰⁷ The department has taken the decision to broaden the type of group learning/teaching and to introduce innovative formats over the next 3 years. To that extent, the course learning/teaching was experimental and feedback following self-reflection will be provided at the departmental ‘thinking-day’ on learning/teaching in the summer vacation.

engagement, particularly in critical reading and thinking.¹⁰⁸ Both units were being taught for the first time in seminar-only format, with syndicate work both in and beyond the classroom. Mini-lectures based round weekly handouts supplemented presentations by syndicate groups and general discussion. I observed several sessions and also participated in lesson planning, setting syndicate tasks and co-teaching.

The Level 1 Course is the foundation for the Level 2/3 Course. The core learning aims of both units are to gain an overview of the complexity, formulation and breadth of the texts, with regard to ideas, practices, and ideologies. The methodological emphases are the same, but there is an increasing demand to understand the texts through an exploration of literary forms in Level 2. The intended learning outcomes at both levels are the ability to demonstrate knowledge and understanding of the socio-religious issues through ideological and literary-critical interpretations and to demonstrate the ability to critically read and interpret specific texts, developed through syndicate and individual tasks. Formative assessment was via feedback on syndicate presentations and on a 1000 word individual commentary chosen from one of the weekly texts. Summative assessment consists of an essay and examination. There are voluntary tutorials at which students are encouraged to discuss oral presentations, essay choices and drafts, and compulsory tutorials for essay feedback. Individual and group transferable skills are stressed in the outlines.

The class was divided into syndicate groups. Members were allocated using the departmental reports on academic achievement, background, age and gender, and aimed to establish a mix of team types. Weekly tasks were assigned to groups and included suggestions on how to manage their time.¹⁰⁹ Email lists encouraged all class members to arrange or even conduct meetings electronically. Tasks emphasised the need to read, analyse and interpret primary texts. The use of secondary texts was restricted to specific weeks. This aimed to develop confidence in the production of the students' own arguments using new methodologies. Secondary texts were used to demonstrate how different methodologies either restrict or add to interpretations. Each week, groups were expected to present a five-minute summary on different

¹⁰⁸ A second teacher collaborated in the development of group learning/teaching practice in his own Level 2 unit, and provided feedback forms to his students on their experience of group learning (in which they had been asked to make a group presentation). This provides additional student feedback.

¹⁰⁹ How to meet, allocate tasks and roles etc.

aspects of the primary texts (with handouts). General discussion aimed to draw the main issues together. This constituted the first half of the two-hour session. The second half consisted of a mini-lecture based on weekly topic handouts, in-class group work, general discussion and summaries.

Students were asked to agree a verbal contract on syndicates. In Week 4, an additional session provided guidelines on the relationship between transferable and academic skills, gave advice on how to develop and monitor those skills and gave examples of how all these skills relate to both the institution and the wider world of work.

The Level 2 class was organised along similar lines. The observations were taken from Week 3 for Level 1 and Week 9 for Level 2.

The Level 1 session consisted of 5 syndicate groups, each of 8 members.¹¹⁰ They presented on the weekly assignment, which consisted of different aspects of the same primary text, without the use of secondary texts. The students showed a high level of engagement. They used a variety of presentation forms. Two presented as a group, with each member expanding on bullet-points from OHP visuals. Two groups elected a single member to present, the other members answering questions in the general discussion which followed. The final group presented two arguments in an adversarial format. Four out of five groups provided summary handouts of the main issues. The overall standard of presentations was imaginative but timing was an issue in those formats in which all members presented. Those in which single members presented were read from a written text. Two groups had ignored the instruction not to refer to secondary texts.

Peer assessment forms allowed each group to reflect on their own presentations in a comparison of the others. They were asked to discuss the strengths and weaknesses of each, to share their results with the whole group and to compare their own performance and their experience of working as a syndicate in preparatory meetings

Students demonstrated a familiarity with many of the learning/teaching techniques that had been introduced, although some groups had experienced problems with organisation, time management and the synthesis of views, showing the need to further develop these skills.¹¹¹ The discussion left little time for the mini-lecture or for

¹¹⁰ Some groups had members missing.

¹¹¹ This is part of the learning process that is made more visible in group work, in which processes are discussed alongside content.

summing-up but the peer assessment process had been placed early enough in the unit to make future adjustments that would ensure that the content of course was covered in full.

Level 2 students were asked to keep learning journals as well as to work in syndicates. The observation took place in Week 9, the time at which the students had the most pressure because of submission of commentaries for formative assessment and planning tutorials for assessed essays.¹¹² The session began with a tutor-led consideration of difficult methodologies and theories set in the weekly task. The general discussion that followed was very lively, with several students showing interest and aptitude in the topic. Two asked questions about the possibility of being able to use these methodologies in dissertations in other courses, showing the ability to relate information and knowledge from one unit to another. A mature student was having difficulty with accepting and understanding the new methodologies and resented having to take these on board, preferring to adhere to traditional redaction-historical methods.¹¹³

At this point in the unit, it was clear that all the groups had taken the decision to elect one member of their syndicate group to present for the others. Several meetings had taken place on-line to save time. However, out of four presentations, two had clearly left it to one member to produce most of the work, as the other members were unable to answer questions in the discussion that followed. The presentations demonstrated the students' desire to express their own views in relation to those gleaned from secondary texts which had been included in the tasks for the week. Differences between readings were raised in presentations and in the general discussion that followed there were further questions to the tutors on the theory behind the methodologies.

The second half of the session began by drawing conclusions from the presentations and the tutor gave a mini-lecture on the major themes of the topic area for the following week. Tasksheets and handouts were provided for the following week and questions arising from these were put to the tutor. They were encouraged to get in touch

¹¹² Throughout, I have tried to observe classes at different points in the semester, to demonstrate students working at different stages of development.

¹¹³ Although a variety of methodologies are used in biblical units, tutors seem generally to subscribe to rational-scientific methods. Methodologies that are less common demand more of the students, especially as they introduce new theories.

about problems and queries on any of the work. The timing of this session was much better than in the larger, Level 1 class.

In the discussions, representatives from all three levels participated. The Level 1 group felt that the number of weekly presentations sometimes encroached on the mini-lecture, with insufficient time being left for summing-up. They would have preferred not to have to present every week, although they agreed that this demand did pressurise them to prepare for classes and helped in their individual selection of essays and commentary topics and in the preparation of examinations. Working in groups allowed them to share ideas and improved their confidence levels. They were surprised at how many different arguments had been presented, providing a broader and more complex sense of the texts. Several expressed their frustration over restrictions on the use of secondary texts, explaining that they had not been expected to express their own arguments at A level. They found this difficult but challenging. Discussion in small groups beyond the classroom had, however, helped them to develop their critical thinking and their ability to express an argument to other people. Ideas gained in groups had informed their personal research and essays and they shared and learned new skills from each other to a far greater degree than in traditional learning/teaching formats.

However, these demands had made the unit more difficult than the others because they had to work harder on the key concepts behind the course material rather than being able to depend on lecture notes (and secondary literature). Many felt that summative assessment may provide a reward for the effort they had made in acquiring syndicate skills. They were still more at ease with traditional formats of lectures (with a small number of seminars in which individuals presented) with general discussion and acknowledged the appeal of having to do less preparation for these classes, stating that they tended to only prepare for their own presentations. However, they liked the role play and debates organised by another tutor. They stressed the importance of the tutor's teaching style noting that charismatic lecturers increased their interest in the subject. Teachers who never put down students' ideas or queries increased confidence levels but group presentations did enable shy students to work within a team environment which provided a safer framework in which to develop confidence.

Levels 2 students made many of the same comments but they were more concerned about time management and difficulties

experienced by lack of attendance of some members.¹¹⁴ They would favour summative assessment of group work, but only if all members contributed. Assessment of individual presentations assured personal over group responsibility and as assessment was based on individual achievement, group project assessments were perceived by some as a threat.¹¹⁵ There was a split of opinion over the benefit of syndicate work but they all liked small group work in class. Several stated that syndicates did not suit their own personal learning styles, but there were others who liked this format and who clearly articulated an appreciation of the link between team transferable skills and the world of work.¹¹⁶

Several wanted to select their own team members, were concerned about the selection process and felt that, failing self-selection, preliminary group exercises in class would have familiarised them with their group members and improved syndicate team performance beyond the classroom.

They saw the value of a clearly defined departmental strategy on learning/teaching, in which development of different key skills were explicitly structured into units from level to level. They thought that the development of staff teaching skills would be important in any transition from traditional to more innovative learning/teaching formats. This would necessitate a progressive staff and student development policy.

With regard to their own skills' development, the students knew about the Study Skills Unit. Some had been referred for personal study skills but not for presentation skills and none had used it voluntarily. All the students were keen to see an increased use of IT resources and felt that these could provide an unbiased interactive environment. They had valued their own use of email and messenger in arranging and holding syndicate meetings.

Journals and questionnaires showed many of the same concerns over assessment. Where the experience of group projects had gone well, students favoured summative assessment. Several felt that as they had

¹¹⁴ In looking at the learning types of this group (from the questionnaire) there was a high proportion of individual and surface learners, which may explain some of the difficulties they expressed about syndicate work. On the other hand, it could reflect a more committed and serious attitude to outcomes given that Level 1 work in this institution does not contribute to final degree results.

¹¹⁵ The department has recently introduced summative assessment for individual presentations, based on an A4 summary.

¹¹⁶ An extra session was held to unpack the relationship between academic and transferable skills, and to discuss the development of essay and presentation skills. A guide to this was provided.

completed the work, they may as well be assessed on it. Sharing ideas had broadened their outlook and helped to contextualise their own views. Peer discussion beyond the classroom helped to clarify issues. More material was covered in syndicate preparation but some resented the ‘hassle’ and extra demand on time.

Confidence was increased even though the synthesis of ideas was a problem due to a lack of team skills. None liked the idea that strong group members either dominated or carried the weakest or uncommitted. The independent learners (about half) wanted their learning to reflect personal efforts. But several students enjoyed learning how to share, evaluate and synthesise different arguments and felt that it enhanced interpersonal and personal skills.

Syndicate projects challenged motivation, forcing engagement in the subject and ensuring the completion of work in a systematic way. Essays and examinations allowed students to put off working, or to work strategically. Group work forced them to look at the whole course rationale and to work to regular deadlines, which helped in essay and examination preparation. More consistent preparation and engagement during the unit had meant that they needed to revise less for examinations, and summarising critical reading in group tasks had developed the skills they needed for the first half of the examination.

In discussion with the tutor, the importance of improving critical thinking was a paramount reason behind the implementation of syndicate work due to the perception that there had been a decrease in close reading skills and independently thought-through arguments at A level. The format had been experimental and on reflection, it was felt that a greater variety of group learning/teaching techniques should be introduced in future units, with syndicate work forming one part of that variety. For example, fishbowl groups, buzz word and brainstorming sessions would increase confidence in the classroom, prior to the setting of syndicate projects. The tutor had previously used traditional lecture formats and had found it difficult not to intervene, through fear of not covering all the course material. The changeover to student-led learning/teaching had been difficult and transfer and shaping teaching habits had been difficult to break. This had caused problems over keeping to the lesson plan. However, there was no doubt that engaged discussion had been enhanced and essay and commentary standards had generally improved.

The tutor was keen to continue the development of group teaching skills within a changed teaching style and saw the value of a

departmental policy on learning/teaching in which staff development focused on the development of transferable key skills to a plan. Teachers in the department meet regularly to share ideas. Peer reviews and student feedback are used to change teaching methods in conjunction with the staff-student liaison committee. Several changes in policy had been introduced in recent years, although these tended to be piecemeal and did not unpack the rationale behind learning/teaching methods and theory. They concentrated on formats for the assessment of individuals.¹¹⁷

Case study 2

This Level 3 class¹¹⁸ consisted of 10 students, nine of whom were in attendance. The class was about equally mixed between males and females. Most came from independent school backgrounds. There were no mature students. The tutor is a high performer in research production and takes a close interest in education theory, in particular, the incorporation of IT learning/teaching methods and group learning. This tutor has been commended for his learning/teaching practice. The observation took place in Week 4 of the unit, just before students were scheduled to begin the first of their assessed essays.

The core learning objectives are to gain an understanding of three modern religious movements within the context of a country's overall recent religious history.¹¹⁹ In individual presentations of each research syndicate's summary to the class, and in assessed essays, this requires the ability to recognise and apply different methodologies and to present arguments from secondary reading. Skills development, therefore, includes presenting, analysing and evaluating complex ideas. Summative assessment is by a portfolio of two essays selected from prescribed questions. Formative assessment is via weekly topic assignments in which brief outlines are submitted to the tutor.

In the classroom, the first half of the session concentrated on group work and discussion. The second half consisted of a lecture. There was evidence of a great variety of group learning/teaching techniques within this first half and the tutor's overall learning/teaching approach is

¹¹⁷ e.g., the students had preferred to keep a mix of examinations and essay, preferring not to have portfolio essays without exams. They had also agreed to the introduction of summative assessment for presentations and the obligatory production of a dissertation for all undergraduates.

¹¹⁸ In the same department as Case Study 3.

¹¹⁹ This is a World Religions unit that looks at a specific Islamic nation.

constituted by an innovative mix of informational and learning formats designed around the numbers and intellectual level of the students. The course outline (accessible in hard copy and on-line) provides a clear structural guide to course form and content. Syndicate group members are listed in the outline, as are weekly tasks with clear instructions. A4 transcripts of the presentation outlines are posted weekly (with the tutor's comments) on 'Blackboard', an IT learning/teaching website. This programme consists of announcements, course and staff information, students' transcripts, an email communication network and a discussion board to which the tutor adds comments twice weekly, providing an exciting extension to contact hours and a shared forum for the group. It also provides web links to websites and articles that are available on-line.

The group task preparation in the session I observed involved the scrutiny, analysis and evaluation of several essays from previous years.¹²⁰ Each student had been asked, prior to the class, to assess an essay and to complete an Essay Report Form giving a mark and comments. The session itself consisted of a discussion in syndicates, in which the differences between the essays were evaluated. In a plenary discussion the tutor guided the students through the various aspects of essay writing – research, argument, structure, use of sources, citations, annotations and bibliography. The integration of individual and group skills was highly innovative. The students were required to use their individual and team skills in the development of a clear understanding of essay skills, and in an appreciation of the two-way process of assessment (allocation of marks, feedback and student response). The tutor made full use of the time in and beyond the classroom.

The topic was skills-oriented and yet the exercise of reading other students' work introduced them to approaches to course content. The syndicate discussions were heated and all students were fully engaged. They had clearly taken time and pleasure in the assessment task. The groups were asked to justify marks for each essay in a plenary session. At the end of this discussion the tutor gave out the marks that he had allocated and discussed the disparities between his marks and rationale and that of the students. This discussion continued amongst the students during the ten-minute break.¹²¹

¹²⁰ An exercise in peer assessment.

¹²¹ It has to be said that the students marked much lower than the teacher and any *Schadenfreude* was reduced when the tutor asked them to consider their reactions to assessment of their own work, noting that they could take heart from the fact that their essays were not marked by fellow students! This was a great exercise in understanding

At the beginning of the second half, the tutor reminded the group how to access transcripts of previous presentations and how to highlight his critical comments. He then gave a lecture which incorporated a variety of learning/teaching techniques (use of white board, handouts of both primary and secondary texts). The handouts were used by syndicate groups to discuss the pros and cons of the topic prior to a tutor-led discussion.

The discussion which followed the class consisted only of male students.¹²² They emphasised that attitudes to group learning/teaching varied from teacher to teacher. It would seem that the dominant format in the department is still the traditional lecture, with handouts, plus a general question and answer discussion. One teacher did, however, encourage role playing sessions. Another ran seminar groups that alternated between tutor- and student-led sessions.

As in the previous case study, these students were greatly influenced by charismatic lecturing and whilst they thought that group learning provided a means to bond with each other in the first year, they would prefer not to work in groups in Year 3. By this level, they wanted to be assessed for their individual research and essay skills, in which their critical thinking could be clearly seen as their own. They enjoyed group learning but did not feel that it was valued highly by the department and it was not assessed summatively. Further, they did not like the idea of summative assessment, as it would not demonstrate their individual skills and knowledge of the subject. They were not particularly interested in the importance of group skills to their future careers, even when it was pointed out that graduate recruitment interviews concentrate on these. They felt they could 'get up to speed' when the time came. Most did not think they would follow careers in RS, but felt that RS gave them a good standard degree with important skills in critical thinking and analysis.

In discussion with the tutor, it was explained how the department members meet up to share both learning/teaching ideas and the Staff Support Unit evaluations from student feedback forms which provide students views on form and content. Clearly some members of the faculty favour group learning/teaching techniques, such as debates, role play and syndicate work, but overall, traditional models have tended to dominate and no formal policy or guidelines on group work existed. A new policy was being considered in which there would be a conscious

the assessment process and in the development of essay skills by reference to the work of peers.

¹²² Due to female students leaving for other classes.

move away from lecture-only formats to seminar blocks, a format favoured by the two tutors I observed. This, and the prescribed formats for assessment, does demonstrate the move towards a clear strategy on learning/teaching.

When designing courses that prioritise group learning/teaching, the teacher took class numbers into account. It was pointed out that most of the students come from independent schools, although attempts are being made to widen access. The students are achievers with high levels of drive. They tend to be strongly individualistic and strategic learners who are assessment driven. This was reflected in the comments made by the students. Their resistance to group learning reflected their desire to compete and achieve in an individual capacity. The sense of resistance played an important part in the course design and the session I observed had been planned to encourage sharing and developing skills which cross over from individual to group skills. Any reluctance to work corporately was rewarded by a stronger desire to understand the assessment process in which they could compare their own essay writing skills with those of other students. The use of *Blackboard* on which presentation transcripts were posted, provided another means to compare their own work with that of the others and in this the tutor recognised that most students are assessment-driven.¹²³

The tutor commented that, as a small humanities discipline in which ‘research’ generally means single-authored books or articles, RS does not encourage academics to collaborate on research projects. This was felt to explain why few teachers value group learning/teaching. Most will not join in shared projects in their own professional capacity as researchers, as individual achievement is rated more highly and provides the best means for promotion. Individual achievers earn financial points in RAE and this is what is most prized by the discipline. It was considered not surprising, therefore, that the emphasis on individual achievement is also reflected in learning/teaching, however much the individual tutor may attribute importance to group or team skills.

Case study 3

This Level 2 class consisted of seventeen students of whom two were male. There was one mature student. The department has a high level of students from independent schools. The teacher is Ivy League-educated, at undergraduate and postgraduate levels and holds teaching awards with distinctions. The observation took place in the final session of the unit,

¹²³ Gibbs & Habeshaw, *op cit*, p 23-24.

providing an opportunity to discuss the learning/teaching experience of a completed module.

The core learning objectives of this unit are for students to gain understanding of a specific biblical genre through familiarity with the core primary texts¹²⁴ and the development of a 'working knowledge' of mainly socio-historical exegesis, leading to the production of hermeneutical readings which aim to demonstrate relevance to the contemporary world. Key skills include critical reading and comparison of primary texts, research investigation of the genre and its function, exegesis (analysis and synthesis) and hermeneutics (evaluation and interpretation), achieved by working as individuals and in groups. Assessment is as in Case 2.

The overall format of the unit is to convene as a whole group at the beginning of sessions before breaking into four discussion groups, the mix of which may vary from week to week. Each group member is expected to have completed a pre-arranged task prior to most classes. This consists of reading primary and secondary texts.¹²⁵

The two-hour session was divided into two halves. The first half consisted of team discussion and concentrated on the critical analysis of core primary texts. Knowledge of secondary texts informed these readings. Generally speaking, two texts were allocated, two groups discussing one and two discussing the other. A student was selected to present an informal summary of each group discussion in a final a plenary session in which differences were debated and assessed. The second hour consisted of a lecture with opportunities for students to question the tutor and to encourage students to make connections to previous topics, methodologies and ideas, before drawing conclusions as a class.

Only two students failed to attend this final session. The group sessions worked well and the students were clearly on familiar terms with each other as they had worked together on a weekly basis over the entire module. I sat in on all four teams and they showed an enthusiastic engagement with the topic, making connections with previous topic areas, with some bringing information from reading carried out in individual preparation beyond the class. Most had brought prepared outlines which they used to bring up issues and areas for discussion.

¹²⁴ Christian, Jewish and Greek, canonical and non-canonical.

¹²⁵ The students were assigned weekly preparations organised by topic and could work externally as a group or as individuals. The main aim of this preparation was to be familiar with the content of each weekly topic.

There was some disparity in the levels of contribution and clearly they had a working agreement for some to contribute and prepare more work. One or two students dominated their groups, but overall listening skills were good and they managed to focus on the synthesis of shared ideas and to prioritise points for the summary presentations. There was a noticeable ease in selecting the presenter and clearly some groups had agreed on how to equably share out weekly presentation summaries. In this way, they would all be guaranteed the opportunity to develop their presentation skills and no one person would dominate this key area.

In the discussion that followed the class,¹²⁶ the students demonstrated confidence and ease with both the format and the tutor. They liked to work in syndicates. They also liked the fact that syndicate work preceded the lecture. It kept concentration levels high. Some commented that the intimate nature of the class reminded them of school and felt that it encouraged the development of interpersonal relationships, not afforded by lecture formats (with seminars in which individuals present). One student commented that the preparation of weekly tasks, which are then discussed in their syndicate, facilitated the selection of essay topics and enabled individuals to try out their argument within an informal, safe and public forum.

None of the students rejected the suggestion of formal assessments for group projects, although they would like this to be based on a written outline and not the informal presentation. One student thought that these skills would be enhanced by feedback on critical thinking, discussion and presentation in personal tutorials. All students agreed that there was no clear departmental policy on learning/teaching and that tutors varied in their approach to group learning, with most adhering to traditional formats of lectures plus additional seminars with open discussion or individual presentations.

Additional feedback was provided from learning journals, in which students reflected that group work clarified key course concepts and that the views of others helped in developing one's own ideas and arguments. When, initially, concepts had been hard to grasp, group discussion assisted in the transference of one concept across to another, particularly in the provision of examples. Task-oriented discussion

¹²⁶ Tutors were not present at any of these sessions and students were encouraged to talk frankly about their learning experiences, to make comparisons with other learning/teaching formats and to make suggestions on how to make improvements. They were also asked to reflect on their own learning styles in relation to group learning.

assisted in the expansion of work done in private preparation. Overall, it was felt that working in syndicate groups was fun and that the informal structure enhanced confidence levels. The variety of ideas and comments encouraged individuals to value their own views as well as those of others. One student was a self-confessed individual learner but felt that syndicate work had broadened her appreciation of team efforts, and dispelled most of her fears about disparities in ability, contribution and confidence levels. The informal, relaxed atmosphere encouraged practice in public presentation and debating skills. There was also an appreciation of the variability of format, where from time to time the tutor introduced different group skills (such as brainstorming or the discussion of archaeological artefacts brought into the class).

The tutor shows a great interest in and knowledge of group learning/teaching theory and values the utility of a student-centred approach which encourages full engagement with the subject, the development of interpersonal relationships and communication skills and the acceptance of responsibility to one's self, the group and the tutor. A poor culture of pre-class preparation in our universities led to the decision to place structured syndicate work in class sessions rather than at the preparatory stage. The resistance to syndicate preparation compares badly with the learning/teaching culture in the US, where students will happily collaborate in groups beyond the classroom.

In Level 3 units, this tutor agrees learning contracts verbally with the students and challenges students with unstructured learning/teaching seminars, in which they are required engage fully as proactive participants. In a recent Level 3 course, half the students achieved a first class mark. This was attributed to a contracted acceptance of responsibility for learning by the class, as individuals and groups.¹²⁷ In this unit, as in the first half of the observed session, the tutor acted as a facilitator and guide. Attendance at tutorials, which is voluntary, increased when student-centred group learning methods were introduced.

Although the department meets up to share good ideas in learning/teaching practice, there is no recognisable learning/teaching strategy and teachers are free to teach according to their preferred styles. In unit design, the only departmental prescriptions are on assessment formats¹²⁸. Tutorials are optional and essay drafts are discussed only on

¹²⁷ There is a clear course outline in which topics and tasks are given in sequential form, but the learning/teaching format follows a discursive format and is student-led.

¹²⁸ In this case, the length of summative portfolio essays and formative outlines.

presentation of one-side of A4 draft.¹²⁹ No negotiations over titles are allowed. This was seen by the tutor to limit the scope of the teacher. The fact that departmental policy does not include the systematic incorporation of transferable key skills was seen as a failing as the lack of strategy on this area of learning/teaching can mean that methods are ambiguously applied or lack continuity.

The tutor fully endorsed the approach of PRS-LTSN and agreed that the undervaluing of teaching skills is directly attributable to RAE links to finance, the demands of TQA and DOE policies.¹³⁰ Because of this, learning/teaching strategies, where they exist, were felt to be reactive, not innovative.

It was thought that this reflects a difference between the UK and the US academic cultures. In the latter, teaching skills are developed at PhD level and are valued as highly in departmental structures as research production. Tutors in the UK are not rewarded or promoted when they demonstrate high level teaching skills and are not encouraged to develop them. Further, in comparison to the US, RS is more vulnerable as a discipline here, as in the US it is integrated into undergraduate foundation courses in the humanities. But this attitude can also be attributed to the fact that departments are not keen on building partnerships with outside agencies unless they relate to specialist research projects. Recruitment is therefore dominated by specialist research production and not by teaching.

Case study 4

The institution and the department in this study have a policy on learning/teaching which includes a strategy on the inclusion of transferable key skills in group learning which are monitored and assessed summatively. This is not, however, clearly spelled out in the Subject Handbook or on the website. Syndicate projects form part of the assessment strategy in which peer reviews form part of the process.

This study consisted of an observation of a Level 2/3 unit, with additional material drawn from another Level 2/3 unit in which assessed syndicate projects were obligatory. There were 15 students in the first

¹²⁹ It was clear from the questionnaire that the students from this department lacked knowledge on how and where they could get support in skills development. One student did not know anything about tutorials and many did not know about the Study Skills Unit. However, this was not attributable to the tutors who clearly emphasised the availability of these aids. The high confidence levels of these students may suggest that they did not feel the need for these supports.

¹³⁰ *Teaching Quality Assurance* exercises and *Department of Education* policy.

unit.¹³¹ The students come from a varied background with a mix of abilities. There are relatively high numbers of mature students. Several in the observed class had participated in the assessed syndicate project.

The tutor is a professor in Christian ethics. The course outlines clearly differentiate between content aims and learning outcomes. The latter delineates the link between an ethics of learning and the content of the course.¹³² The observed course involved the weekly use of a textbook, with additional bibliography. Group worksheets on a video screening constituted the means for formative assessment. The observed unit was assessed by essay.

Formal contracts were drawn up for any assessed syndicate work and in these projects, topics are negotiated with the tutor. The project format is prescribed.¹³³ Summative assessment of the second unit consisted of a syndicate presentation (20%), an essay (30%) and an examination (50%).

The overall format of the observed unit is a 3-hour session broken into two halves, with a 20-minute break. Three groups work on a task which is given at the beginning of the session. They are expected to have individually read the texts in advance. Twenty minutes was allowed for discussion in which the main issues were unpacked. In the 5-minute presentation by a single nominated member of each group, clear relevance on contemporary issues had to be demonstrated. A general discussion questioned and compared the topics and drew conclusions. Members of each group could offer additional perspectives. I sat in on all the groups and the level of engagement was high. Many showed the need to express personal meaning and this concern informed the detail of the final presentations.¹³⁴ The level of discussion was good, with students referring to previous topics and courses. They all seemed to

¹³¹ 27 in the unit which was not observed but which is referred to on assessment of syndicate projects.

¹³² In the outline in which project work is assessed, a clear sense of the elements of syndicate work are stressed (e.g. roles, contribution to discussion, the need to organise and manage meetings, the need to develop personal and team arguments, and the need to empathise with other people.) Evidence has to be provided for these. This is in addition to the traditional skills of assimilating, understanding, analysing, synthesising and evaluating knowledge and ideas, and the skills of essay and presentation planning and execution.

¹³³ The negotiated contract consisted of agreement with the tutor over the allocation of roles, the preparation of the project and the format of the presentation (an hour in length). Assessment evaluation was also a negotiated process.

¹³⁴ This seems to demonstrate the need to 'foster the development of the whole person.' C.f., Drane, *op cit*, p133.

have prepared for the class and many showed the relevance of the course to contemporary political issues. The presentations were well-constructed and the timing was excellent, demonstrating a confident familiarity with public presenting, due in part to the sense of a safe and encouraging environment. Students showed concern for the ideas of their peers and generally demonstrated their understanding of the course learning outcomes on an ethical approach to team learning/teaching. This could have affected their preparedness to question critically, but, in fact, different views were argued vociferously, although the tutor did tend to draw conclusions on behalf of the group.

The second half of the class consisted of a lecture followed by a general discussion and summary. Students felt confident to ask questions during the lecture and the tutor encouraged interventions and concentration levels remained high throughout the session. The environment was conducive to this format and took place in a recently purpose-designed room, with good lighting, OHP and computer facilities. Although the tutor did not make use of these in the observed session, both tutor and students regularly use these.¹³⁵

In the discussion with students, they explained how group skills were developed over the 3 levels. At level 1, in-class group work is developed, with regular use of fishbowl, snowball and buzz groups, in which tasks are given prior to general discussion. There is, however, variation in learning/teaching formats. This particular tutor was highly rated for the ability to encourage student-centred learning. It was generally felt that individual presentations did not facilitate learning as often it was difficult to grasp the information being given. The shift to student-centred learning in syndicates was highly valued at levels 2 and 3, although some self-confessed individual learners resented the effort involved in learning how to organise meetings and allocate roles. They did acknowledge that these formed an important aspect of what they described as 'life skills'. Their use of vocabulary demonstrated an understanding of the importance of interpersonal skills and although they valued charismatic lecturing, this was less marked than in the other two institutions. It was pointed out that as a discipline, theology (and, more generally, RS) revolved around the concept of community and yet it was felt that in order to obtain a degree, individual skills were still more highly rated than team skills. This sometimes created tensions in syndicate projects, and one student resented summative assessment as

¹³⁵ The other two institutions had less attractive environments, with a far greater pressure on space. However, the students seemed unaware of this.

her project mark had been lower than her essay and examination marks. Overall, this group of students emphasised skills over content, but nonetheless, they clearly repeated the benefits expressed by the students from the other institutions.¹³⁶ There was less emphasis on the negative aspects of team work. They liked working in syndicates beyond the classroom, although for some (in particular the mature students who live off-campus) arranging meetings was clearly a problem.

In discussion with the tutor, the commitment to a shift to student-centred learning was clear, as was the link between the ethics of community in the content of RS and group learning/teaching. The instigation of an institutional and departmental policy on group learning/teaching was seen as a positive benefit which allowed the progressive development of transferable key skills which could be carefully monitored and assessed. Interpersonal skills were seen as an important part of students' development with relevance to the world of work and to academic practice. The provision of a safe, nurturing environment formed part of this process, as it helped engender confidence and the ability to share. Individual learning was not impeded by this emphasis, rather it has been shown to improve individual skills. Small group discussion and presentations allowed students the confidence needed to develop individual arguments in personal study, by comparing their own ideas with those of the others. The standard of debate had increased because of the environment developed in these classes. A 3-hour session was seen to enhance the students' knowledge of each other and allowed sufficient time to experiment. The provision of a lecture at the end of each session satisfied those students who still depended on note-taking and handouts.

3.4. The student questionnaire¹³⁷

The rationale behind the questionnaire was to supplement observations and discussions with student perceptions on learning, teaching, key skills in group learning, departmental culture, key skills brought forward from school and support mechanisms. It looked for evidence of patterns and coherence in perceptions of learning/teaching.¹³⁸ The questions provide

¹³⁶ E.g., sharing ideas, confidence building, the broadening out of the topic, the help in selecting areas for individual tasks etc.

¹³⁷ Students who took part in the case studies only completed the student questionnaire.

¹³⁸ As in the Staff Questionnaire, the questions used the learning/teaching theories covered in the introduction.

evidence of a considerable variation in attitudes. I have, therefore, selected to make general observations on this outcome.¹³⁹

Perceptions of the department on learning/teaching: Over the 3 levels, more students believed that their departments emphasised individual over group learning, reflecting a clear understanding of the assessment and learning/teaching formats.¹⁴⁰ The majority had not been asked to agree learning contracts.¹⁴¹ The vast majority perceived learning/teaching to be dominated by lectures, although many failed to recognise that they had participated in seminar learning/teaching, with mini-lectures. Formats were, in the main, tutor-led.¹⁴² A relatively limited experience of group methods had been experienced in HE, with fishbowl and brainstorming sessions being the most commonly used.¹⁴³ Although all the students had experience of syndicate projects, they were not all clear about this.¹⁴⁴ This may reflect a lack of terminology or a lack of reflection on learning/teaching methods.

Perceptions of learning: In this section, students demonstrated that their learning styles differ considerably and that the mix of learning types may vary from year to year. For example, the Level 1 group was dominated by students who considered that a combination of course content, individual and group learning was important, whereas in Levels 2/3, a greater proportion stressed the importance of course content and individual learning.¹⁴⁵ This may reflect the fact that students know that these levels count towards individual degree marks and that few courses include summative assessment of syndicate work.¹⁴⁶

¹³⁹ C.f., Appendices, C and D. As the results show a distinct variation in learning types which has undoubtedly made analysis difficult, in future questionnaires, I would make questions less nuanced! The fact that a broad spread of learning types is evidenced, however, demonstrates the importance of factoring this into learning/teaching strategies for each group of students and at the level of intake decisions.

¹⁴⁰ C.f., Question 34, 42%, 49% and 55% respectively over the levels.

¹⁴¹ C.f., Question 35, 74%, 62% and 55% respectively.

¹⁴² C.f., Question 36. This perhaps shows a weakness in the question format.

¹⁴³ C.f., Question 37.

¹⁴⁴ C.f., Question 38. It is unclear as to why this was the case, as questionnaires were completed after discussion with me, and at the end of the courses.

¹⁴⁵ C.f., Question 1.

¹⁴⁶ This is possibly reflected in the case study 4's Level 3 figures, in which all the students value group learning as well as individual learning. It forms part of the overall culture of the department and institution.

In students working at Levels 1 and 3, there is evidence of different learning types, with a split between surface and deep learners, deep slightly outnumbering surface learners. This was reversed among the students working at Level 2.¹⁴⁷ Differences are again reflected in the questions on how students prefer to learn.¹⁴⁸ In Level 1, 60% of students show their dependency on secondary literature and lecture notes for the assimilation of abstract concepts. This dependency decreased in Level 2, but not in Level 3. Overall, most students feel that group discussion (syndicate or general) helps them to develop the means to think critically and present arguments, although general discussion was favoured over syndicate work (except in Level 1). It was noticeable that a considerable percentage viewed group discussion as the best forum for developing their critical thinking; this may indicate an increasing sophistication in their understanding of key skills and learning/teaching methods.

When it comes to personal motivation,¹⁴⁹ a number of students showed a surface approach to learning, in that they were motivated by a fear of not completing the course.¹⁵⁰ A considerable proportion of students wanted to explore their own ideas and to understand those of others but the pattern varied. This was also the case in other motivational areas and no clear pattern emerged, demonstrating a variation in learning types.

In all cases, students are influenced most by their tutor's teaching style.¹⁵¹ Students over all 3 levels predominantly preferred lecture formats that are tutor-led and that do not include seminars.¹⁵² Very few prefer seminar-only formats. Level 1 students seek formative assessment predominantly for essays.¹⁵³ There is a broader spread of opinion at other levels, although Level 3 students would like formative assessment of informal individual and group presentations.

Perceptions of teaching: Most students stressed the importance of the role of the tutor as facilitator, in both the provision of course content and skills'

¹⁴⁷ C.f., Question 2.

¹⁴⁸ C.f., Questions 3-5.

¹⁴⁹ C.f., Question 6.

¹⁵⁰ 36%, 35% and 28% respectively over the 3 levels.

¹⁵¹ C.f., Question 7 (54.5%, 42% and 80% respectively).

¹⁵² C.f., Question 10.

¹⁵³ C.f., Question 8. Formative assessment of essays is less common at Levels 2 and 3 and this may be reflected in the results. It may also reflect an increase in confidence.

development.¹⁵⁴ Again, in prioritising areas which reflect learning styles, the results were mixed, showing a variety of learning types.¹⁵⁵ As they progress through the levels, fewer students want pre-class tasks but a large number want the opportunity to discuss problem resolution.¹⁵⁶ In the organisation of courses, charismatic lecturing, clear outlines and handouts outweighed the development of intellectual and transferable skills or the ability to make fair assessments.¹⁵⁷

In the development of courses, the relationship between the students' intellectual ability and course level, and the newness and size of the subject, far outweighed considerations about background or gender.¹⁵⁸ None thought that gender was an issue and yet there are some signs of difference between the sexes and ages.¹⁵⁹

Perceptions of group learning skills: Once again, results showed a variety of learning types and results did not show a predominant pattern of perceptions.¹⁶⁰ Their understanding of how and where they developed different skills was excellent.¹⁶¹ As the levels progress, there is an increasing acceptance that comprehension, application, analysis and evaluation are effectively learned in group discussion of one form or another,¹⁶² although many still see lectures as the best way in which to learn and synthesise all the skills needed, many also see essays as the locus for drawing together all these skills, particularly in Level 3.¹⁶³ This may demonstrate development in self-reflection over the 3 levels.

Group learning was viewed positively in the development of organisational and communication skills, increasing levels of confidence.¹⁶⁴ As the levels progressed, it was increasingly seen as a problem-solving forum. The proportions of students who prefer to work in groups again reflected a change over the 3 levels, with more Level 1 students preferring to work alone. About a third of students in Levels

¹⁵⁴ C.f., Questions 11-12.

¹⁵⁵ C.f., Question 14.

¹⁵⁶ C.f., Question 16.

¹⁵⁷ C.f., Questions 17-18.

¹⁵⁸ C.f., Question 15.

¹⁵⁹ e.g., more females rate charismatic lecturing than males. Mature students tend to subscribe to traditional learning/teaching methods and show signs of surface learning. But the overall pattern is not clear enough from the questionnaire results.

¹⁶⁰ C.f., Questions 19-21.

¹⁶¹ C.f., Questions 22-29.

¹⁶² C.f., Questions 24, 25, 26 and 28.

¹⁶³ C.f., Question 29.

¹⁶⁴ C.f., Question 30.

2/3 preferred to work in groups.¹⁶⁵ However, none of the students resented having to work in groups, an important consideration in the development of learning/teaching strategies and it would be useful to evaluate how changes in habitual formats might affect those views over time.

Key skills transferred from school: Students surveyed at levels 1 and 3 showed high levels of confidence in their own abilities on coming into HE.¹⁶⁶ They all had experience of a variety of group skills prior to entry, with a number having worked on assessed syndicate projects.¹⁶⁷ Students were clear that key skills were described in outlines and handbooks, but they were less clear about the existence of Study Skills units and few make use of them.¹⁶⁸ As to areas on which they might seek help, essay writing and personal study skills outweighed the desire to improve personal or group presentation skills or the skills needed to work in groups, although Level 3 were less concerned about personal study skills, demonstrating perhaps an increase in confidence.

4. Outcomes

The central aim of this project was to gain insight on attitudes towards and practice of group learning/teaching in relation these to the key concerns of critical thinking, student-led discussion in student-centred learning and their relationship to transferable key skills and employability. Following an exploration of key education theories on learning/teaching types and teaching in small groups¹⁶⁹ (in the context of the broader picture of learning/teaching¹⁷⁰), the research attempted to provide a preliminary picture of group learning/teaching RS in the overall strategies on learning/teaching in RS.

Learning/teaching which is grounded in traditional transfer and shaping formats are seen to still dominate RS learning/teaching. These focus on tutor-led teaching and individual learning skills. Group learning is still relatively under-exploited in most departments and syndicate

¹⁶⁵ C.f., Questions 31-33. This matched the results taken from the in-house feedback questionnaires in Case Study 1.

¹⁶⁶ C.f., Question 44. The reduced confidence of Level 2 students is reflected in their lower motivation demonstrated throughout the questionnaire.

¹⁶⁷ C.f., Question 45. Assessed projects had been experienced by 20%-45% and syndicate work by 30%-70%.

¹⁶⁸ C.f., Questions 46-52.

¹⁶⁹ Outlined in 1.2-1.6.

¹⁷⁰ Outlined in 1.7.

projects are rare. There is however, a clear indication that a substantial percentage of staff and students recognise the value of group learning in the development of these key considerations.¹⁷¹ The case studies show that teachers with a high commitment level to group work can add to learning/teaching satisfaction and enjoyment, despite the extra effort needed to plan and run these formats. Tutors who use these methods suggest that results are beneficial to the development of critical thinking and student-led learning. One tutor demonstrated clearly that passing the responsibility over to the students, at the right level, can result in extremely high results.¹⁷² Clearly, high level facilitating skills are required of teachers and there are signs that the development of clear institutional and departmental policies which emphasise the need for team skills (within an ethical base) help to ensure the transition to student-led learning/teaching.¹⁷³ The study evidences a variety of learning/teaching styles and staff development should be seen as just as important as student development. Students are able to articulate their recognition of staff skills' shortfalls and are reluctant to change their own practice if their tutors do not change theirs.¹⁷⁴ Motivation to change may, thus, be impeded by habit and the lack of reward, for both teachers and students, as clearly both are reward/assessment driven.¹⁷⁵

Policies on learning/teaching that acknowledge these problems would provide a way to ensure the progressive transition and development of these key skills areas. It is possible that the ability to demonstrate the value of group learning skills to employers could enhance the ability of RS to develop better partnerships both in and beyond the HE institution. The provision of courses, in which these skills are clearly structured, would increase the students' awareness of the importance of team projects to their ability to gain high level employment at the end of their degrees.

4.1 Interpretations

The culture of learning/teaching in RS: Whilst this survey can only begin to raise awareness of the existence of a possibly predominant style and culture in RS learning/teaching, there is some evidence that in almost all the institutions represented, concerns over specialist research dominates

¹⁷¹ C.f., results in 2.1 and 2.2.

¹⁷² Case Study 2.

¹⁷³ Case Study 4.

¹⁷⁴ Case Study 1.

¹⁷⁵ C.f., comments from Case Studies 2 & 3.

attitudes to how we balance the organisation of learning/teaching with research in our departments. The provision of a stimulating learning/teaching environment is seen to be important but, in the main, traditional teaching styles and teaching formats still dominate, despite the evidence from education theory that transfer and shaping models do not encourage student-centred learning or the development of skills needed for critical thinking. The methods used for group learning are relatively under-exploited and their importance in the development of transferable skills needed by employers does not seem to have been sufficiently assimilated. Whilst most teachers see themselves as facilitators of student-led learning in which students are enabled to develop critical skills through an understanding of themselves and the world, most follow transfer and shaping teaching models.

Evidence from the student questionnaire demonstrates that student learning types vary from class to class, and from level to level. Their learning/teaching needs vary accordingly. But traditional formats will tend to favour individual and surface learners over deep learners and team players. Students are aware of the dominant learning/teaching priorities of their departments and wish to demonstrate the skills needed to reflect those priorities. In this, they reinforce existing practice, especially as it makes less demands on them.

The evidence for clear corporate strategies, in which the development of all-round learning skills are systematically planned, is scant. I would suggest that whilst there is a growing desire and awareness of the need to develop a variety of learning/teaching methods, in particular in group learning/teaching, this would seem to be driven by the efforts of individual teachers, and not by departmental strategies. This raises questions about the way in which the development of transferable key skills is incorporated into teaching methods.

Learning/teaching styles: The survey provides tentative evidence for the existence of a wide variety of teaching and learning styles at the individual level. These differences, however, show that the dominant teaching styles are that of the transfer and shaping models, in which the traditional lecture is supplemented by general discussion and individual presentations in additional seminars. Limited in-class group techniques are employed and syndicate projects are still relatively rare. And even though it is acknowledged in RS that discussion in groups improves critical thinking, theory suggests that it is through innovative student-led group work that confidence and deep learning is best encouraged.

The diversity of learning types demonstrates that a variety of learning/teaching methods is needed to enable a larger number of students to fully develop their potential. And whilst students show reluctance or resistance to group learning, due to the continuous efforts required to gain these skills, they openly acknowledge its benefits in the development of their critical thinking, in the systematic organisation and management of study and in the production of their own individual study (e.g., the selection and production of essays and revision work).

Learning/teaching skills' development: Although most departments have Staff Development and Study Skills Units, voluntary subscription does not sufficiently raise awareness of the need to use them. Evidence for the systematic development of skills in learning/teaching is patchy and few of the departments surveyed could demonstrate a clear strategy. There is a need, therefore, to evaluate how best to ensure the planning in of transferable skills into course structures, taking account of learning/teaching types and levels. Development should be progressive, with all skills taught at each level. This raises a number of issues about how the broad range of skills is guaranteed at each stage of a student's development. When teachers are left to make their own decisions about learning/teaching formats, and because of the selection of optional modules, students may miss out on the development of particular skills because of an imbalance in planning which methods are used from unit to unit, and from level to level.

Group learning/teaching methods: Discussion is seen by all teachers as a priority in the development of critical thinking and yet most use traditional tutor-led formats which do not encourage deep learning strategies that develop independent thinking or the key skills needed to enhance it. Group learning in syndicates and in-class groups is seen to greatly enhance student confidence in assimilating, analysing and assessing difficult concepts and yet there is little evidence that these methods are being introduced in the kind of coherent and consistent way which will systematically develop these skills.

Summative assessment of group work would seem to be rare. Students know this to be the case, and perceive group learning/teaching as being rated less highly than individual effort. Group learning involves a greater commitment to planning, running and participating in order to make it work successfully. The undervaluing of teaching in funding assessment, therefore, does not encourage teachers to make the kind of

commitment necessary to develop the skills needed to introduce these methods, especially when most students are content to continue along traditional learning/teaching lines.

Employers' views provided in the *Dearing Report* indicate that team skills and student-centred learning (exemplified in group learning) are becoming more and more important to non-vocational employability. They stress the need to communicate, co-ordinate and evaluate material within a corporate environment. Graduate and postgraduate recruitment policies are organised around the ability to work in teams, to make presentations within a corporate environment.¹⁷⁶ Institutions and departments are increasingly required to build partnerships with agencies and the world of work beyond the institution and to show the relevance of skills developed in individual disciplines. The emphasis of RS on critical thinking fulfils the need of employers, but at present, this is encouraged at the individual, not the group or corporate level (also in its research culture).

4.2. Questions arising

Provisional evidence indicates that teachers of RS, in the main, adhere to traditional learning/teaching styles and formats. Students show a variety of learning types. Both recognise that group discussion helps to develop critical thinking but subscribe to learning/teaching formats which, according to education theory, are not best suited to its optimum development.

These conclusions raise some key questions

The traditional learning/teaching pattern continues despite the fact that most students have received a good grounding in a variety of group learning methods in schools, few of which are used in HE.

Does this mean that they give up these skills to concentrate on individual skills as they perceive these to be more highly valued in RSHE?

The individual case studies demonstrate a high level of commitment to the value of group learning by the tutors. They are responding to the trends in education theory and their own convictions that group learning enhances the development of critical thinking, student-centred learning and the kinds of transferable skills needed in the work of work.

¹⁷⁶ C.f., CRAC programmes and the Research Council's Graduate School's programme. For the latter, see <http://www.gradschools.ac.uk>

How far should developments in teaching methods be determined by the convictions and enthusiasm of individual tutors, and how far by departmental and disciplinary strategy?

Students recognise that group learning helps them in the development of interpersonal skills and yet many resent the effort involved in developing those skills. Their dependency on charismatic lecturing and their fear of being let down by group members, shows their understanding that summative assessment is dominated by individual tasks.

Would assessment of syndicate projects encourage both staff and students to take group learning/teaching more seriously?

One tutor in the case studies acknowledged that his own teaching style affected the smooth introduction of group learning/teaching.

As most RS teachers use transfer and shaping teaching styles, whilst believing themselves to be guides and catalysts, would the introduction of questionnaires on teaching styles help in raising awareness levels needed for change and self-development?

All the tutors in the case studies were convinced that group learning/teaching improved the students' confidence levels, their communication skills, and their ability to evaluate and synthesise concepts.

Are these key skills being sufficiently well connected to learning outcomes in course learning/teaching planning, outlines and skills training?

The evidence for different learning styles suggests that a variety of learning/teaching methods needs to be used in order to get the best out of students.

Would the introduction of questionnaires on student learning styles help in the design of courses, where styles are linked to tasks and outcomes?

The emphasis of RAE driven policies and the undervaluing of high level teaching skills would seem to create tensions in departmental strategies.

Should RS departments be lobbying for funding for excellence in teaching, in particular for those that demonstrate their recognition of the importance of group learning to transferable skills required in the recruitment of graduates from non-vocational degrees?

4.3. The benefits of change in learning/teaching

The questions in the preceding section aim to open these issues to debate. A preliminary evaluation of learning/teaching practice in RS in HE suggests that we would benefit from further consideration of how to move away from teaching methods which emphasise individual skills to those that demonstrate a balance between individual and group skills. Any shift in this direction would positively demonstrate the discipline's awareness of a widening perspective on skills, and show how the form and content of the discipline can relate to the wider contemporary world.¹⁷⁷

4.4. Evaluating learning/teaching

In order to understand how students are being taught, a process of self-reflection can assist in the generation of creative solutions on the key issues of the development of critical thinking in a student-centred group learning/ teaching environment that ensures the prioritisation of transferable key skills. This would include clarification of the following areas:

- transferable key skills that aid in the development of critical thinking;
- the teaching formats most used in the department;
- the teaching styles of the staff (ascertained through peer assessment, education theory and a variety of questionnaires);
- the learning types of the students.¹⁷⁸

¹⁷⁷ I have made considerable use of John Drane's chapter, on new styles in learning/teaching, *op cit.* C.f., pp135ff for his consideration of the changing demands of theological education and the wider world.

¹⁷⁸ Whilst this is variable from year to year, many departments have strategies (or styles) for student recruitment. This, however, will change if policies that demand widening access are fully applied, necessitating closer scrutiny of how to teach a variety of learning types. C.f., Drane on the use of Honey and Mumford's *Learning Styles* questionnaires, p146. For references to these questionnaires, c.f.,

<http://www.psi-press.co.uk>

Any evaluation of the teaching and learning styles of a department necessitates the full cooperation of staff and students.

With regard to the evaluation of teaching, Ramsden suggests that an

... intellectually satisfying approach [is] ...to focus on good teaching rather than good teachers...cooperation between members of staff and peer feedback within a team assists learning and motivation...Educational development ...involves efforts to change the policies of institutions and departments towards the promotion of good teaching, ...[through] the management of academic staff as teachers, in a fuller recognition of the practical problems of innovation...and in systematic programmes of teacher education which take full account of our knowledge of good teaching.¹⁷⁹

Once the dominant style and culture of the department with regard to learning/teaching is acknowledged and understood, ways can be found in which to systematically introduce the types of group learning/teaching formats which encourage student-centred activities which are shown to develop critical thinking and transferable key skills. This would require 'structural and procedural adjustments in order to move from theory to practice.'¹⁸⁰

4.5. Planning strategies for success

Adjustments to learning/teaching could be achieved by developing a planned strategy to a realistic timetable. It would consist of, *inter alia*, the following elements:

A progressive strategy of change in learning/teaching formats:

This would begin with a staff development strategy, based on an evaluation of staff and student skills' development and followed by a year on year introduction of student-centred group work to ensure a smooth transition that would include the monitoring and re-adjustment of changes (logistics and peer review, student feedback and evaluation of student development).

¹⁷⁹ Ramsden pp-254-57.

¹⁸⁰ Drane, p148, C.f, 147ff NB Drane is concerned to develop learning/teaching strategies which incorporate a spiritual and ethical dimension in the form and content of theology courses.

Drane suggests that a variety of formats can be used in longer seminar sessions that include

... role play, small-group work, watching videos and talking about them, story-telling, ...interactive forms, making collages, plenaries, learning practical skills – and even elements that might look like traditional lectures, but which will typically be utilized as a point for extempore summing-up of what has already been discovered by other means.¹⁸¹

These formats do not exclude formal or semi-formal presentations, either by groups or individuals representing groups. Discursive formats can enhance learning at higher levels, especially where learning contracts are negotiated to agreed outcomes.¹⁸² The four Case Studies demonstrate how these can be used within the more loosely structured formats suggested by Drane.¹⁸³ Lectures can still form an important element in teaching but transferable key skills need to be developed progressively from Level 1 through to Level 3.

The introduction of key skills only sessions:

Many institutions are introducing team-building and team skills' sessions in the early part of Level 1. These have the benefit of allowing students to get to know one another in a stimulating environment. They can also be used to introduce the importance of transferable key skills from working in teams to both their studies and the wider world of work. If students are made aware that these skills will form part of their degree programme, they will perhaps be ready to take them more seriously.¹⁸⁴

¹⁸¹ He stresses the importance of coffee breaks in long sessions, as these act as a forum for reflection and further questions. I observed this in all the Case Study sessions.

¹⁸² C.f., Case Studies 3 and 4.

¹⁸³ Another format, gleaned from the Graduate Schools' programme, op cit. n25, is the setting of tasks to syndicate groups, in which they are sent off to read, analyse and evaluate primary and secondary set texts, prior to returning to the class to give a 5-minute presentation before a plenary debriefing session. This could involve arguing different views in order to draw conclusions about the validity of each view.

¹⁸⁴ Part of these sessions could include a session on learning types in which students complete questionnaires prior to a discussion session that explains learning strategies in relation to deep and surface approaches. My own experience of this type of session in business, teacher training and at a graduate school, shows that individuals like to compare their own styles with those of others and that further, they try to change their styles, once the weaknesses have been flagged. Their awareness of strengths and weaknesses help them in the evaluation of how to work effectively alone and with others.

Planning transferable key skills into course learning/teaching formats:

Drane suggests that in group learning/teaching formats, ‘teachers need to put some additional effort into making sure that ...resources are clearly identified and easily available.’¹⁸⁵ This might include the planned use of departmental guides on skills in week-to-week tasks for individuals and groups, incorporation into course outlines and weekly timetables.¹⁸⁶ An improved awareness of the need to provide extensive details on the relevance of key skills to undergraduate achievement as well to the wider world, could be flagged in departmental handbooks and websites. The incorporation of skills training into the structure of the course requires careful consideration of whether to reduce the amount of course subject content.¹⁸⁷

A more effective use of additional support, such as study Skills’ centres:

Most departments have recourse to Study Skills’ support. Few use these mechanisms in a systematic way. Regular referrals, monitored in formative assessment processes (student feedback on essays, presentations and journals), could help to inculcate the culture of self-development necessary to student-centred learning. This could include self-development of group learning skills.¹⁸⁸

*Student-centred group learning/teaching to ensure the development of a community of learners in which both teachers and learners are seen as resources in the team-building process:*¹⁸⁹

This requires teachers and students to work in partnership with one another. Being more open about personal and interpersonal skills is one way of inculcating this culture. Graeme Gooday’s recent article on student-centred learning emphasises this. He states:

¹⁸⁵ Drane, p145.

¹⁸⁶ C.f., Case Study 3, above, for an excellent example of how to include key skills training into group work that shows relevance to the course content.

¹⁸⁷ C.f., Gibbs & Habeshaw, p20. In my own experience in Case Study 1, the reduction of content would have eased the pressures on time, allowing students to better develop those skills demanded in the course outcomes (e.g., critical reading skills, critical thinking in new methodologies).

¹⁸⁸ Knowledge of your own learning type would facilitate the flagging of problems that students encounter in teamwork and help in the improvement of team skills.

¹⁸⁹ C.f, Drane, pp 142, 143 &145ff.

A 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... We have to abandon the long-entrenched view of students passively orbiting around a resolutely fixed scholarly earth!¹⁹⁰

Learning how students learn is a means to developing the type of partnership in which teachers and students can accept joint and individual responsibility.

*Group learning/teaching formats to include the institution of weekly single seminar-only classes:*¹⁹¹

For group learning/teaching to work effectively, sufficient time needs to be given over to its practice. Seminar-only courses in which the students are encouraged to cover much of the course in preparing for tasks in the classroom, without being able to depend on lectures, require seminars to be longer than one hour and no less than two. Longer sessions help students to gain confidence in a safe, shared environment, in which there is time to test out ideas and to build in summary sessions that iron out problems.

Whilst it is clear that this type of format works best in Levels 2 & 3, especially as Level 1 numbers tend to be greater, it is important to ensure a progressive development of the skills needed in working in groups. Case Study 1 demonstrated that it is possible to work with larger groups, even though the tutor felt that, on reflection, syndicate projects should only form part of the overall structure of the course. By introducing some syndicate work in the classroom, prior to their working on tasks in private study groups, the students are able to gain a step-by-step knowledge and confidence of these learning/teaching skills. Mini-lectures and plenary discussions can be used in conjunction with these methods.

¹⁹⁰ pp145-6: Graeme Gooday. "How do Different Student Constituencies (not) Learn the History and Philosophy of their Subjects? Case Studies from Science, Technology and Medicine" in *PRS-LTSN Journal*, Vol 1, No. 2, Winter 2002, pp141-155.

¹⁹¹ C.f., Case Study 4, and Drane p 140 on new styles of teaching. Longer seminar sessions enable students to get know each other in a way that encourages the development of group skills. Whilst Drane points out that a 3 or 4 hour session in a suitable environment can be hard to timetable, the trend towards these formats in learning/teaching would suggest that this is an area which the institution will have to resolve. Drane also stresses the need to inculcate a culture of community which reflects Christian ethics and feels that this can be best achieved in these formats. C.f., Drane, p149.

*Assessment formats, progressively introduced over 3 levels, consisting of learning journals, self and peer assessment, syndicate projects and even fieldwork.*¹⁹²

Teachers and students are reward-driven. When assessment of syndicate projects and learning journals is only formative, it is easy for both parties to under-value their importance. At some stage in the undergraduate course, syndicate projects should be summatively assessed. This is the only way in which to develop a learning/teaching culture that acknowledges the importance of transferable skills of this type. Case Study 4 demonstrates that this kind of project can be used to structure in an ethical element in which the team players must take responsibility not just for what they learn, but how they learn. Formative or summative peer and self assessment should also be part of the process.

Effective use of the Personal Development Record could further encourage students to participate more fully in their own self-development of transferable skills needed to work corporately. The ability to articulate their strengths and weaknesses in skills will enable them to reflect on and monitor the whole learning process in relation to their own personal profiles. This progression can be presented to potential employers to demonstrate their ability to understand and change within a personal strategy of self-development.¹⁹³

4.6. Expanding group learning/teaching formats

The case studies show that it is possible to teach small groups in a variety of imaginative and useful ways. The careful planning of skills' development that encourages the nurturing of critical thinking can vary from in-class group tasks to content-based syndicate tasks, both in and beyond the classroom, the latter, only if students develop a culture of week-on-week preparation.

Case Study 1, despite the acknowledgement of weaknesses in timing, demonstrates that syndicate groups can be introduced to classes of over 30. Case Study 2 demonstrates that individual preparation can be used to enhance small-group work in class. Case Study 3 demonstrates that by recognising that students are assessment-driven, IT programmes can be employed to encourage the sharing of assessment processes and to encourage debate. The introduction of team peer review sessions reward the students with a sense of how to develop individual learning

¹⁹² C.f., Drane, p150ff and Case Study 4, in which syndicate projects constituted 20% of the summative assessed marks.

¹⁹³ MacDonald Ross, *op cit*, p122.

skills within a group forum, in which peer assessment encourages them to share information about skills. It also acts as a motivation to achieve in groups. Case Study 4 demonstrates that a culture of learning/teaching in which group learning is seen as part of the total learning outcomes, helps to inculcate a culture in which personal meaning is respected and shared responsibility taken in the community of learners. Summatively assessed projects help to formalise this process and to raise awareness of interpersonal skills.

All of these processes require the development of teaching styles that recognise the teacher as catalyst or guide to learning, and in which the students and teachers work in partnership towards common goals and outcomes. These include the development of skills which help to build critical abilities in assimilating, analysing and evaluating difficult concepts and a further ability to communicate these in speech and in writing, as individuals and as groups.

This approach suggests the need for a radical change in approach, in which the learning/teaching community is seen to be as important as the individual. Any increase in effort is rewarded by improvements in student-centred learning.¹⁹⁴ However, to make sense of the increased levels of skills required by teachers, a greater emphasis on financial and other motivational rewards for good practice is essential. It is to be hoped that this can be achieved, beginning, first of all, with the implementation of cultural change at departmental levels. The effective demonstration of a nuanced balance between individual and group skills within a corporate teaching and research strategy may, in turn, lead to a greater acknowledgement of the importance of rewarding good practice at institutional and government levels, making easier the lobbying for rewards.

4.7. Epilogue

This project has been broad-ranging in its aims, attempting to provide a window on the role and status of group learning/teaching in RS in HE. From interpretation of the staff and student questionnaires, questions have emerged about our awareness of a culture of teaching and learning styles in which both students and teachers may unconsciously impede the introduction of the kinds of innovative methods that are required to develop critical thinking in student-centred learning, and which are demanded by employers of non-vocational degree graduates.

¹⁹⁴ C.f. Goody pp154-5.

The case studies, however, demonstrate that individual teachers are able to introduce exciting and successful group learning/teaching methods. Ramsden suggests that a good starting point for introducing planned changes in strategy is by looking at good practice. Making good examples known (as through the case studies) is a way of doing this. For example, Case Study 4 demonstrates how the ethics of community can connect into a respect for personal meaning which John Drane reinforced with his suggestions on new styles in learning. Openness to peer review, student feedback and corporate discussion is a good way to smooth the ground for more effective evaluation and future planning.

The case-study evidence from the three participating departments in the South West of England demonstrates a shift in attitudes towards group learning. Whether this reflects an overall change in attitudes is far from clear from the questionnaires. But I hope that the interpretation of the questionnaires and the peer review of observed classes will act as a starting point for future discussion on the relevance of group learning/teaching to the key concepts of the importance of critical thinking, student-led discussion and transferable skills needed for future employability by students of RS.

A greater awareness is needed of the benefits and rewards that student-centred group work bring to the learning/teaching process. This requires openness with regard to personal development in both teachers and students that directly links the importance of transferable key skills with desired learning outcomes, in particular those needed to work in teams. The use of questionnaires may be one way of flagging teaching and learning in order to develop coherent, systematic learning/teaching strategies which include an awareness of different kinds of learning/teaching methods to cover all learning/teaching types and all transferable skills. The progressive introduction of changes can be planned, monitored and assessed across all three undergraduate levels over an established number of years, allowing for staff development in the key areas of group learning/teaching methods and assessment processes.

Bibliography

- Drane, J. W., *Cultural Change and Biblical Faith* (Carlisle, Paternoster), 2000, Chapter 7, pp129-153.
- Drane, J. W., "Theological Education for the Third Millennium", *British Journal of Theological Education*, 6/3 (1994-5), pp3-8.

- Fox, D., "Personal Theories of Teaching" in *Studies in Higher Education*, Vol. 8, No 2, 1983, pp151-163.
- Fry, H., Keteridge S & Marshall S., *A Handbook for Teaching and Learning in Higher Education* (London, Kogan Page) 1999.
- Gibbs, G. & Habeshaw T., *Preparing to Teach: an Introduction to Effective Teaching in Higher Education* (Trowbridge, The Cromwell Press) 1989.
- Gooday, G., "How do Different Student Constituencies (not) Learn the History and Philosophy of their Subjects? Case Studes from Science, Technology and Medicine", *The PRS-LTSN Journal*, Vol. 1, No 2, Winter 2002, pp141-155.
- Jacques, David, *Learning in Groups* (London, Kogan Page) 1992.
- Macdonald Ross, George, "External Pressures on Teaching", *The PRS-LTSN Journal*, Vol. 1, No 2, Winter 2002, pp98-129.
- Ramsden, Paul, *Learning to Teach in Higher Education* (London, Routledge) 1992.

Websites

Honey & Mumford. Learning Styles Questionnaires,
<http://www.psi-press.co.uk>

PRS-LTSN document on research areas, 2001,
PRS-LTSN 2001 questionnaire,
<http://www.prs-ltsn.leeds.ac.uk/policies/publications>

Research Council's Graduate School's Programme, July, 2000,
<http://www.gradschools.ac.uk>

The National Inquiry into Higher Education, 1997 (the 'Dearing Report'),
<http://www.leeds.ac.uk/educol/ncihe>

Department of Theology, University of Exeter,
<http://www.ex.ac.uk/theology>

Department of Theology and Religious Studies, University of Bristol,
<http://www.bris.ac.uk/Depts/THRS>

Department of Theology and Philosophy at The University College of St Mark
& St John, Plymouth,
http://www.marjon.ac.uk/courses/course_info/ba_theology.asp

Appendices A and B (merged) – General Staff Survey and Results

Age:	25-35: 5%	Male/Female: (M or F)
	35-45: 35%	M: 75%
	45-55: 30%	F: 25%
	55+: 10%	
	no age given: 20%	

Part 1: Cultural Philosophy of your department

Q1: Which of the following descriptions best fits your department?

A/ Traditional Christian Theology (systematics, ethics, philosophy, biblical studies)	A/ 20%
B/ World Religions (systematics, ethics, philosophy, study of primary texts)	B/ 0%
C/ Christian Theology in the contemporary world (culture, ideology, politics etc)	C/ 0%
D/ World Religions in the contemporary world (culture, ideology, politics etc)	D/ 5%
E/ General Religious and Philosophical Studies and education (vocational)	E/ 5%
F/ A combination of A & B	F/ 25%
G/ A combination of A & C	G/ 20%
H/ A combination of B & D	H/ 5%
I/ Other combinations	I/ 20%

Q2: According to the general aims of your department, rate the following categories in order of importance?

(Rate from 1-6 next to the category letter, with 1 as the highest)

A/ Production of specialist research	A/ 1-3: 90% 4-6: 5% (0: 5%)
B/ Teaching in specialist research area	B/ 1-3: 90% 4-6: 5% (0: 5%)
C/ Development of individual staff teaching skills	C/ 1-3: 15% 4-6: 70% (0: 15%)
D/ Development of student learning skills	D/ 1-3: 50% 4-6: 35% (0: 15%)
E/ Development of departmental learning/teaching strategy	E/ 1-3: 25% 4-6: 60% (0: 15%)
F/ Administrative/management Duties	F/ 1-3: 25% 4-6: 60% (0: 15%)

Q3: *According to the general aims of your department, rate the following according to their utility and value to learning. (Rate from 1-4 next to the category letter, with 1 as the highest)*

- | | |
|-------------------------------|-------------------------------------|
| A/ Lectures | A/ 1-2: 65% 3-4: 30% (0: 5%) |
| B/ Tutorials | B/ 1-2: 40% 3-4: 55% (0: 5%) |
| C/ Student-led group learning | C/ 1-2: 15% 3-4: 80% (0: 5%) |
| D/ Tutor-led group learning | D/ 1-2: 65% 3-4: 30% (0: 5%) |

Q4: *According to the general aims of student learning in your department, what do you want most to see developed in students? (Rate from 1-5 next to the category letter, with 1 as the highest)*

- | | |
|--|--|
| A/ Acquisition/reproduction of knowledge | A/ 1-2: 25% 3-4: 30% 5: 30% (0:15%) |
| B/ Acquisition of abstract concepts | B/ 1-2: 35% 3-4: 50% 5: 0% (0:15%) |
| C/ Acquisition of facts, skills and procedures | C/ 1-2: 35% 3-4: 50% 5: 5% (0:10%) |
| D/ Development of critical thinking | D/ 1-2: 80% 3-4: 15% 5: 0% (0: 5%) |
| E/ Development of a personal sense of reality | E/ 1-2: 25% 3-4: 25% 5:40% (0: 10%) |

Q5: *According to the general teaching outlook of your department, how are course structures organised? (Rate from 1-4 next to the category letter, with 1 as the highest)*

- | | |
|--|--------------------------------------|
| A/ Along cognitive lines | A/ 1-2: 50% 3-4: 10% (0: 40%) |
| B/ Along affective lines | B/ 1-2: 10% 3-4: 50% (0: 40%) |
| C/ According to a linear structure | C/ 1-2: 50% 3-4: 10% (0: 40%) |
| D/ According to a discursive structure | D/ 1-2: 20% 3-4: 40% (0: 40%) |

Q6: *According to the outlook of your department, how would the following be valued in information sent out to prospective staff and students?*

- | | |
|--|---|
| A/ Staff leadership | A/ 1-2: 15% 3-4: 20% 5-6: 50% 0: 15% |
| B/ Vision on learning to an agreed strategy | B/ 1-2: 25% 3-4: 25% 5-6: 30% 0: 20% |
| C/ Communication between staff and students | C/ 1-2: 50% 3-4: 30% 5-6: 5% 0: 15% |
| D/ Provision of key-skills training for development of student potential | D/ 1-2: 30% 3-4: 25% 5-6: 25% 0: 20% |
| E/ Creation of learning environment to agreed goals | E/ 1-2: 60% 3-4: 25% 5-6: 0% 0:15% |
| F/ Interrogation and review strategies on learning/teaching | F/ 1-2: 5% 3-4: 30% 5-6: 40% 0:25% |

Part 2: Perceptions of the Teaching Process

Q7: Which of the following do you think most influences your approach to teaching?

- | | |
|---|--------|
| A/ Personal teaching style | A/ 65% |
| B/ Characteristics of the department as a whole | B/ 10% |
| C/ Education theory/training | C/ 25% |
-

Q8: Which of the following characteristics is most important in a tutor?

- | | |
|---|---|
| A/ The ability to lecture well | A/ 1:15% 2: 15% 3:15% 4:25% 5:25% 0:5% |
| B/ The ability to encourage individual learning | B/ <u>1:65%</u> 2:10% 3: 20% 4:0% 5:0% 0:5% |
| C/ The ability to encourage group learning | C/ 1:0% <u>2: 45%</u> 3:10% 4:15% 5: 20% 0:5% |
| D/ The ability to assess work | D/ 1:0% 2:0% 3: 15% 4: 30% <u>5:50%</u> 0:5% |
| E/ The specialist subject knowledge | E/ 1:10% 2:15% <u>3:40%</u> 4:25% 5:5% 0: 5% |
-

Q9: Which of the following describes your approach to teaching?

- | | |
|--|--------|
| A/ To transfer knowledge of the discipline to the student | A/ 10% |
| B/ To train the student in RS by demonstration, with progress checks through set exercises | B/ 20% |
| C/ To share experience of RS by acting as a guide to their own exploration of the discipline | C/ 30% |
| D/ To aid the process and pace and direction of learning by acting as a catalyst | D/ 40% |
-

Q10: How do you value the following?

- | | |
|--------------------------|--|
| A/ Charismatic lecturing | A/ 1:25% 2: <u>40%</u> 3: 20% (0: 15%) |
| B/ Clear course outline | B/ <u>1:55%</u> 2: 10% 3: 20% (0:15%) |
| C/ Clear topic handouts | C/ 1:20% 2: 35% <u>3:40%</u> (0:5%) |
-

Q11: Which of the following skills would /you rate as most important?

- | | |
|---|---|
| A/ The ability to encourage independent thinking | A/ <u>1:75%</u> 2:10% 3:10% 4: 5% |
| B/ The ability to lead class discussion | B/ 1:10% 2:15% <u>3:45%</u> 4:15% (0:15%) |
| C/ The ability to facilitate independent and group learning | C/ 1:20% <u>2:60%</u> 3:5% 4:15% |
| D/ The ability to make fair assessments | D/ 1:0% 2:10% 3:30% <u>4:45%</u> (0:5%) |
-

Q12: *What are you looking to develop in your students?*

- A/ An increase of knowledge/facts
 B/ An ability to memorise knowledge/facts
 C/ Acquisition, retention and utilisation of facts, procedures and skills
 D/ An understanding of abstract concepts
 E/ Making sense of reality in a way that is personal and meaningful

A/ 1:25% 2:5% 3:10% (0:60%)
B/ 1:0% 2:0% 3:10% (0:90%)
C/ 1:15% 2:25% 3:15% (0:45%)
D/ 1:5% 2:35% 3:10% (0:50%)
E/ 1:30% 2:25% 3:15% (0: 30%)

Q13: *In the delivery of material to students, which of the following best describes your style?*

- A/ Value-neutrality
 B/ Acknowledgement of personal perspectives
 C/ Combination of A & B

A/ 0%
B/ 40%
C/ 50%
(0: 10%)

Q14: *How much does your choice of teaching format depend on the Level?*

- G: greatly; S: somewhat; NM: not much

G: 35% S: 60% N/M: 5%

[**Q15:** Question omitted from analysis]

Q16: Which of the following teaching formats do you think works best?

A/ Lectures with note-taking	A/ 0%
B/ Lectures with handouts and note-taking	B/ 0%
C/ Lectures with handouts, note-taking and in-class group-set tasks	C/ 5%
D/ Lectures with note-taking and whole-class discussion	D/ 0%
E/ Lecture series + group discussion in seminars led by lecturer	E/ 15%
F/ Lecture series + group discussion in seminars led by students	F/ 25%
G/ Lecture series + individual presentations followed by class discussion in seminars	G/ 10%
H/ Lecture series + group presentations followed by class discussion in seminars	H/ 10%
I/ Lecture series + student-led debates in seminars	I/ 5%
J/ Seminar only, with mini-lectures and class discussion led by lecturer	J/ 0%
K/ Seminar only, with mini-lectures and class discussion led by students	K/ 0%
L/ Seminar only, with mini-lectures and individual presentations followed by class discussion	L/ 5%
M/ Seminar only, with mini-lectures and group presentations followed by class discussion	M/ 5%
N/ Student-led seminars with weekly topics set to groups	N/ 10%
O/ Student-led seminars with weekly topics set to individuals	O/ 5%
	P/ variety: 5%

Q17: Which of the following categories are best served by lectures?

A/ Acquisition/reproduction of knowledge	A/ 55%
B/ Acquisition of abstract concepts	B/ 15%
C/ Acquisition of facts, skills and procedures	C/ 30%
D/ Development of critical thinking	D/ 60%
E/ Development of a personal sense of reality	E/ 5%

Q18: Which of the following categories are best served by group-set work or discussion?

A/ Acquisition/reproduction of knowledge	A/ 0%
B/ Acquisition of abstract concepts	B/ 15%
C/ Acquisition of facts, skills and procedures	C/ 25%
D/ Development of critical thinking	D/ 85%
E/ Development of a personal sense of reality	E/ 60%

Q19: Which of the following should be assessed *formatively* (i.e., for evaluation of progress)?

A/ Essays	A/ 100%
B/ Written presentations by individual students	B/ 60%
C/ Informal presentations by individual students	C/ 60%
D/ Written presentations by groups	D/ 30%
E/ Informal presentations by groups	E/ 35%
F/ Group projects	F/ 60%
G/ Individual contributions to discussion in class	G/ 50%
H/ Individual contributions to discussion in tutorials	H/ 40%
I/ Learning journals	I/ 60%

Q20: Which of the following should be assessed *summatively*?

A/ Essays	A/ 100%
B/ Written presentations by individual students	B/ 70%
C/ Informal presentations by individual students	C/ 5%
D/ Written presentations by groups	D/ 40%
E/ Informal presentations by groups	E/ 0%
F/ Group projects	F/ 30%
G/ Individual contributions to discussion in class	G/ 20%
H/ Individual contributions to discussion in tutorials	H/ 5%
I/ Learning journals	I/ 25%

Q21: In your opinion, how do students best develop their critical thinking?

A/ Individual written assignments	A/ 40%
B/ Group written assignments	B/ 0%
C/ Group discussion in class	C/ 25%
D/ Group discussion in personal study time	D/ 10%
E/ Group discussion in tutorials	E/ 25%

Q22: *In your opinion, in tutorials, on which of the following should the tutor give feedback?*

(You may circle more than one category)

- | | |
|---|--------|
| A/ course content/acquisition of knowledge | A/ 75% |
| B/ reading of primary and secondary material | B/ 80% |
| C/ critical thinking | C/ 80% |
| D/ feedback on essay structure and style | D/ 75% |
| E/ feedback on group or individual presentation structure and style | E/ 65% |
| F/ feedback on discussion skills | F/ 50% |
-

Q23: *In your opinion, should the tutor take the following into account in group learning?*

(You may circle more than one category)

- | | |
|---|--------|
| A/ Student intellectual ability in relation to the course level | A/ 85% |
| B/ Student background and circumstances | B/ 70% |
| C/ Gender | C/ 70% |
| D/ The newness and size of subject | D/ 70% |
| E/ Student learning skills (or lack of them) | E/ 90% |
| F/ Student learning 'type' | F/ 50% |
-

Q24: *In your view, should the tutor structure any of the following into courses?*

(You may circle more than one category)

- | | |
|--|--------|
| A/ Provision of pre-class preparation tasks for students | A/ 85% |
| B/ Learning contracts (objectives, procedures and criteria, ground-rules and weekly tasks) | B/ 35% |
-

Q25: *In your view, how are the following skills, when taken altogether, best arrived at? (knowledge, comprehension, application, analysis, synthesis, evaluation) best achieved?*

(Circle one category)

- | | |
|--|--------|
| A/ Lectures | A/ 15% |
| B/ Formal debates | B/ 0% |
| C/ Whole group discussion | C/ 20% |
| D/ Individual presentations followed by group discussion | D/ 25% |
| E/ Tutorials | E/ 5% |
| F/ Essays and examinations | F/ 35% |
-

Q26: *In your view, does group learning improve the quality of the following*

(You may circle more than one category)

A/ Personal study skills	A/ 40%
B/ Confidence in working with peers	B/ 85%
C/ Ability to share information	C/ 90%
D/ Ability to communicate verbally	D/ 90%
E/ Ability to communicate through written presentations	E/ 30%
F/ Ability to solve problems	F/ 55%
G/ Ability to organise and bring results of private study to the classroom	G/ 65%
H/ Confidence towards teacher/lecturer	H/ 60%

Part 3: Learning/teaching Methods and Strategy of your Department

Q27: *On which of the following would you say that your department places the most emphasis? (Circle one category)*

- | | |
|---|---------------|
| A/ Individual learning | A/ 60% |
| B/ Group learning | B/ 0% |
| C/ Combination of individual and group learning | C/ 30% |
-

Q28: *How does your department rate the following? (Rate from 1-10, with 1 as highest value)*

- | | |
|--|--|
| A/ Course design | A/ 1-3: 50% 4-7: 5% 8-11: 0% 0: 45% |
| B/ Specialist knowledge of tutor | B/ 1-3: 65% 4-7: 0% 8-11: 5% 0: 30% |
| C/ Teaching qualifications of tutor | C/ 1-3: 30% 4-7: 20% 8-11: 5% 0:45% |
| D/ Background and qualifications of students | D/ 1-3: 20% 4-7: 35% 8-11: 5% 0: 40% |
| E/ Numbers in class group | E/ 1-3: 0% 4-7: 50% 8-11: 10% 0:40% |
| F/ Communication and information technology | F/ 1-3: 5% 4-7: 40% 8-11: 10% 0:45% |
| G/ Assessment procedures | G/ 1-3: 30% 4-7: 30% 8-11: 5% 0: 35% |
| H/ Learning key-skills requirement | H/ 1-3: 25% 4-7: 15% 8-11: 15% 0: 45% |
| I/ Relation of course content to the world | I/ 1-3: 0% 4-7: 25% 8-11: 30% 0:45% |
| J/ Relation of key-skills to academic practice/careers | J/ 1-3: 5% 4-7: 25% 8-11: 30% 0:40% |
| K/ Relation of key-skills to non-vocational careers | K/ 1-3: 5% 4-7: 15% 8-11: 45% 0:35% |
-

Q29: *Are learning contracts a standard part of teaching learning procedure (including objectives, procedures and criteria, ground-rules and weekly tasks)?*

- | | |
|----------------|-------------------------|
| Yes/No: | Yes: 20% No: 80% |
|----------------|-------------------------|
-

Q30: *Which of the following formats are used regularly in your department?*

- (Circle as applies)**
- | | |
|---|----------------|
| A/ Individual written-presentation read out to class-group | A/ 50% |
| B/ Individually presenting an argument, informally, with a prepared handout/OHP for the class | B/ 60% |
| C/ Group written-presentation prepared read out to class-group by one or more of group | C/ 40% |
| D/ Group prepared handout, presented informally by one or more of group | D/ 15% |
| E/ Open discussion | E/ 100% |
-

Q31: Which of the following methods are used during in-class group tasks?

(Circle as applies)

- | | |
|--|---------------|
| A/ Brainstorming | A/ 50% |
| B/ Buzz word sessions | B/ 25% |
| C/ Crossover groups (working in small groups and then sharing with other small groups) | C/ 20% |
| (D – no option) | |
| E/ Fishbowl groups (working from small groups back to whole group) | E/ 60% |
| F/ Peer tutoring (discussing and assessing each other's individual or group work) | F/ 20% |
| G/ Snowballing (working in pairs, to small to whole group) | G/ 30% |
| H/ Step-by-step discussion (discussing a planned sequence of issues led by student or teacher) | H/ 30% |

Q32: Which of the following methods are used for group-set tasks?

(Circle as applies)

- | | |
|--|---------------|
| A/ Syndicate Projects (mini-projects followed by group presentation or written presentation) | A/ 30% |
| B/ Peer tutoring (discussing and assessing each other's individual or group work) | B/ 35% |
| C/ Allocation of formal roles (e.g., chair/negotiator, researcher, recorder, debater, presenter, designer etc) | C/ 10% |

Q33: Which of the following are regularly used in whole class discussion?

(Circle as applies)

- | | |
|-------------------------------|---------------|
| A/ Student-led discussion | A/ 75% |
| B/ Tutor-led discussion | B/ 80% |
| C/ Student-centred discussion | C/ 50% |
| D/ Tutor-centred discussion | D/ 40% |

Q34: Which of the following best reflects your department?

(Circle one category only)

- | | |
|--|---------------|
| A/ Recognisable strategy on group learning practice | A/ 15% |
| B/ Variable strategy on group learning practice depending on tutor | B/ 70% |
| C/ Little interest in group learning practice | C/ 15% |

Q35: Which of the following most applies to your department?

(Circle one category only)

- | | |
|---|--------|
| A/ Main emphasis on lectures | A/ 5% |
| B/ Main emphasis on lectures + general discussion in seminars | B/ 35% |
| C/ Main emphasis on lectures + individual presentations in seminars | C/ 40% |
| D/ Main emphasis on lectures + group presentations in seminars | D/ 15% |
| E/ Seminar only: mini-lecture + general discussion | E/ 0% |
| F/ Seminar only: mini-lecture + individual presentations | F/ 0% |
| G/ Seminar only: mini-lecture + group presentations | G/ 5% |
| H/ Seminar only: general discussion | H/ 0% |
| I/ Seminar only: individual presentations + discussion | I/ 0% |
| J/ Seminar only: group presentations + discussion | - |
-

Q36: Does your department discuss how to vary course content against student levels and learning skills

(Circle one of the following - G: greatly; S: somewhat; NM: not much)

G: S: NM: G: 25% S: 50% N/M: 25%

Q37: Do course outlines provide details of the key learning skills students require?

Yes/No:(Y/N) Yes: 80% No: 20%

Q38: Does your student handbook provide students with details of the key learning skills students require?

Yes/No:(Y/N) Yes: 65% No: 35%

Q39: Does your department organise special events (skills workshops, induction days etc) designed to encourage working in groups?

Yes/No:(Y/N) Yes: 55% No: 45%

Q40: Does your department produce key-skills guides on any of the following?

(Circle as many as applies)

- | | |
|------------------------------|--------|
| A/ Lectures and note-taking | A/ 33% |
| B/ Presenting as individuals | B/ 10% |
| C/ Presenting as groups | C/ 15% |
| D/ Whole class discussion | D/ 5% |
| E/ Tutorials | E/ 5% |
| F/ Essay writing | F/ 75% |
| G/ Examination techniques | G/ 30% |
| H/ Critical Reading | H/ 15% |
| I/ Personal Study | I/ 25% |
| J/ Corporate/group study | J/ 0% |
-

Q41: Do you have a departmental policy to discuss the relevance working in groups for graduate interviews and jobs with students in class?

Yes/No:(Y/N) Yes: 15% No: 85%

Q42: Does the university have a Study Skills centre?

Yes/No:(Y/N) Yes: 85% No: 15%

Q43: Do you check to see if students make use of this?

- | | |
|---------------------|--------|
| A/ Never | A/ 30% |
| B/ Sometimes | B/ 40% |
| C/ Often | C/ 15% |
| D/ (not applicable) | D/ 15% |
-

Q44: Do you have a policy to refer students to the centre for help?

Yes/No: Yes: 65% No: 20%
If yes, for which of the following would they be referred? not applicable: 15%

(Circle as applies)

- | | |
|-----------------------------|--------|
| A/ Essay writing | A/ 65% |
| B/ Individual presentations | B/ 0% |
| C/ Group presentations | C/ 0% |
| D/ Private study techniques | D/ 40% |
| E/ Group study techniques | E/ 0% |
-

Q45: Does your department have a corporate strategy on learning/teaching?

Yes/No: Yes: 65% NO: 35%

Q46: If yes, is this policy regularly up-dated?

Yes/No: Yes: 60% No: 40%

Q47: *If yes, do you discuss in staff recruitment interviews?*

Yes/No:

Yes: 35% No: 30%
NOT KNOWN: 35%

Q48: *If yes, do you discuss this in staff/student meetings?*

Yes/No:

Yes: 65% No: 5%
NOT KNOWN: 30%

Q49: *On which of the following do staff receive ongoing training?*

A/ Group learning/teaching

A/ 35%

B/ Lecturing

B/ 15%

C/ Tutorials

C/ 15%

D/ Assessment

D/ 40%

E/ No formal policy or format

E/ 10%

F/ None

F/ 5%

Q50: *Is this part of a corporate strategy or is it voluntary?*

A/ Corporate

A/ 20%

B/ Voluntary

B/ 75%

C/ None available

C/ 5%

Appendices C and D (merged) – Student Survey and Results

Part 1: Perceptions of Learning

RESPONSES IN PERCENTAGES OF NUMBERS OF EACH LEVEL

(Some questions are multiple choice. In others, incomplete percentages demonstrate incomplete answers)

m = male

f = female

mat = mature

Level:	1 m/f/mat	2 m/f	3 m/f/mat
Q1: <i>Which do you consider to be more important? (circle one category)</i>			
A/ Course content/subject matter	5/5/5	0/21	0/10/5
B/ Process/dynamic of how you learn as an individual	0/0/0	0/0	5/0/0
C/ Process/dynamic of how you learn with other people	0/0/0	0/0	0/0/0
D/ Combination of A + B	5/0/0	21/14	10/30/0
E/ Combination of A + C	0/20/0	0/0	0/0/0
F/ Combination of A + B + C	20/35/5	7/35	0/25/15
Q2: <i>What do you understand the process of learning to be? (circle the letter which comes closest to your approach to learning)</i>			
A/ The acquisition/reproduction of knowledge	10/0/0	7/21	5/10/15
B/ Memorising course material in a methodical way	0/0/0/	0/7/	0/0/0
C/ The acquisition of facts, skills and procedures	5/20/5/	0/21	0/15/5
D/ Understanding or abstracting meaning from content	20/20/0/	14/21	10/25/0
E/ Making sense of reality	5/10/5/	7/0	0/15/0
Q3: <i>How do you think you best assimilate abstract concepts? (circle the category which comes closest to your style of learning)</i>			
A/ Reading primary texts	0/12.5/0	0/21	0/5/0
B/ Reading secondary texts	12.5/10/5	7/0	5/0/5
C/ Note-taking from lectures	12.5/20/0	0/28	0/35/10
D/ Discussion	12.5/10/5	14/36	5/20/5

Rosemary Beckham – A Preliminary Study of Group Learning/Teaching

Level:	1 m/f/mat	2 m/f	3 m/f/mat
Q4: Which of the following formats do you prefer to use to present arguments in class? (circle one category which comes closest to your style of learning)			
A/ Individual written-presentation read out to class-group	0/5/5	7/7	5/5/5
B/ Individually presenting an argument, informally, with a prepared handout/OHP for the class	14/5/0	7/1	0/5/0
C/ Group written-presentation prepared read out to class-group by one or more of group	5/5/0	0/7	0/0/5
D/ Group prepared handout, presented informally by one or more of group	5/14/0	7/14	0/5/0
E/ In open discussion	14/23/5	14 21	15/35/10
Q5: How best do you develop your critical thinking? (Circle one category which comes closest to your style of learning)			
A/ Individual written assignments	16/13/0	21/35	5/40/15
B/ Group written assignments	5/0/0	0/0	5/0/0
C/ Group discussion in class	5/13/10	7/21	5/20/0
D/ Group discussion in personal study time	13/16/0	0/0	0/0/0
E/ Group discussion in tutorials	0/90	7/7	0/10/0
Q6: What most motivates your approach to learning?			
A/ Fear of not completing the course	9/27/0	7/28	5/20/0
B/ Opportunity to learn subject matter	26/23/5	7/21	5/25/10
C/ Desire to compete with peers and gain high marks	5/17/0	0/7	5/5/0
D/ Opportunity to understand broad outline ideas of course	5/0/10	7/21	10/20/5
E/ Ability to interconnect ideas between courses	5/23/5	0/21	0/10/5
F/ Desire to please your teacher/lecturer	0/5/0	0/0	0/5/0
G/ Develop problem-solving skills	0/0/5	0/0	0/0/0
H/ Explore ideas of your own	17/23/5	7/14	5/30/0
I/ Understand other people's ideas	22/14/0	14/35	0/15/10
J/ Develop key skills needed for your own discipline	0/10/0	7/7	0/5/5
K/ Develop key skills needed in non-vocational careers beyond your degree	0/0/0	0/14	0/15/5
Q7: Which most influences your approach to learning?			
A/ Characteristics of teacher/lecturer	22/35/7.5	14/28	20/55/5
B/ Characteristics of the department as a whole	5/8/0	7/7	0/0/15
C/ Your own learning style	15/7.5/ 0	7/28	0/5/0

Level:	1 m/f/mat	2 m/f	3 m/f/mat
Q8: <i>Which of the following should be assessed formatively?</i>			
A/ Essays	30/50/10	7/28	5/10/0
B/ Written presentations by individual students	18/20/0	0/28	5/10/0
C/ Informal presentations by individual students	15/0/0	14/21	15/45/5
D/ Written presentations by groups	10/15/0	7/21	0/15/0
E/ Informal presentations by groups	15/10/5	7/28	0/40/10
F/ Group projects	15/20/5	14/35	0/20/5
G/ Individual contributions to discussion in class	10/0/0	7/0	15/25/0
H/ Individual contributions to discussion in tutorials	15/0/0	0/14	0/30/0
I/ Learning journals	5/0/5	0/21	0/30/0
Q9: <i>Which assessed summatively?</i>			
A/ Essays	37/50/10	2/71	20/65/15
B/ Written presentations by individual students	23/20/5	28/21	0/50/5
C/ Informal presentations by individual students	10/15/0	7/14	0/5/0
D/ Written presentations by groups	0/5/0	7/14	0/30/0
E/ Informal presentations by groups	5/10/0	7/0	0/0/5
F/ Group projects	5/15/0	0/14	0/0/5
G/ Individual contributions to discussion in class	10/5/5	7/0	5/5/0
H/ Individual contributions to discussion in tutorials	5/0/0	0/0	5/15/0
I/ Learning journals	0/0/0/	0/0	0/0/0

Level:	1	2	3
	m/f/mat	m/f	m/f/mat
Q10 <i>Which best suits your style?</i>			
A/ Lectures with note-taking	0/36/0	7/0	0/0/0
B/ Lectures, handouts and note-taking	5/36/5	7/14	5/0/5
C/ Lectures with handouts, note-taking and in-class group tasks	0/10/0	7/28	0/5/10
D/ Lectures, note-taking, in-class discussion	23/5/0	0/21	5/15/0
E/ Lecture series + group discussion in seminars led by lecturer	5/0/0	0/7	0/0/0
F/ Lecture series + group discussion in seminars led by students	5/0/0	0/0	0/0/0
G/ Lecture series + individual presentations followed by class discussion in seminars	0/0/0	0/0	0/5/0
H/ Lecture series + group presentations followed by class discussion in seminars	5/0/0	0/0	0/0/0
I/ Lecture series + student-led debates in seminars	5/0/0	0/0	0/5/0
J/ Seminar only, with mini-lectures and class discussion led by lecturer	0/5/0	0/0	5/0/0
K/ Seminar only, with mini-lectures and class discussion led by students	0/0/0	0/0	0/0/0
L/ Seminar only, with mini-lectures and individual presentations followed by class discussion	0/0/5	0/0	0/0/0
M/ Seminar only, with mini-lectures and group presentations followed by class discussion	0/0/0	0/0	0/0/0

Part 2: Perceptions of Teaching

Level:	1	2	3
	m/f/mat	m/f	m/f/mat
Q11: <i>Which is the primary role of your tutor?</i>			
A/ To provide the content/subject matter of your course by lectures	20/14/5	7/35	5/15/0
B/ To facilitate learning	23/18/0	14/28	5/25/5
C/ To combine the provision of content with key learning skills	5/23/5	7/10	7/5/30
Q12: <i>Is it part of the tutor's role to?</i>			
A/ Tell you how to think	27/5/0	7/0	0/0/0
B/ Tell you what to think	0/0/0	0/0	0/0/0
C/ Tell you what skills you need to learn	0/18/10	7/38	0/0/5
D/ Tell you how to develop those skills you need to learn	27/50/10	70/15	14/64/10
Q13: <i>In tutorials, on which should the tutor give feedback?</i>			
A/ Course content/acquisition of knowledge	30/10	7/14	5/30/5
B/ Reading of primary and secondary material	10/27/5	0/14	5/30/0
C/ Critical thinking	14/27/10	7/21	15/35/0
D/ Feedback on essay structure and style	32/54/10	14/71	15/35/0
E/ Feedback on group or individual presentation structure and style	10/32/0	7/28	0/40/5
F/ Feedback on discussion skills	0/18/10	7/14	0/20/0
Q14: <i>To which should the tutor give priority?</i>			
A/ An increase of knowledge/facts	18/23/5	0/21	15 /15/ 0
B/ An ability to memorise knowledge/facts	0/0/0	0/7	0/0/5
C/ Acquisition, retention and utilisation of facts, procedures and skills	18/14/10	7/42	0/50/0
D/ An understanding of abstract concepts	18/23/5	14/21	5/20/5
E/ Making sense of reality in a way that is personal and meaningful	10/18/5	14/14	10/10/10
Q15: <i>Should the tutor take the following into account in group learning?</i> <i>(You may circle more than one category)</i>			
A/ Your intellectual ability in relation to the course level	22 /55/10	21/42	5/40/5
B/ Your background and circumstances	5/0/0	7/0	5/0/0
C/ Your gender	0/0/0	0/0	0/0/0
D/ The newness and size of subject	18/45/10	7/35	5/40/10
E/ Your learning skills (or lack of them)	10/25/5	14 /14	0/50/5

Level:	1	2	3
	m/f/mat	m/f	m/f/mat
Q16: <i>Should the tutor structure any of the following into courses?</i>			
(You may circle more than one category)			
A/ Preparation for classes	23/28/0	0/14	15/20/0
B/ Opportunities to discuss problem resolution	18/32/5	14/21	5/35/15
C/ Learning contracts (objectives, procedures and criteria, ground-rules and weekly tasks)	14/14/5	14/14	0/25/10

Q17: <i>Which of the following abilities do you most value in a tutor?</i>	In rank order			
(Instead of circles, number by priority from 1-7, with 1 as highest value)				
A/ Charismatic lecturing	1 /2/1	4/1	1/1/5	
B/ Clear course outline	6/1/4	1/4	2/6/1	
C/ Clear topic handouts	1/3/5	2/2	2/3/2	
D/ Ability to encourage independent thinking	6/4/2	3/3	2/4/6	
E/ Ability to lead class discussion	3/7/3	4/7	5/6/2	
F/ Ability to facilitate independent and group learning	7/5/5	5/5	7/5/4	
G/ Ability to make fair assessments	3/5/4	6/6	6/2/5	

Q18: <i>Rate the following characteristics in a tutor:</i>	In rank order			
A/ Their ability to lecture well	1/1/1	1/1	1/1/1	
B/ Their ability to encourage learning	1/1 /3	2/2	1/4 /2	
C/ Their ability to assess your work	3/4/4	4/3	2/2/4	
D/ Their specialist subject knowledge	4/3/1	3/4	3/3/3	

Part 3: Perceptions of Key Study Skills and Group Learning

Level:	1	2	3
	m/f/mat	m/f	m/f/mat
Q19: Which of the following skills do you consider to be of most importance in group learning			
A/ Being well-prepared	18/22/5	7 /21	15/15/10
B/ A critical and informed mind	13/13/5	7/7	0/5/5
C/ An awareness of the interests/needs of the teacher/leader	0/5/0	0/0	0/0/0
D/ An awareness of the interests/needs of your peers	13/10/0	7/14	0/5/5
E/ A need to communicate (questions/answers)	13/17/0	14/28	0/30/0
Q20: Which of the following skills do you consider to be of most importance in-class group tasks? (Circle one category)			
A/ Ability to listen to task set	0/0/0	0/0	5/0/0
B/ Ability to contribute ideas	13/13/5	7/7	5/5/10
C/ Ability to solve problems	5/5/0	0/0	0/0/0
D/ Ability to listen to others	13/17/5	0/21	0/25/5
E/ Ability to draw conclusions	0/9/0	14/7	0/0/0
F/ Ability to record what has been said	0/0/0	7/7	0/0/5
G/ Ability to communicate to rest of class	13/9/0	7/21	5/35/0
Q21: Which of the following skills do you consider to be of most importance in out-of-class group-sets? (Circle one category)			
A/ Attendance at meetings	13/13/0	7/14	5/10/0
B/ Agreeing individual tasks	0/5/0	0/7	0/0/0
C/ Sharing evidence from private study	5/5/0	7/14	5/20/5
D/ Discussing issues	13/26/10	14/21	0/30/15
E/ Making notes from discussion	0/0/0	0/0	0/0/0
F/ Agreeing presentation content	9/5/5	7/0	5/0/0
G/ Agreeing presentation format	0/0/0	7/0	0/5/0
Q22: Which do you consider to be of most importance in group presentations?			
A/ Being active part of group presentation	0/13/5	7/14	5/40/5
B/ Making notes on other presentations to share with rest of group	0/0/0	0/0	0/0/0
C/ Good communication skills (speaking, visuals etc)	9/26/5	0/28	5/20/15
D/ Keeping to time	0/0/0	0/0	0/0/0
E/ Providing handouts	0/0/0	7/7	0/0/0
F/ Having a good argument	26/9/0	21/7	5/5/0
G/ Use of secondary material	5/0/0	0/0	0/0/0

Level:	1	2	3
	m/f/mat	m/f	m/f/mat
Q23: <i>These categories help in the acquisition of knowledge (measurement, recall, selection, reproduction, presentation (written) exploration (reading/discussing). Which of the following best develops this?</i>			
A/ Lecture notes	17/22/5	14/42	0/20/5
B/ Personal Study	17/13/0	7/28	10/30/5
C/ Group discussion	0/13/0	0/0	0/5/0
D/ Group-set projects	0/5/0	0/0	5/10/0
E/ In-class group work	0/0/5	7/0	0/5/5

Q24: <i>These categories help in the acquisition of comprehension (identification, illustration, formulation, explanation, comparison and contrasting). Which of the following best develops this?</i> (Circle one category)			
A/ Lecture notes	9/26/5	0/21	0/20/10
B/ Personal Study	13/17/0	7/21	5/10/5
C/ Group discussion	17/17/0	14/21	0/20/0
D/ Group-set projects	0/0/5	0/0	0/5/0
E/ In-class group work	0/0/0	7/7	10/10/5

Q25: <i>These categories help in the application of knowledge (selection, assessment, sourcing, demonstration). Which best develops this?</i>			
A/ Lecture notes	5/13/5	7/7	0/5/5
B/ Personal Study	13/17/0	21/21	10/20/5
C/ Group discussion	9/13/0	0/35	0/10/0
D/ Group-set projects	5/9/5	0/14	0/5/0
E/ In-class group work	0/0/0	7/14	5/25/10

Q26: <i>These categories help in the analysis of knowledge (selection, comparison, differentiation, contrast, breakdown). Which best develops this?</i>			
A/ Lecture notes	9/0/5	0/14	0/10/5
B/ Personal Study	9/13/5	7/14	10/30/5
C/ Group discussion	22/22/0	14/35	5/25/0
D/ Group-set projects	0/0/0	7/0	0/0/0
E/ In-class group work	0/9/0	0/21	0/5/5

Level:	1	2	3
	m/f/mat	m/f	m/f/mat
Q27: <i>These categories help in the synthesis of knowledge (summarising, argument, relating, precision, organisation, generalisation, conclusion). Which best develops this?</i>			
A/ Lecture notes	5/5/0	0/21	5/0/0
B/ Personal Study	13/17/5	0/21	5/30/5
C/ Group discussion	9/22/5	14/14	0/30/10
D/ Group-set projects	9/5/0	14/7	0/5/0
E/ In-class group work	0/0/0	0/7	0/5/5

Q28: <i>These categories help in the evaluation of knowledge (judging, evaluation, evidence and support, criticism/ attack, recognition, selection). Which best develops this?</i>			
A/ Lecture notes	5/0/0	0/7	0/10/0
B/ Personal Study	13/13/5	0/14	5/20/5
C/ Group discussion	17/22/5	14/42	10/30/10
D/ Group-set projects	0/0/0	0/7	0/0/0
E/ In-class group work	0/17/0	14/0	0/5/5

Q29: <i>In your view how are the above categories (knowledge, comprehension, application, analysis, synthesis, evaluation) best achieved?</i> (Circle one category)			
A/ Lectures	13/22/5	21/28	0/5/5
B/ Formal debates	0/5/0	0/0	0/0/0
C/ Whole group discussion	5/9/0	0/0	0/10/ -
D/ Individual presentations followed by group discussion	0/5/0	7/7	5/ - /5
E/ Tutorials	0/0/0	0/0	5/5/0
F/ Essays	13/13/5	0/28	5/50/5

Q30: <i>In your view does group-learning improve the quality of the following:</i>			
A/ Personal study skills	17/9/10	7/7	0/10/5
B/ Your confidence in working with your peers	17/35/5	7/42	10/55/10
C/ Your ability to share information	17/17/0	7/35	10/55/5
D/ Your ability to communicate verbally	17/17/10	21/28	10/60/5
E/ Your ability to communicate through written presentations	9/0/5	0/14	0/20/5
F/ Your ability to solve problems	9/0/0	0/28	5/30/0
G/ Your ability to organise and bring results of private study to the classroom	13/17/0	21/28	0/55/0
H/ Your confidence towards your teacher/lecturer	5/5/5	0/7	10/35/5

Rosemary Beckham – A Preliminary Study of Group Learning/Teaching

	Level:	1	2	3
		m/f/mat	m/f	m/f/mat
<hr/>				
Q31: <i>Are you happy working in groups:</i>				
Yes/No		Yes 26/38/10	14/71	5/65/10
		No 13/13/0	14/0	10/0/10
<hr/>				
Q32: <i>Do you prefer to work alone:</i>				
Yes/No		Yes 39/43/0	21/50	15/50/0
		No 0/9/9	9/21	5/30/0
<hr/>				
Q33: <i>Do you resent working in groups:</i>				
Yes/No		Yes 9/20/0	9/0	0/0/0
		No 28/34/9	20/71	0/0/0
<hr/>				

Part 4: Departmental Learning/teaching

Level:	1	2	3
	m/f/mat	m/f	m/f/mat
Q34: <i>Which would you say that your department places the most emphasis?</i>			
A/ Individual learning	28/9/5	14/35	5/50/0
B/ Group learning	0/9/0	7/0	0/0/5
C/ Combination of individual and group learning	9/35/5	7/35	10/20/10
Q35: <i>Does your tutor ask you to agree to a learning contract?</i>			
Yes/No	Yes 9/17/0 No 30/34/10	0/14 21/57	10/20/10 5/45/10
Q36: <i>Which have you experienced during your time as an undergraduate?</i>			
A/ Lectures	39/52/9	21/50	15/65/15
B/ Lectures with handouts	39/52/9	21/50	15/65/15
C/ Lectures with handouts and in-class group tasks	39/52/9	14/57	15/78/15
D/ Lectures and in-class discussion	26/21/5	29/43	15/50/15
E/ Lecture series + group discussion in seminars led by lecturer	13/17/5	21/7	15/35/5
F/ Lecture series + group discussion in seminars led by students	13/26/9	21/35	0/35/10
G/ Lecture series + individual presentations followed by class discussion in seminars	9/5/0	21/28	10/40/10
H/ Lecture series + group presentations followed by class discussion in seminars	9/21/5	21/28	10/10/10
I/ Lecture series + student-led debates in seminars	0/0/0	0/0	0/5/10
J/ Seminar only, with mini-lectures and class discussion led by lecturer	9/0/0	14/7	5/25/5
K/ Seminar only, with mini-lectures and class discussion led by students	0/5/0	7/7	0/5/0
L/ Seminar only, with mini-lectures and individual presentations followed by class discussion	9/5/0	7/7	20/20/0
M/ Seminar only, with mini-lectures and group presentations followed by class discussion	5/5/0	0/7	0/0/10

Level:	1	2	3
	m/f/mat	m/f	m/f/mat
Q37: Which of the following methods have you experienced during in-class group tasks?			
(Circle categories you have experienced)			
A/ Brainstorming	9/22/5	21/21	0/15/15
B/ Buzz word sessions	5/0/0	5/0	0/7/0
C/ Crossover groups (working in small groups and then sharing with other small groups)	9/0/5	0/7	0/10/15
E/ Fishbowl groups (working from small groups back to whole group)	9/39/0	21/42	15/45/15
F/ Peer tutoring (discussing and assessing each other's individual or group work)	13/13/0	0/0	0/0/10
G/ Snowballing (working in pairs, to small to whole group)	0/5/0	7/0	0/10/0
H/ Step-by-step discussion (discussing a planned sequence of issues led by student or teacher)	9/9/0	7/7	0/10/5

Q38: Which of the following methods have you experienced during in group-sets?

(Circle categories you have experienced)

A/ Syndicate Projects (mini-projects followed by group presentation or written presentation)	13/21/10	7/28	0/25/15
B/ Peer tutoring (discussing and assessing each other's individual or group work)	13/17/0	7/14	0/10/5
C/ Allocation of formal roles (e.g., chair/negotiator, researcher, recorder, debater, presenter, designer etc)	5/5/0	7/36	0/0/0
D/ Production of assessed Group Projects (written and visually supported projects over a number of weeks)	0/0/0	7/21	5/10/5

Questions 39-43 omitted.

Part 5: Experience of Key Skills

Level:	1	2	3
	m/f/mat	m/f	m/f/mat
Q44: <i>Which skills did you have before you came to university?</i>			
A/ Ability to listen to tutor	35/48/5	14/50	15/65/10
B/ Ability to contribute ideas	30/30/10	14/42	15/60/5
C/ Ability to solve problems	22/26/5	14/35	15/45/5
D/ Ability to listen to your peers	22/35/10	7/42	15/55/10
E/ Ability to draw conclusions	30/26/5	14/42	15/30/5
F/ Ability to record what has been said	35/30/10	7/42	15/55/10
G/ Ability to communicate to rest of class	26/22/5	7/35	15/55/0
Q45: <i>Which group skills did you experience before you came to university?</i>			
A/ Working in small groups in class	35/40/5	29/57	10/70/15
B/ Working in group-sets (syndicates) outside the classroom	17/13/0	14/28	10/55/5
C/ Preparing group presentations	26/26/5	14/35	15/60/10
D/ Organising and attending meetings	22/17/10	7/28	15/60/5
E/ Agreeing individual tasks	30/17/5	7/28	15/50/10
F/ Sharing evidence from private study with group-set	26/30/5	14/21	10/30/0
G/ Discussing issues	39/52/9	21/50	15/65/15
H/ Making notes from group discussion	22/30/9	14/21	15/45/5
I/ Agreeing presentation content	30/17/5	14/21	15/45/0
J/ Agreeing presentation format	22/13/5	14/21	15/45/0
K/ Peer tutoring	13/13/5	7/0	5/25/5
L/ Brainstorming	26/22/5	21/21	5/35/10
M/ Buzz word sessions	5/17/0	7/14	5/5/-
N/ Fishbowl groups (working from small groups back to whole class)	22/30/0	21/21	5/25/5
O/ Individual presentations to whole group followed by general discussion	30/26/0	7/21	10/30/10
P/ Formal Debates	26/22/5	7/35	10/35/10
Q/ Snowballing (working in pairs, to small groups to whole class)	5/17/0	7/14	5/20/0
R/ Step-by-step discussion	22/17/0	14/14	5/15/0
S/ Tutorials	22/30/0	7/21	10/15/0
T/ Assessed Group Projects	9/5/5	0/21	15/30/-
Q46: <i>Does your course outline provide you with details of the key learning skills you will require?</i>			
Yes/No	Yes 39/52/9 No 0/0/0	28/71 0/0	15/65/10 0/0/0

Rosemary Beckham – A Preliminary Study of Group Learning/Teaching

Level:	1 m/f/mat	2 m/f	3 m/f/mat
Q47: <i>Does your student handbook provide you with details of the key learning skills you will require?</i>			
Yes/No	Yes 39/52/9 No 0/0/0	28/71 0/0	10/60/20 0/0/0
Q48: <i>Does your department organise special events designed to encourage working in groups?</i>			
Yes/No	Yes 39/52/9 No 0/0/0	57/14 21/7	0/0/0 15/60/10
Q49: <i>Does your department discuss the relevance of working in groups for graduate interviews and jobs?</i>			
Yes/No	Yes 0/0/0 No 39/52/0	21/35 7/35	0/0/0 15/65/10
Q50: <i>Does the university have a Study Skills Centre?</i>			
Yes/No	Yes 39/52/9 No 0/0/0	28/71 0/0	0/35/10 15/40/0
Q51: <i>Do you make use of this?</i>			
A/ Never	30/47/0	28/57	0/5/0
B/ Sometimes	9/5/9	0/14	0/0/20
C/ Often	0/0/0	0/0	0/0/0
Q52: <i>On which of the following key skills would you seek help?</i>			
A/ Essay writing	17/34/5	28/45	10/50/5
B/ Individual presentations	0/13/0	0/14	5/20/5
C/ Group presentations	5/5/0	0/0	0/20/0
D/ Private study techniques	26/26/5	7/35	5/10/5
E/ Group study techniques	13/5/5	0/0	0/10/5

Project Report:

An Analysis of the Conceptual Frameworks Utilised by Undergraduate Theology Students when Studying Science & Religion

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Introduction

Interdisciplinary courses on science and religion have been offered to students studying theology or religious studies in a few institutions in the U.K. for several years. However, recently there has been a significant increase in the number of courses dedicated to this area of study and there is now considerable scope for research into patterns of learning and teaching. As particular issues in the interaction of science and religion also feature in other courses in departments of philosophy, theology and history, research into teaching and learning in this area may be of interest to the PRS community as a whole.

Our previous work in this area¹ has found that those institutions that deliver courses in science and religion assume that mutual conversation is possible. Indeed recent commentators² suggest that dialogue is not only assumed by tutors but is the inevitable outcome, since the learning and teaching of courses takes place within an already prescribed framework, delineated by, perhaps, a core course text³, or the

¹ Fulljames, Peter and Stolberg, Tonie L., "Consonance, Assimilation or Correlation?: Science and Religion Courses in Higher Education", *Science & Christian Belief*, 12, 2000, 35-46.

² Cantor, Geoffrey and Kenny, Chris, "Barbour's Fourfold Way: Problems with his taxonomy of science-religion relationships", *Zygon*, 36/4, 2001, 765-781.

³ The text examined by Cantor and Kenny is Ian Barbour's influential book *Religion in an Age of Science*. The text and his taxonomy were referred to by all the courses taking part in this study, and were specifically singled out by many of our student interviewees as a way of describing and understanding the science-religion relationship.

label given to the relationship⁴. What needs to be appreciated is that the nature of the assumed dialogue differs markedly. Some courses aim to show that there can be consonance between science and religion, others argue for a greater degree of interaction perhaps in different ways for different issues which we describe as correlation, and others are working towards the more systematic interaction of assimilation.

What is not known is whether the participating students share the same expectations as their tutors as to the nature of the dialogue, or the nature of the assumptions they bring to their learning. The majority of the previous research at tertiary level education has focused on the impact of an individual's beliefs on the acceptance or otherwise of the concepts underpinning the science curriculum. This has been particularly the focus of researchers in the United States, since the secularisation of the American school curriculum precludes the study of the interaction of scientific conceptual development on a student's religious education. Tertiary level educational studies have focused on the impact of an individual's religious beliefs on their acceptance of standard scientific theoretical models such as biological evolution⁵, or how a student's belief system shapes their understanding of the nature of science in general⁶, or particular areas of scientific understanding such as astronomy⁷. Even a

⁴We recognise in this report that, as Cantor and Kenny also observe, we are open to the charge that, by using the label "science *and* religion", our research presumes that the learning and teaching of the science-religion relationship must be judged by the relative success or failure of students in constructively interrelating science and religion. Although we do make an assessment of students' attempts to undertake this conceptual task, the main focus of this report is the applicability of taxonomies such as Barbour's or our own derivation, to understand and support learning and teaching and the proposal of a more appropriate (and practical) approach.

⁵Cobern, William W., "Point: belief, understanding, and the teaching of Evolution", *Journal of Research in Science Teaching*, 31/5, 1994, 583-590. Also, Smith, Mike U., "Counterpoint: belief, understanding, and the teaching of evolution", *Journal of Research in Science Teaching*, 31/5, 1994, 591-597. Also, Ayala, F. J., "Arguing for Evolution: Holding strong religious beliefs does not preclude intelligent scientific thinking", *Science Teacher*, 67/2, 2000, 30-32.

⁶Brazelton, Elizabeth W., Frandsen, John C., McKown, Delos B. and Brown, Charles D., "Interaction of Religion and Science: Development of a questionnaire and the results of its administration to undergraduates", *College Student Journal*, 33/4, 1999, 623-628.

⁷Brickhouse, Nancy W., Dagher, Zoubieda R., Letts IV, William J. and Shipman, Harry L., "Diversity of Students' Views about Evidence, Theory, and the Interface between Science and Religion in an Astronomy Course", *Journal of Research in Science Teaching*, 37/4, 2000, 340-362. Also, Shipman, Harry L., Brickhouse, Nancy W., Dagher,

student's future career choice⁸ has been analysed in terms of its potential impact on future science education strategies and the likelihood of changes in public perceptions with regards to science policy decisions such as those surrounding environmental issues⁹.

Work in other countries that have different educational environments to that found in the United States have, nevertheless, focused on very similar issues. Even where 'religion' refers to public and personal dimensions of Islamic faith, in contrast to the broadly Christian context of students in the majority of research¹⁰, the focus is on how scientific education is influenced by the prevailing socio-religious context¹¹.

Even more limited is research that focuses specifically on the learning and teaching of science and religion as an interdisciplinary area with its own pedagogical issues and concerns¹². In 1996, *Science & Education* devoted a complete issue to the theme, 'Science, Religion and Education'¹³. The articles focus on the appropriate metaphysical basis for

Zoubeida and Letts IV, William J., "Changes in Student Views of Religion and Science in a College Astronomy Course", *Science Education*, 86, 2002, 526-547.

⁸ Esbenschade, Donald H., "Student Perceptions about Science & Religion", *The American Biology Teacher*, 55/6, 1993, 334-338.

⁹ Petersen, Rodney L., "Science and Religious Education: A deepening Conversation", *Bulletin of Science, Technology and Society*, 17/2, 1997, 68-72.

¹⁰ This is also the case in this present study, in which all the students self-selected for interview identify themselves as either practising Christians, or as having been brought up in a Christian cultural context.

¹¹ Anees, M. A., "Islam and Scientific Fundamentalism", *Technoscience*, 8/1, 1995, 21-22. Also, Loo, Seng P., "Scientific Understanding, Control of the Environment and Science Education", *Science & Education*, 8, 1999, 79-87. Also, Loo, Seng P., "Islam, Science and Science Education: Conflict or concord?", *Studies in Science Education*, 36, 2001, 45-78.

¹² *Zygon: Journal of Religion and Science*, does carry articles focusing on particular topics for study in its section 'The Teachers' File', but even here rarely carries studies in pedagogy. A welcome, recent exception was Nyhof-Young's examination of how classroom discourse might be improved by the adoption of "feminist" teaching tools. See, Nyhof-Young, Joyce, "Education for the Heart and Mind: Feminist pedagogy and the religion and science curriculum", *Zygon*, 35/2, 2000, 441-452.

¹³ The issue contained the following articles: Mahner, Martin and Bunge, Mario, "Is Religious Education Compatible with Science Education?", *Science & Education*, 5, 1996, 101-123. Settle, Tom, "Applying Scientific Openmindedness to Religion and Science Education", *Science & Education*, 5, 1996, 125-141. Lacey, Hugh "On Relations between Science and Religion", *Science & Education*, 5, 1996, 145-153. Turner, Harold, "Religion: Impediment or Saviour of Science?", *Science & Education*, 5, 1996, 155-164. Poole, Michael, "... for more and better religious education", *Science & Education*, 5, 1996, 165-174. Woolnough, Brian E., "On the Fruitful Compatibility of Religious Education and Science", *Science & Education*, 5, 1996, 175-183. Wren-Lewis, John, "On Babies and

the teaching and learning of science, and whether a particular approach is still appropriate when the curriculum is extended to include discussion of issues within a historical or cultural context.

Within the United Kingdom context, research has focused on secondary level education. There is a considerable range of common issues that both science and religious educators could address concerning the data, nature and application of science¹⁴. However, empirical research has been limited to the relationship between students' attitudes towards science and attitudes towards religion and the influence on these attitudes of particular views of science (scientism) and of religion (creationism)¹⁵, and how these may be different within the distinctive religious context of schooling in Northern Ireland¹⁶.

The objectives of this study are therefore to bring together issues raised by previous research, and act as a starting point for research into the learning and teaching of science and religion at the tertiary level. There are three main aims; firstly, to assess whether the typology for ways of relating science and religion used previously to compare the approaches of different course designers and teachers can be used to interpret the views of learners. Secondly, to explore whether the views of learners and the process of learning may be interpreted in terms of the conceptual frameworks used in thinking about science and in life as a whole. Thirdly, to gather base line data for future research into the learning and teaching of the science-religion relationship.

Bathwater: A non-ideological alternative to the Mahner/Bunge Proposals for Relating Science and Religion in Education”, *Science & Education*, 5, 1996, 185-188. Mahner, Martin and Bunge, Mario, “The Incompatibility of Science and Religion Sustained: A reply to our critics”, *Science & Education*, 5, 1996, 189-199.

¹⁴ Bausor, John and Poole, Mike, *Science and Religion in the Agreed Syllabuses – an investigation and some suggestions* (QCA, 2001, unpublished report).

¹⁵ Fulljames, Peter, “Science, Creation and Christianity: A further look”, in Francis, L. J., Kay, W. K. & Campbell, W. S. (Eds), *Research in Religious Education* (Leominster: Gracewing, 1996) pp. 257-266. Also, Fulljames, Peter, Gibson, Harry & Francis, Leslie “Creationism, Scientism, Christianity and Science : a study in adolescent attitudes”, *British Educational Research Journal*, 17, 1991, 171-190.

¹⁶ Francis, Leslie J. and Greer, John E., “Shaping Adolescents’ Attitudes towards Science and Religion in Northern Ireland: the role of scientism, creationism and denominational schools”, *Research in Science and Technological Education*, 19/1, 2001, 39-54.

Method

Sample

As far as we are aware, there are undergraduate theology or religious studies students undertaking science and religion courses at 12 different institutions of higher education in the U.K. With the agreement of their tutors, and working within the constraint of the time frame in which this research took place, 72 students of theology or religious studies at 6 institutions in the United Kingdom who had recently completed modules on science and religion completed a questionnaire. 25 of the respondents were male and 47 were female. 44 were aged between 17 and 21, 12 aged between 22 and 36, 10 aged between 37 and 65, and 6 aged over 65. 64 of the respondents had achieved at least one pass at GCSE grade C (or an equivalent) in a science subject. 17 of the respondents had achieved at least one A-level pass (or an equivalent) in a science subject.

Semi-structured interviews were conducted with 13 students in 4 institutions. The 13 students were selected from the 72 students who had completed the questionnaire on the basis of their willingness to be interviewed and the practicability of arranging interviews. 8 of the interviewees were female and 7 male. 5 interviewees indicated that they had studied science and passed their General Certificate, with 3 indicating having studied science to a higher level, achieving a post-16 level qualification.

Measures—Questionnaire

- *Identification with a religious group* was assessed by a four point scale: strongly, to some extent, marginally, not at all.
- *Personal prayer* was assessed by a three point scale: regularly, sometimes, never.
- *Confidence in explaining science* was assessed by a six item scale. For each item the degree of confidence in explaining a particular phenomenon to a friend was assessed on a three point scale: confident, to some extent, no idea.
- *Understanding of scientific concepts* was assessed by a six item scale. For each item a one sentence definition of a particular scientific concept was written by the respondent and scored by a researcher.

- *Attitude towards science* was measured using a scale of ten items selected from a widely used larger scale¹⁷, and tested as a ten item scale¹⁸. Each item was assessed on a five point Likert scale.

Scientism was measured using a six item scale¹⁹. The items reflect the view that scientific methods and scientific theories can attain to absolute truth. Each item was assessed on a five point Likert scale.

Measures—Interviews

Interview questions explored further the areas investigated in the questionnaire and also how the cognitive approaches of learners are influenced by their perceptions of the nature of science, their ways of relating science and religion and the conceptual frameworks being used in their every day lives.

The first two questions²⁰ explored the extent of interviewees' formal science education, the importance of science in their everyday lives, and changes in their views of the nature of science as they had participated in a course on science and religion.

The next two questions²¹ invited discussion of religious issues which might be added to a course on science and religion or to which science would be irrelevant, in order to explore the views of learners about different ways of relating science and religion. Further consideration of such ways was possible in response to two further

¹⁷ Using the instrument of attitude towards science developed by Menis, J., "Attitudes towards School, Chemistry Students and Science among Upper Secondary Chemistry Students in the United States", *Research in Science & Technological Education*, 7, 1989, 183-190.

¹⁸ Francis, Leslie J. and Greer, John E., "Attitude toward Science among Secondary School Pupils in Northern Ireland: Relationship with sex, age and religion", *Research in Science & Technological Education*, 17/1, 1999, 67-74.

¹⁹ A modified version of the instrument used by Fulljames, P., Gibson, H. M. & Francis, L. J., "Creationism, Scientism, Christianity and Science: A study of adolescent attitudes", *British Educational Research Journal*, 17, 1991, 171-190.

²⁰ Question 1: 'Looking back at your formal science education, what relevance does it play in your life today? Can you describe a specific example?' Question 2: 'Is the science you studied as part of this module different? In what way? Can you describe a specific example? Why do you think that is?'

²¹ Question 3: 'What religious issues, not covered by the course, do you think science has something to say about? Why?' Question 4: 'Are there any religious issues where an input from science or scientists would be irrelevant? Why?'

questions²² asking how views may have been influenced or may have changed. These final open-ended questions encouraged learners to refer to their conceptual frameworks and how they may have changed, allowing for the possibility that responses to all the earlier questions might also be interpreted in terms of conceptual frameworks.

Procedures and analysis

The questionnaires were administered by staff in each institution, who emphasised that confidentiality and anonymity of respondents would be respected. The data were analysed using the SPSS statistical package.

The interviews were conducted in groups by one of the researchers, each student having the opportunity to respond to each of the questions in the schedule if he or she wished to do so. Confidentiality and anonymity were emphasised, and it was explained that pseudonyms would be used in reports of the research. The interviews were recorded and at a later date transcribed. Analysis of the data used standard procedures in the analysis of qualitative data and included both literal and interpretative reading of the data.

Results and Discussion

Part 1. Questionnaire

For each section of the questionnaire the frequencies of responses will be presented and the internal consistency of scales tested. It will then be possible to consider the relationships between different ways of relating science and religion and other variables measured by the questionnaire.

Religious commitment: Responses to items about identification with a religious group and personal prayer indicate that there was diversity in the personal religious commitment of the students of theology or religious studies who completed the questionnaire, although for a majority the level of commitment was high. 58% identified strongly with a religious group, 15% identified to some extent, 17% marginally and 10% not at all. 60% stated that they prayed regularly, 26% sometimes and 14% never. There was a high positive correlation between

²² Question 5: 'How does scientific thinking or religious thinking influence your views? Do you ever bring both ways of thinking to bear on the same issue?' Question 6: 'Can you give an example as to how the course has altered, if at all, your religious views in any way? In what way has this course affected your view on broader religious issues?'

identification with a religious group and personal prayer ($r = 0.846, p < 0.001$).

Confidence in explaining science: Table 1 presents responses to items exploring confidence in explaining science. Respondents were more confident in explaining why a ball thrown in the air returns to the ground, why children often look like their parents and the function of the heart than they were in explaining the hole in the ozone layer, why ice floats on water and why plants have green leaves. The internal consistency of the scale of confidence in explaining science is demonstrated in Table 2 by the bivariate relationships between the six items, and is confirmed by the calculation of the alpha coefficient as 0.7300.

	Confident %	To some extent %	No idea %
A ball thrown in the air returns to the ground	78	22	0
Children often look like their parents	78	21	1
The hole in the ozone layer	36	60	4
The function of the heart	68	29	3
Ice floats in water	40	49	11
Plants have green leaves	54	42	4

Table 1. Confidence in explaining science: “How confident would you be in explaining these phenomena to a friend”?

	Child-parents	Ozone Hole	Heart function	Ice floating	Green plants
Ball thrown	+0.286 0.015	+0.129 NS	+0.374 0.001	+0.243 0.040	+0.335 0.004
Child-parents		+0.089 NS	+0.383 0.001	+0.158 NS	+0.495 0.000
Ozone hole			+0.234 0.047	+0.295 0.012	+0.379 0.001
Heart function				+0.469 0.000	+0.461 0.000
Ice floating					+0.225 NS

Table 2. Bivariate correlations: Confidence in explaining science (NS – not significant)

Understanding of scientific concepts: Table 3 presents the scores awarded for explanations by respondents of the meaning of particular scientific concepts. Each of the concepts is relevant to the explanation of one of the phenomena for which respondents were asked to express their confidence in providing an explanation. A comparison of Table 3 and Table 1 shows that usually understanding was better in those areas where there was greater confidence, except that gravity was understood rather less well and photosynthesis rather better than suggested by the expressions of confidence. However, for none of the six concepts is there a significant correlation between understanding of the concept and confidence in explaining the corresponding phenomenon. The internal consistency of the scale of understanding scientific concepts is demonstrated in Table 4 bivariate relationships between the six items, and is confirmed by the calculation of the alpha coefficient as 0.6957.

	Good %	Partly correct %	No understanding %
Gene	14	61	25
Free radical	6	10	85
Haemoglobin	24	62	14
Density	24	12	64
Photosynthesis	7	64	29
Gravity	11	51	38

Table 3. Understanding of scientific concepts: “Explain as best you can in one sentence the meaning of these scientific terms”

	Free radical	Haemoglobin	Density	Photosynthesis	Gravity
Gene	+0.149 NS	+0.142 NS	+0.389 0.001	+0.310 0.008	+0.472 0.000
Free radical		+0.134 NS	+0.254 0.031	+0.193 NS	+0.342 0.003
Haemoglobin			+0.142 NS	+0.363 0.002	+0.226 NS
Density				+0.299 0.011	+0.462 0.000
Photosynthesis					+0.281 0.017

Table 4. Bivariate correlations: Understanding of scientific concepts
NS, not significant

Attitude towards science: Table 5 presents responses to items exploring attitude towards science. There is widespread agreement with three items that focus on the economic benefits of science. About four-fifths of respondents agree that “science is very important for a country’s development” and that “scientific inventions improve our standard of living”, while three-fifths agree that “money spent on science is well worth spending”. Four of the items are concerned with more general evaluation of science. About three-quarters of respondents reject the statement that “scientific discoveries do more harm than good” and accept that “science is useful for solving the problems of everyday life”. In contrast opinion is almost equally divided on “science and technology are the cause of many of the world’s problems” and while two-fifths agree that, “science will help to make the world a better place in the future” two-fifths are not sure how to respond to this item. Similar high levels of uncertainty are found in the responses relating to three items relating to the environment and to relationships in society. Nevertheless, a majority of respondents reject the statements that “science has ruined the environment” and that “much of the anxiety in modern society is due to science”. The item “scientific inventions have increased tensions between people” attracts the highest negative evaluation. 54% of respondents agree with this statement while 35% are not sure. Overall most respondents seem to have a positive attitude towards science but with some ambivalence about the role of science in society.

The internal consistency of the scale of attitude towards science is demonstrated in Table 6 by the bivariate relationships between the six items, and is confirmed by the calculation of the alpha coefficient as 0.7344.

	Agree %	Not sure %	Disagree %
Science is useful for solving the problems of everyday life	79	13	8
Science has ruined the environment *	12	42	46
Science is very important for a country's development	85	14	1
Money spent on science is well worth spending	61	35	4
Much of the anxiety in modern society is due to science *	24	36	40
Scientific inventions improve our standard of living	78	15	7
Scientific inventions have increased tensions between people *	54	35	11
Science will help to make the world a better place in the future	43	42	15
Scientific discoveries do more harm than good *	3	25	72
Science and technology are the cause of many of the world's problems *	39	24	37

(* items are reverse coded)

Table 5. Attitude towards science

	B	C	D	E	F	G	H	I	J
A	-0.191 NS	+0.100 NS	+0.321 0.006	-0.112 NS	+0.150 NS	-0.087 NS	+0.326 0.005	-0.308 0.008	-0.271 0.021
B		+0.043 NS	-0.110 NS	+0.431 0.000	-0.053 NS	+0.266 0.024	-0.285 0.015	+0.373 0.001	0.373 0.001
C			+0.400 0.000	-0.005 NS	+0.267 0.023	-0.054 NS	+0.277 0.018	+0.007 NS	-0.087 NS
D				+0.027 NS	+0.441 0.000	+0.013 NS	+0.492 0.000	-0.292 0.013	-0.238 0.044
E					-0.120 NS	+0.303 0.010	-0.228 0.054	+0.170 NS	+0.332 0.004
F						-0.088 NS	+0.285 0.015	-0.211 NS	-0.204 NS
G							-0.127 NS	+0.191 NS	+0.248 0.036
H								-0.325 0.005	-0.357 0.002
I									+0.262 0.026

NS, not significant

Table 6. Bivariate correlations: Attitude towards science

Key:

A= Science is useful for solving the problems of everyday life

B= Science has ruined the environment

C= Science is very important for a country's development

D= Money spent on science is well worth spending

E= Much of the anxiety in modern society is due to science

F= Scientific inventions improve our standard of living

G= Scientific inventions have increased tensions between people

H= Science will help to make the world a better place in the future

I= Scientific discoveries do more harm than good

J= Science and technology are the cause of many of the world's problems

Scientism. Table 7 presents responses to items exploring scientism. Amongst these students of theology and religious studies there is little support for the view of science described as scientism. In particular, there is a very strong rejection of the statements that “nothing should be believed unless it can be proved scientifically” (93%) and that “science will eventually give us complete control over the world” (89%). The internal consistency of the scale of scientism is demonstrated in Table 8

by the bivariate relationships between the six items, and is confirmed by the calculation of the alpha coefficient as 0.7264. Two of the items, “science will eventually give us complete control over the world” and “theories in science can be proved to be definitely true”, each have a significant positive correlation with all the other items in the scale. There is a significant positive correlation between the items, “nothing should be believed unless it can be proved scientifically” and “science will eventually give us complete understanding of the world” but neither has a significant relationship with either of the other pair of items, “theories in science can be proved to be definitely true” and “the laws of science will never be changed”, between which there is a significant positive correlation.

	Agree %	Not sure %	Disagree%
Science will eventually give us complete understanding of the world	13	15	72
Theories in science can be proved to be definitely true	18	26	56
The laws of science will never be changed	6	26	68
Theories in science are never proved with absolute certainty *	67	21	12
Science will eventually give us complete control over the world	1	10	89
Nothing should be believed unless it can be proved scientifically	4	3	93

(* items are reverse coded)

Table 7. Scientism

	B	C	D	E	F
A	+0.429 0.000	+0.177 NS	-0.134 NS	+0.473 0.000	+0.465 0.000
B		+0.461 0.000	-0.539 0.000	+0.315 0.007	+0.238 0.044
C			-0.443 0.000	+0.274 0.020	+0.028 NS
D				-0.326 0.005	-0.032 NS
E					+0.443 0.000

NS, not significant

Table 8. Bivariate correlations: Scientism

Key

A= Science will eventually give us complete understanding of the world

B= Theories in science can be proved to be definitely true

C= The laws of science will never be changed

D= Theories in science are never proved with absolute certainty

E= Science will eventually give us complete control over the world

F= Nothing should be believed unless it can be proved scientifically

Ways of relating science and religion: Table 9 presents responses to five independent items in the questionnaire which explored ways in which science and religion may be related. Table 10 presents the bivariate relationships between these items. Very few of the respondents have the views represented by Barbour’s categories of independence and integration. Only 2.8% (that is, 2 of the 72 respondents) agreed that “science and religion should be kept completely separate”. Only 11.1% agreed that “deep down science and religion are one and the same”, although it may be noted that about one fifth of the respondents were not sure how to respond to this item. It is possible that these respondents would be confident of the ultimate coherence of all knowledge and yet aware of important differences between scientific and religious discourses.

A large majority (86%) agreed that “both science and religion are important for human well-being” and that “interaction between science and religion can be of benefit to both”, indicating that most students participating in these courses on science and religion are committed to dialogue. All the courses are planned on the assumption that there can be constructive dialogue and this assumption is shared by most of the students. The courses vary in the way that dialogue is understood—consonance, assimilation or correlation—but the responses do not

provide any evidence of which of these patterns of dialogue are favoured by students.

Opinion is almost equally divided in response to the item about conflict. The 47.2% who do not accept that “conflict between science and religion is inevitable” are presumably amongst those who are confident that there can be constructive dialogue. The 43.1% who think that “conflict between science and religion is inevitable” presumably include the small proportion who do not have such confidence in dialogue, but also include many who express confidence in dialogue in their agreement that “interaction between science and religion can be of benefit to both”. This interpretation is confirmed by the significant negative correlation shown in table 10 between the items representing conflict and dialogue ($r = -0.409$, $p < 0.001$), but also acknowledges that it may not be appropriate to identify some students with only one of these categories. It is possible that some students are in the process of formulating their position and in terms of the categories used by Shipman *et al*—distinct, convergent, transitional, confrontational²³—may be regarded as transitional. Alternatively, it may be that some students distinguish areas of debate in which they think that, “conflict between science and religion is inevitable” and other areas where they think that “interaction between science and religion can be of benefit to both”. If there are a substantial number of students who think in this way it is questionable whether the general categories—of Barbour or of Shipman—can be of much use in interpreting student views of the science-religion relationship.

These five items are not intended to form a scale but the logical consistency of the responses is indicated by the significant positive relationship between the view that interaction between science and religion can be of mutual benefit and the view that both science and religion are important for human well-being ($r = +0.416$, $p < 0.001$), and the significant negative relationship between the view that there can be mutual benefit and the view that science and religion should be kept separate ($r = -0.568$, $p < 0.001$).

²³ Shipman *et. al.* op. cit. note 7.

	Agree %	Not sure %	Disagree %
Both science and religion are important for human well-being	86.1	8.3	5.6
Conflict between science and religion is inevitable	43.1	9.7	47.2
Science and religion should be kept completely separate	2.8	11.1	86.1
Deep down science and religion are one and the same	11.1	19.4	69.4
Interaction between science and religion can be of benefit to both	86.1	13.9	0

Table 9. Ways of relating science and religion

	B	C	D	E
A	-0.337 0.004	-0.232 0.050	-0.150 0.208	+0.416 0.000
B		+0.297 0.011	0.139 NS	-0.409 0.000
C			-0.127 NS	-0.568 0.000
D				0.108 NS

NS, not significant

Table 10. Bivariate correlations: Ways of relating science and religion

Key

A= Both science and religion are important for human well-being

B= Conflict between science and religion is inevitable

C= Science and religion should be kept completely separate

D= Deep down science and religion are one and the same

E= Interaction between science and religion can be of benefit to both

Relationships between ways of relating science and religion and other variables: It is now possible to consider the relationships between different ways of relating science and religion and other variables measured by the questionnaire. As there is a complex multivariate interaction it is appropriate to introduce the variables in sequence, noting relationships with sex, age, level of science education and religious commitment as well as with other variables already introduced. The sequence will be, firstly confidence in explaining science and understanding of science concepts, secondly attitude towards science, thirdly scientism, and then finally the ways of relating science and religion. Table 11 presents the

bivariate relationships between sex, age, level of science education, identification with a religious group, personal prayer, confidence in explaining science, understanding of scientific concepts, attitude towards science, scientism, and four ways of relating science and religion: conflict, independence, integration and dialogue.

	B	C	D	E	F	G	H	I	J	K	L	M
A	-0.212 NS	-0.023 NS	0.031 NS	0.019 NS	-0.012 NS	0.040 NS	-0.065 NS	-0.192 NS	-0.078 NS	0.025 NS	0.031 NS	-0.12 NS
B		0.103 NS	0.294 0.012	0.218 NS	-0.095 NS	0.010 NS	0.474 0.000	0.087 NS	-0.169 NS	-0.080 NS	0.059 NS	0.080 NS
C			0.159 NS	0.138 NS	0.335 0.004	0.502 0.000	0.132 NS	0.041 NS	0.027 NS	0.028 NS	-0.053 NS	-0.015 NS
D				0.846 0.000	-0.176 NS	0.094 NS	0.123 NS	-0.098 NS	-0.323 0.006	-0.192 NS	-0.198 NS	0.172 NS
E					-0.215 NS	0.060 NS	0.130 NS	-0.133 NS	-0.425 0.000	-0.110 NS	-0.190 NS	0.293 0.013
F						0.169 NS	-0.001 NS	0.226 0.57	0.229 NS	-0.13 NS	0.145 NS	-0.212 NS
G							0.154 NS	-0.198 NS	-0.143 NS	-0.226 NS	0.102 NS	0.191 NS
H								0.227 NS	-0.306 0.009	-0.262 0.026	0.037 NS	0.333 0.004
I									0.175 NS	0.151 NS	0.138 NS	-0.044 NS
J										0.297 0.011	0.139 NS	-0.409 0.000
K											-0.127 NS	-0.568 0.000
L												0.108 NS

NS, not significant

Table 11. Bivariate correlations: Relationships between ways of relating science and religion and other variables

Key

A= Sex

B= Age

C= Level of science education

D= Identification with a religious group

E= Personal prayer

F= Confidence in explaining science

G= Understanding of scientific concepts

H= Attitude towards science

I= Scientism

J= Conflict

K= Independence

L= Integration

M= Dialogue

Those students of theology or religious studies who have achieved at least one A level in a science subject are more likely than others to have confidence in explaining science and more likely to have a better understanding of science concepts. There is no significant relationship

between confidence in explaining science and understanding of science concepts, which is consistent with the lack of a significant relationship between each item in the scale of confidence in explaining science and the corresponding item in the scale of understanding of science concepts.

There is no significant difference between the attitude towards science of males and of females, but attitude towards science tends to be more positive amongst students of theology or religious studies who are older than those who are younger. Attitude towards science is not related to level of science education, confidence in explaining science or understanding of scientific concepts. Attitude towards science is not related to religious commitment, as measured by identification with a religious group and personal prayer, suggesting that religious commitment may be combined with a positive attitude towards science but not necessarily so.

There are no significant relationships between scientism and any of the other variables. As many respondents rejected scientism very strongly so that the range of scores on the scientism scale is limited there may need to be caution in the interpretation of these results. Nevertheless, it may be noted that there is no significant relationship with attitude towards science, suggesting that for students of theology or religious studies it is possible to have a positive evaluation of science without accepting that science attains to absolute truth. However, while there is not a significant relationship between scientism and attitude towards science, there is significant positive relationship between two items in the scientism scale, “scientism will eventually give us complete understanding of the world” and “nothing should be believed unless it can be proved scientifically” and the item in the scale of attitude towards science “science will help to make the world a better place in the future” ($r = +0.466$, $p < 0.001$ and $r = +0.321$, $p < 0.01$ respectively).

Opinion in response to the item about conflict between science and religion was almost equally divided. There are no significant relationships between responses to the item about conflict and sex, age, or level of science education. Those who think that, “conflict between science and religion is inevitable” are less likely than others to have a strong religious commitment—as measured by the items, “to what extent do you identify yourself with a religious group?” and “how often do you pray?” and are less likely to have a positive attitude towards science. This indicates that those who do not think conflict is inevitable

are able to combine a positive evaluation of the importance of science and a strong religious commitment.

The small proportion of students who think of science and religion as independent are less likely than others to have a positive attitude towards science, and the large proportion who have confidence in dialogue are more likely to have a positive attitude towards science. None of the positions described as independence, dialogue and integration seem to be related to the level of religious commitment.

There are other points that may be of interest. There is a significant relationship between the expression of integration between science and religion, “deep down science and religion are one and the same” and the item in the scale of attitude towards science, “science will help to make the world a better place in the future” ($r = +0.330$, $p < 0.005$). There is also a significant relationship between confidence in dialogue, represented by the item “interaction between science and religion can be of benefit to both” and another item in the scale of attitude towards science “science is useful for solving the problems of everyday life” ($r = +0.384$, $p < 0.001$).

Intermediate conclusions

The extent to which students of theology or religious studies identify with each of the four ways of relating science and religion in Barbour’s typology has been measured. There is widespread support for dialogue, very little support for independence or for integration, and an almost equal division between those who think conflict is inevitable and those who do not. No evidence is available from the questionnaire that allows discrimination between different patterns within dialogue such as consonance, assimilation and correlation, and it will be one task of the interviews with selected respondents to assess whether these categories may be used in interpretation of the views of learners. The combination of conflict and dialogue by about half of the respondents means that the presentation of these two categories as alternatives needs to be questioned. Furthermore, the lack of discrimination amongst this sample in relation to the categories of independence, dialogue and integration suggests the usefulness of Barbour’s typology in interpretation of the views of learners may be limited.

Significant relationships are found between the perception of conflict and both religious commitment and attitude towards science. Those who do not think conflict is inevitable are more likely to combine a positive evaluation of science and a strong religious commitment.

There is no relationship between attitude towards science and scientism, indicating that students of theology or religious studies are able to have a positive evaluation of science without accepting that science attains to absolute truth.

There is a disparity between levels of confidence in explaining science and understanding of scientific concepts, as indicated by ability to define scientific terms. An important part of a course on science and religion is ensuring that there is sufficient understanding of relevant areas of science and confidence in talking about science may not always be an accurate indicator of this. It is possible that such understanding will be facilitated when the science is related to a social context in which ethical questions are being asked, and a further task of the interviews will be to explore this possibility.

Part 2. Interviews

There are three stages in the interpretation of the interview data. Firstly, a range of views of the nature of science is identified. Secondly, student views of the science-religion relationship are considered in terms of the typology used previously to compare the approaches of course designers and teachers, and thirdly, student views of the science-religion relationship are considered in terms of the conceptual frameworks they use in thinking about science and in life as a whole.

Nature of science: The interviews show that there can be changes that can occur in the way students think about science after taking a course in science and religion. For David and Claire, who didn't enjoy their formal science education, the course has made science relevant.

DAVID: At school level I wasn't much interested, whereas now, after four years at university, your mind has been taught how to research and how to study it further and carry on your own investigation. So, whereas at school I would have heard of Einstein's $E=mc^2$, through this course I am beginning to understand what that means and having an interest and taking it further to understanding its implications in respect to creation and the Big Bang.

CLAIRE: I have to say that I didn't like science at school, it was a subject I had to do, and the only time it has come into play in later life is doing this module. The only relevance it had was in facts and it did inform me to a certain extent, but that

information I perceived I haven't used, only doing this module has it come into play as I have a basic understanding of the issues.

Any examination of the way students think about science can't only focus on the relevance of the scientific information given, but also on the epistemological usefulness of thinking scientifically. For David, an analytical way of thinking is not only to be used when studying science.

DAVID: I haven't studied science since my GCSEs. The formal way in which you have to study science has carried through in my way of thinking. I have more of an analytical way thinking. I like to reason things through. The way I study is more scientific than arts.

For Jay, science, albeit a powerful way of thinking, can only answer a limited range of questions.

JAY: Science is one of the most useful and helpful subjects. It's also very interesting—the first passion within me at a younger age—more so than religious studies and other things, at a younger age because it is so rich and fun to do, whereas with religious studies, for a younger age, the mind isn't quite as developed—whereas with science, you look before your eyes, get the answer—instantly, you've got a pattern, you want to know why it's happened. So for a younger age it's more of a spark to get something that's mind bending.

But for Kim, rational analysis is the only approach.

KIM: I'm both a physics and religion major. I'm a physicist at heart. The religion is just a hobby—physics is what I am. All through high school I took all the science classes I could. My religion notes are all taken in mathematical nomenclature and I use all the symbols, so all my thought processes are by way of mathematics. *What makes you 'a scientist at heart'?* Evenings with my friends—we may sit around and try to calculate—well, if the gravitational constant was of an order of magnitude larger, how long would it take the world to collapse into a singularity? This would be our form of entertainment. Or I wander around, and I see the sunset and I try to decide how the light refracted and what's happening to produce those colours? What kind of gas is in streetlamps to make it diffract in different ways. I just see things and I automatically turn to thinking about their scientific explanation and proofs—I look for scientific proofs in non-scientific areas.

Interviewees' responses also highlight differing perceptions as to the nature of 'laboratory' and 'everyday' science:

MARGARET: Obviously, the actual content is very different from any of the biology I ever did at school because it hadn't been done yet, and I didn't take biology very far, but I would have thought the actual science of it, showing how it's done is not that different, although its different content. All the other things we are talking about here are surely because it is a course that is looking at the ethics and theology behind it—whether we should be doing it is another thing, but it's part of this course, not the science of biology.

ALISTAIR: I did A-level biology, and what we do now is the same as what we did at A-level, but there is much more of a respect and an ethical morality behind the way we treat animals and we go into their rights and things, but in terms of the science, the biology side of it, it is the same.

For Alistair and Margaret, engagement with science must also include reference to the ethics or morality of its practice. This, for some students with no formal science education, like Kate, might be the only way to convince them to engage with the course.

KATE: I would have done biology at school but for the fact that we had to dissect animals and I didn't want to do that, because we were part of the young farmers club and we looked after rats, and I didn't want to see them in formalin with pins in them and this course takes quite a different attitude to living creatures, and I appreciate that. I mean, it's still looked at scientifically, but it sort of honours them more.

For other interviewees, a further step has to happen. Discussion of the ethics of science has to be shown to be relevant to one's own life. For Claire, this is when science became 'real'.

CLAIRE: What we do now we go to surrounding issues and go for a more broader scope and actually take in different influences, and to be honest it makes the subject more interesting to me, probably because I'm a few years older now so I'm actually here because I want to do it, but also these other influences and issues we're looking at actually make you respect the subject more than I did when I was younger. *That's an interesting choice of word 'respect'?* When I was, at GCSE, you get your book—this is right, this is the way it is. I respected it then but I respect it more now, because it's such a broad topic, I never knew that so many will be theological issues; moral and ethics and dilemmas—that was not covered at all while I was at school and maybe if it had been touched on a bit more it would have made the subject more interesting.

As well as a range of ways of describing the nature of science, there are large differences in the maturity of students' philosophical understanding

of the nature of scientific method and how it might relate to other metaphysical ideas.

The following examples illustrate how scientific terms are often poorly understood and so inappropriately used.

CHARLES: I only did science up to GCSE and for me science was empirical—observation and basic tests, whereas in comparison here, we actually go into a lot of the theory—stuff you wouldn't even touch on. *What do you mean by theory?* Like, how to clone a human—she's not taught us how to do that, but technical issues. This is what goes on to change people's lives, rather than, this is how a plant goes green.

ALISTAIR: I think that science is quite like a religion anyway, as nothing is definite. Science is still a belief in what you have done. Take Darwin's theory, although I agree with it, in a couple of hundred years time there could be another theory which replaces it—science is always changing as well.

For others, like Kim, any confusion does not arise from a lack of awareness of a philosophical basis for the nature of science; it is her lack of appreciation of alternative (in her case non-realist) philosophies.

KIM: I was very angry one day with one of my tutors—because I'm a physicist and I know it is true! But mostly because I knew he was right and I couldn't argue against him—when he argued that science is a religion—there's no difference between science and these other religions where the layman just accepts what others say and you don't really understand the deep theories behind it, and you're working from a metaphysical understanding of the world that's essentially unproven, and it's made me see that science is a religion and that you're accepting its base largely on faith—faith in Einstein and Newton. I like to think that science is not the same as these mythological religions of the East—and I couldn't come up with any solid argument as to why when you look through a scanning electron microscope you have to take as faith that what you're seeing is an atom. I've built one, I've seen an atom, but I still couldn't argue conclusively!

Kim's 'faith' in the superiority of the scientific method has been challenged by her studies of science and religion. The course appears to have left Kim in a state of 'conceptual transition' leaving her unresolved as to how to relate science and religion.

Ways of relating science and religion: It is now possible to consider the extent to which the views of learners, as represented by the interview data, may be interpreted in terms of the typology for ways of relating science and religion used previously to compare the approaches

of course designers and teachers¹. Of Barbour's four categories of independence, conflict, dialogue and integration it was suggested that dialogue most aptly describes the approach of all courses currently available. Courses may be distinguished by the different assumptions they make about the nature of dialogue. Some aim merely to show there can be consonance between science and religion, others work towards the more systematic interaction of assimilation, while there are yet others that appear to be intermediate and allow for different patterns of correlation in different areas of discussion.

None of the interviewees spoke of science and religion in a way that could be assigned to the category of integration, even though 11% of questionnaire respondents had agreed that "deep down science and religion are one and the same" (see Table 9).

Several interviewees pointed to differences between science and religion:

DONNA: Scientific thinking goes on the basis of how you think something works, or how you think something is right—the person is self-aware. However, if you think religiously, it's consulting God and having God and his will in the picture. Religious thinking is from within the heart and applies to everyday life. When you're searching for something or trying to figure out something, you have to use your scientific antennae.

KATE: I think science and theology have different roles—science is more concerned with establishing facts, religion with understanding values.

Such statements would be consistent with the view that science and religion are independent, as was expressed by the small minority of questionnaire respondents (3%) who agreed that "science and religion should be kept completely separate", but that this is not the view of these interviewees is indicated by their statements elsewhere:

DONNA: There are two different issues: big bang theory and creation by God, which can be used together to create a bigger picture.

KATE: I think it must be good to increase the dialogue rather than keep in separate camps all the time.

¹ Fulljames and Stolberg, op. cit. note 1.

Both Donna and Kate are committed to dialogue, as are other interviewees, some of whom recognise that courses have been planned with the assumption that there will be dialogue:

EWAN: It's sometimes science working in a vacuum, separated from everything else, you get the situation, the scientists have cloned a human being—albeit for three or four cells—they say, and there's a huge furore about that because people respond to that research, but the scientist have ignored that, they want to be left alone to their research, they don't want to have to respond to that, and there needs to be a dialogue—they need to have an understanding how the rest of humankind feel about these issues.

CHARLES: We come with a commonality that the course assumes that we both agree with science and religion together—there's no dividing issue between them—a kind of dialogue between them.

Charles explains further what he understands by dialogue as he explains the value of interaction in both directions:

CHARLES: What I would have liked, I think is to look at to what extent basic doctrines of faith, like salvation, are challenged by science. We've tended to look at science and then look—is this right with religion, and focus on the scientific part. We always start with something to do with science and then look at it from a religious point of view. I would like to go from a religious point of view—does Darwin challenge salvation? Can we have salvation, or does such and such thing deny the fact? Does it make Jesus' death pointless from a Christian point of view?

In general it is not easy from the interview data to distinguish between the different patterns within dialogue represented by the categories consonance, assimilation and correlation, although for those such as Donna and Kate who emphasise the differences between science and religion the approach does seem to be that of consonance rather than assimilation.

An example of assimilation may seem to be provided by Mathew when he speaks of the science of the mind:

MATHEW: We could have looked at the science of the mind—how we cope with death—we're the only animal that understands our death and so think up some way to cope with it. So working out how the mind works could answer why is religion used, why we think there must be something bigger than us? People will answer that from an evolutionary standpoint—it's the way we have to survive life, being able to cope with this makes you more able to survive. I use science apologetically—that's

the way I work—because of my outlook on life, I want to pass on what I believe and tell people about that and explain to them and show them that it is a rational way of thinking—it's not irrational to believe in God, it does work and fit in with life as we know it.

Yet Mathew elsewhere emphasises the differences between the scope of science and religion so that overall it may be more appropriate to describe his approach as that of correlation:

MATHEW: The two ways of thinking are complementary. There are certain boundaries where science cannot cross. The origin of the question, why did evolution start—not the process of evolution, and why did it have to come into being? So science has to stop and religion or Christianity or the Bible carries on. The boundary is the why—science can't go outside of this world—it doesn't recognise anything outside this world because it's looking at this world whereas religion, especially Christianity, is God's revelation into the world.

The category of correlation allows for different patterns of interaction in relation to different issues and may be illustrated by other interviewees, such as:

DAVID: As a Christian, I come at it from having a faith and this is almost a separate issue in a sense—I've developed that faith through non-scientific arguments—not pursuing that sort of reasoning or logic. For the rest, I'm still keen to look into the science and see if it can 'step in' to theology and explain certain facts that might be required, but for my personal faith it's not a key issue.

It may be argued that the difficulty in interpreting the views of learners in terms of categories such as consonance and assimilation is because learners are in the process of formulating a suitable approach, so that rather than using the category of correlation it might be better to describe their position as transitional²:

KIM: It is a bit frustrating that I've read absolutely sound, seemingly, from very reputable arguments that Evolution is utterly impossible, and from others that Evolution is the only logical way to explain the existence of the diversity of life, and both of them seem to be terribly sound arguments, that it's hard to decide between them.

² Shipman *et. al.*, *op. cit.* note 7.

This may be appropriate for some learners, but there is evidence from other learners of sophisticated reflection on different issues in different ways appropriate to those issues. In particular this is so for those studying theology or religious studies when theoretical issues are introduced through engagement with current ethical debates. An example mentioned by several interviewees is the debate about human cloning which can lead to exploration of the many different dimensions involved in the question of what it means to be human. Because of the many contextual elements in such debate it may be misleading to attempt to characterise particular positions in terms merely of different ways of relating science and religion.

A further problem in interpreting the interview data in terms of typological categories is that both the categories of dialogue and conflict seem to be relevant for many learners. The majority of questionnaire respondents (86%) agreed that “interaction between science and religion can be of benefit to both” but almost one half (43%) thought that “conflict between science and religion is inevitable” (see Table 9). Some interviewees explained that conflict is likely to continue in some areas even though in their opinion it is not necessary, but there were other interviewees who accepted conflict in some areas while in general they looked for dialogue, as illustrated by the two statements:

JAY: There are quite a lot of scientific views can't really be argued with that much—because they are two different realms, the factual realm and the spiritual, and when they come in conflict, it's almost like debating things that are on two levels, it's very fascinating to look at it, but there are points where they 'bang together' and you can't continue the discussion further because they do conflict.

JAY: I do tend to use both ways of thinking to find my way around—trying to work out answers to the questions of life. I'm too sensible and logical to simply accept a kind of theory of God; it has to have looked at evidence as well. Everyone has a hunger to know—basic questions—why are we here?—You answer them at different levels, but they are interlinked in science and religion.

Courses may be designed to enable movement towards intellectual coherence, as Jay seems to want to do, yet at any one time there may be considerable diversity in the positions of those in a particular learning group and this diversity could include those who are content to live with conflict while also being interested possibilities for dialogue.

The views of the science-religion relationship of those studying theology or religious studies may be interpreted to some extent in terms

of the typological categories used to compare the approaches of course designers and teachers but the usefulness of doing so seems to be limited.

Conceptual frameworks: The limited usefulness of typological categories in understanding how theology and religious studies students cognitively relate issues of science and religion suggested the need to revisit the interviewees' responses.

For Anne, Jay and Mathew their way of making sense of the world is through a personally constructed perspective, which maybe described as a conceptual framework.

ANNE: In a way religious faith can be more reliable than science—it's almost instinctive. You can't run your life by science, decisions you make are some much about how you feel—personal feelings in terms of morality—that's closer to religious thinking, which is about morality and the oneness of God, our attitude to other people.

JAY: When you get older, you want to ask more questions like why—why is that, why is this happening? With those why questions comes a whole deal of morals, where for me religion becomes really exciting so I've veered towards religion and arts. As my mind matured I got more into the philosophical, more thinking—as opposed to the direct facts.

MATHEW: I use science apologetically—that's the way I work—because of my outlook on life, I want to pass on what I believe and tell people about that and explain to them and show them that it is rational way of thinking—it's not irrational to believe in God, it does work and does fit in with life as we know it. So, I love to talk to people about that—when I come across things like this, I generally think in an apologetic mode, how can I impart this, how can I say this to somebody else, can I make sure I have a full rounded knowledge of what's going on so I can tell somebody else. This is how I work, as opposed the academic way of just arguing for the sake of it. I try not to think of things just coldly and 'out there'. It would be very easy to have some facts, put them in your file and leave them but better to develop them—how to use them, how to discuss it and to help others to understand how science does work with the Bible—make it more real, apply it to life, people's lives and your own.

Their conceptual frameworks are constantly being checked and validated through interaction with others, for the interviewees, this is often guided by their faith or religious outlook. However, it would be inaccurate to assume that their basic conceptual framework for understanding is

purely religious in nature; scientific and religious thinking are elements of a general cognitive structure, applicable to their life as a whole.

MARGARET: Now it's too simple to say religion is about 'why' and science is about 'how' but it does illustrate a major difference. In practice science solves the 'whys' as well, but in a different way.

CHARLES: I think scientists do seek intelligibility—just to say that they are looking at the 'how', doesn't mean they're not trying to answer the 'why'—I think they're trying to fill in that picture as well, and that's not the same with religion. I question why would you want to know why something happens if you don't want to know how something happens? If they're not Christian or not the member of another faith, then the motive comes from somewhere else, so scientists do seek intelligibility. The problem, I find, is that we use labels. So religion is about this, science about that, but they're interwoven. Scientists have nothing to say about issues when they're not relevant to them. I think in two different boxes—there are scientists who are theists and those who are not. It would be irrelevant to a scientist who is not a theist, an atheist, to talk about why Jesus died.

KATE: My husband is a physicist and I do know that when he's thinking about our existence he doesn't think in the same way as he does when he's trying to solve a problem at work, he thinks in a way more like me, in a religious way. *What changes? What's a religious way?* It's a holistic way. *What's then added, or extra to scientific thinking?* When I am solving a problem I hope I am solving it in a scientific way, more analytically—it depends what I'm trying to do.

As Cobern has previously discussed³, students use a set of nonrational presuppositions, personally coherent, on which conceptions of reality are grounded. This is a metaphysical level antecedent to specific views that a person holds.

MATHEW: The two ways of thinking are complementary. The early scientists—the majority were Christian, such as Newton. There are certain boundaries where science can't cross. The origin of the question, why did evolution start—not the process of evolution, and why did it have to come into being? So, science has to stop and religion or Christianity or the Bible carries on. The boundary is the why—science can't go outside of this world—it doesn't recognise anything outside this world because it's looking at this world whereas religion, especially Christianity, is God's

³ Cobern, William W., "Worldview Theory and Conceptual Change in Science Education", *Science Education*, 80/5, 1996, 579-610.

revelation into the world. So He's coming from the outside, science is on the inside looking at what is going on around it.

The basis for Mathew's conceptual framework is divine revelation, which delineates the way he lives his life. This is the basic structure with which cognitive issues are judged, and is the scope of a student's fundamental understanding of what the world is like. Conceptual frameworks are also dynamic in nature:

EWAN: Religion influences my views in the area of the genetic manipulation of crops. The scientist in me says this is a grand idea—excellent stuff. The faith side of me says we should tread carefully, and I think that within myself, I seek a balance. Science has given us what we need to feed the world, to go ahead and stop using some of the chemicals, stop doing some of the damage that we're doing to the planet and ethically that's good, but we're also in danger of genetic bio-crops taking over the world and we don't know what's likely to happen—we haven't fully evaluated. We're tinkering and, if we don't take the co-creationists' view, that God created what we have, do we have the right? Should we be tinkering in that very basic way? *You said that you wanted to 'balance' the two. What is doing the balancing?* The balancing is coming from the information I get from my faith really, I do believe in God and I believe in a God who is very caring and loving Creator and wants us to have the best out of this life. I think 'the best' doesn't necessarily mean making a profit for that particular research company. It is the best overall, so we really need to evaluate everything very sensibly before we go full tilt and implement.

New information, experiences and learning—all have to be accommodated within the student's conceptual framework. If ideas are novel, rebalancing or readjustment might need to occur. In Ewan's case, the balancing is moderated by faith, which would appear to be at the heart of his personal conceptual framework, working through Ewan's concept of a caring and loving God.

For Kim, it seems that science is a means to a 'greater truth'—a highly personalised and meaningful process.

KIM: Thinking back to areas of faith where science comes in—the creation story of Genesis is purely a spiritual story and science doesn't need to have contact there. *What do you mean by spiritual?* I don't use it in a personal way. For me it is something that is not explicable by fundamental physical laws—it's a greater truth—it's not easily defined and understood differently by different people—it's something that's not physical reality.

For learning to therefore take place, students need to be enabled to see that the interaction of scientific and religious ways of thinking is credible when viewed from the individual student's perspective. As Kate puts it:

KATE: The two approaches are different, but an individual can put on either pair of specs and see it either way—to get a complementary understanding.

The challenge for science-religion educators is what is an effective strategy when faced with students who are all working from unique conceptual perspectives?

DAVID: There is a very large overlap—looking at daily life, both would certainly influence me. Everyday events—I would probably turn to science to say why that's happening, but for anything of a more spiritual nature, rather than seeking science for an explanation initially, I would probably satisfy myself with my faith. *What do you mean by spiritual?* Not in an ambiguous or New Age sense, but at a Christian level as a means of communication between myself and God.

David's emphasis on not just the 'everyday' but on different patterns of dialogue that encompass the whole of life can be utilised by educators when teaching science and religion⁴. As Loving *et al.* indicate, instead of explicitly defining the ontological, epistemological, and social dimensions for students, educators need to create opportunities for students to resolve, cognitively, any conceptual conflicts that might arise when dealing with what are often controversial issues. Students are, by the very success of their academic career, very adept at reproducing 'technically correct' notions without having a thorough understanding.

JAY: Although I said I was very 'arty', I do tend to use both ways of thinking to find my way around—trying to work out answers to the questions of life. I'm too sensible and logical to simply accept a kind of theory of God; it has to have looked at evidence as well. Everyone has a hunger to know-basic questions—why are we here? —you answer them at different levels, but they are interlinked in science and religion. *Where are they interlinked?* The questions come from your mind. You think what the answer is and then try and prove it and put it down on paper. A lot of my friends are scientists and I can't just say to them, 'oh well, I believe in God. If you

⁴ Roth, Wolff-Michael and Alexander, Todd, "The Interaction of Students' Scientific and Religious Discourses: Two case studies", *International Journal of Science Education*, 19/2, 1997, 125-146. Also, Loving, Cathleen C. and Foster, Andrea, "The Religion-in-the-Science-Classroom Issue: Seeking graduate student conceptual change", *Science Education*, 84, 2000, 445-468.

have faith you believe in God.’ That’s not enough for a lot of scientists. My friends say, ‘the purpose of our existence on Earth is to reproduce our DNA.’ That makes me so furious, and I’ve got a scientific side to me as well, so I’m going to go and do a theology degree and I’m going to try and read some books about science and try to come back with some answers to explain why I think God is real. I know—in my head—that they’re not right, but I need to know—to feed the hunger to find the answers and to disprove them. *What happens if they’re right?* My mind is quite open to scientific answers and to philosophical ones, and I want to put them together and get a big base and pick out the one. I don’t want to be just fifty percent sure; I want to be more than fifty percent. How sure do you need to be? That’s the problem, you can’t be one hundred percent certain, which is where Christian faith steps in. As a philosopher said, ‘there’s a God-shaped hole in all of us’, which science cannot fill. To that, couldn’t you also say there’s a science-shaped hole in all of us? That’s why I think they’re inseparably interlinked.

It is the role of educators to ‘feed the hunger’ that is in students such as Jay. When done successfully, as many of the interviewees attest, the impact can be much greater than the teaching and learning of science and religion.

Conclusions

The assumption by course designers that dialogue is the preferred state of intellectual exchange, is shared by many of their students but is not the only pattern of interaction that they might use, in some instances a notion of conflict is also appropriate even though the view of science described as scientism is not prominent among theology students. This might be, in part, due to the divergent perceptions held by students as to the nature of science.

Student responses also show that the standard taxonomical categories used as the basis for understanding student learning are useful in the interpretation of views of learners to some extent, but there are limitations, as many learners may be regarded as at a transitional stage, with a variety of transitional states used by the student body as a whole. Students may use different ways of accommodating scientific and religious ways of thinking for different issues. If many aspects of an issue are considered, views may not be simply constructed around the relation of science and religion, rather, students will draw upon a richer set of concepts organised into a personally coherent framework.

Teaching has therefore to be appropriate and individualized to allow for the variety of conceptual positions held by students. Even those students with a limited science background can engage effectively

with science and religion issues, if the educator can enable the student to develop a new, coherent, personal conceptual framework after being confronted with the discrete examples used in the course curriculum. This is possible if some time in each course is given to allow the student to gain a sufficient understanding of the relevant science, but there needs to be care that understanding is accurate—as no relationship was found between confidence in explaining and understanding of science.

Teachers should recognise the importance of the two-way interaction, introduce activities that encourage critical reflection, perhaps through focusing on ethical issues that might engage all learners as an entry into the exploration of theoretical issues. Effective learning is therefore through conceptual clarification and change, and is as applicable as much to the teacher as it is to their students.

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Report:
**Breaking Down the Classroom Walls:
Innovative Teaching and Learning Methods in
Religious Studies and Theology—
Some Perspectives from the University of
Wales**

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Current and past members of staff of the University of Wales will no doubt have good memories of spending enjoyable quality time at ‘Gregynog’, the University’s conference centre near Newtown in Mid-Wales. We are privileged in the University to have such a beautiful setting and such excellent facilities for a conference centre. Twice each year, the departments of Religious Studies and Theology across Wales come together to Gregynog for a conference, once in November for students, and then again in June for staff and postgraduates. This article emerges as one of the outcomes of the 24-hour conference for staff held in June 2002.

During the academic year 2001-2002, it was the responsibility of the Department of Religious and Theological Studies at Cardiff to organise the programme for both conferences, and the PRS-LTSN made a significant investment and input to each, for which we are grateful. The existence of the subject centre was a catalyst for inspiring the theme of ‘Teaching and Learning’ for both colloquia during the year.

On previous occasions, the conferences for both staff and students generally had an ‘open’ theme. This tended to result in the delivery of diverse and usually unconnected academic papers which, certainly in our current times, students might actually prefer to download from the Internet! As a way of making the expense, time and effort required for staff and students to travel long distances across Wales for a relatively short period seem more worthwhile, I decided to initiate a focused theme of ‘Teaching and Learning’ for both events. Thanks to

the efforts of colleagues from across the University of Wales who shared their expertise and experience, both conferences became more interactive, required more active and engaged participation, and focused upon some of the methods and technologies of delivering and assessing the curriculum. Perhaps above all, the value of the conferences was the opportunity for learning with one another and sharing good practice, and it exemplified just the approach to teaching our students that this article advocates. As the pressure and workload upon staff and students increases, there is rarely time or opportunity left over to reflect upon what it is we are trying to teach or learn, why we are learning/teaching it, and how teaching and learning might be made more effective. In the light of this, the theme of the 2001-2002 conferences was deliberately structured to create spaces for reflection and conversation.

Part of the focus for the student conference in November was the use of the internet in teaching and learning in Religious Studies and Theology. Thanks to the input of Jeff Dubberly and Eva De Visscher (authors of the RDN web sites 'Internet Religious Studies' and 'Internet Theologian' respectively), students were able to have an online demonstration of resources available online. Reflecting afterwards on the way students responded to these and other sessions, it became clear that at least part of the staff and postgraduate conference later in the year might usefully consider some of the implications and possibilities of 'non-traditional' resources for teaching, especially those derived from popular culture.

This paper therefore explores some of the pedagogical issues and problems that arise as a consequence of the fact that it is no longer sufficient to teach via the fairly limited range of 'traditional' and often very passive teaching methods of academe. Delivering a formal lecture, week after week, may have once been the hallmark of academic teaching competence, but much more is now required of us as educators. The emergence of the LTSN and its related subject centres, and the creation of subject-specific journals such as *Teaching Theology and Religion* reflect a growing interest in pedagogical issues in higher education in general and in Religious Studies and Theology in particular. The Quality Assurance Agency for Higher Education benchmarking statements for Theology and Religious Studies (2000) also challenge the 'traditional lecture' as a teaching tool, and suggests that more interactive classes which make use of other media might be more appropriate. Better understanding of what makes for good learning on the part of students (thanks in part to the extensive research of those connected, for example, with the Oxford

Brookes Centre for Staff Development) has been a catalyst for experimentation and exploration of innovative teaching methods and technologies. As a consequence, we are now expected to be much more creative and technologically sophisticated and competent. By using the technologies of the internet, film, or music we begin to meet a growing expectation on the part of students that they will be taught by individuals who are thinking about new and innovative methods of delivering the curriculum. If nothing else, through reflective teaching we set an example of professional practice that students will take with them into future employment.

The Changing Face of Religion

There are a growing number of multi-media resources available for teaching about religion, especially through the Internet. This serves as a substantive counter to the claims of some sociologists who argue that religion is losing significance in contemporary life (Bruce 2002). Although traditional techniques for ‘measuring’ religion might indicate patterns of decline, there is an alternative view that suggests that religions are flexibly responding to adapt to new circumstances. It is arguable that religion is being re-located out of ‘traditional’ spheres to new contexts where it then takes new shapes and appears in different guises. Religion is alive and well on the Internet, for example. Charles Henderson, executive director of the Association of Religion and Intellectual Life, following the announcement of the 1999 Academy Award nominations claimed that he could not “remember a year when God figured so prominently in the [Oscars]”(cited in Deacy 2002). It is as if when religion is ‘squeezed’ out of one area of social life, it simply finds expression in another. “By broadening and globalizing our view of religion...we begin to see the power of religion even in a world that has become increasingly cynical and sceptical toward its own values and capacity to change. Religion, as always, seems to reshape itself to fit the moment.”¹

If religion really does change shape or appearance as society itself mutates, this makes it almost inevitable that religion will begin to appear in unexpected places and via new media. “If before, it was the religious realm which appeared to be the all-encompassing reality within which the secular realm found its proper place, now the secular sphere will be the all-encompassing reality, to which the religious sphere will have to

¹ <http://www.poppolitics.com/articles/2001-01-29-religionintro.shtml>

adapt” (Casanova 1994 p15). This is a slightly more nuanced version of the secularisation thesis, pointing to religious *change*, rather than simply *decline*. Studying “what new systems of classification and differentiation [and I would add ‘manifestation’] emerge within this one secular world and what new place religion will have” (ibid) is part of our task as scholars of religion. This means looking in those places and at those media perhaps most profoundly associated with the ‘secular’ world and harnessing their potential for teaching and learning for our own purposes.

Popular music

Trystan Hughes (Trinity College, Carmarthen) argues that there are many elements within pop music that can be exploited for teaching religious studies. There are ‘religious’ songs, songs with secularised religious themes, and religious critique within pop songs. It is also easy to identify ‘spirituality’ in pop songs and the use of theological concepts. The song ‘Shining Light (Ash)² is used in a first year course as a way of showing students that religion and spirituality are not topics confined to their religious studies lectures or to the four walls of a place of worship. Most students know the song, yet many presume it to be purely a love song. Once it has been critically evaluated, the many possible interpretations of the song become clear; from its being ‘just’ a love song, to being a song about Christ, and to becoming even a Marian hymn. Additionally, Hughes tries to show students how popular songs and the music industry associated with them might also be a form of ‘alternative’

² *Shining Light*

© Ash (from *Free All Angels* 2001)

Roman candles that burn in the night/ Yeah you are a shining light/ You lit a torch in the infinite/ Yeah you are a shining light/ Yeah you light up my life.

You have always been a thorn in their side/ But to me you’re a shining light/ You arrive and the night is alive/ Yeah you are a shining light/ Yeah you light up my life.

We made a connection/ A full on chemical reaction/ But by dark divine intervention/ Yeah you are a shining light/ A constellation once seen/ Over Royal David’s city/ An epiphany, you burn so pretty/ Yeah you are a shining light.

You are a force you are a constant source/ Yeah you are a shining light/ Incandescent in the darkest night/ Yeah you are a shining light/ My mortal blood I would sacrifice/ For you are my shining light/ Sovereign bride of the infinite/ Yeah you are a shining light.

These are the days you often say/ There’s nothing that we cannot do/ Beneath a canopy of stars/I’d shed blood for you/ The north star in the firmament/ You shine the most bright/ I’ve seen you draped in an electric veil/ Shrouded in celestial light.

religion, with Elvis Presley being a classic example. Many students have never before reflected on their own consumption of and relationship to popular music and its ‘idols’, yet it is for many of them a familiar world that they inhabit much more than that of contemporary Christianity. Through courses on ‘Culture and Christianity’ (level 1) and ‘Rock of Ages’ (level 3), they learn to see religious expression and vocabulary in unexpected places, especially in their own lives outside the classroom.

Film

Likewise Chris Deacy (also Trinity College) uses modern film as a medium for teaching through awakening students to the possibility that “film can be seen to wrestle with, and bear witness to, some of the most fundamental themes and insights which lie at the heart of religious [and] specifically Christian activity” (Deacy 2000). The protagonist in one of the films nominated for an Oscar award in 2000, *The Green Mile* (Frank Darabont 1999) could be construed as a Christ-like figure who can heal the sick, resurrect the dead, and who ultimately suffers a wrongful and ignominious death for the sins of another. Deacy argues that film, far from being a route to escapism from life’s big questions, in fact offers the possibility for engendering self-questioning on spiritual and religious matters, both for the audience and for students who critically engage with themes that emerge in film. Deacy concurs with Marsh and Ortiz in their well-known volume *Explorations in Theology and Film* that there has been a neglect of film within religious studies. This may be the result of cultural snobbishness or suspicion, a desire for doctrinal purity, a concern that theology should be prevented from becoming too ‘worldly’, or simply belief that the conversation is not very fruitful. But “if Christian theology is not now to become a discussion between fewer and fewer people ... then the central question is not *whether* Christian theology converses with film, but *how*” (Ortiz and Marsh 1997 p 4).

The Internet

Author of the *Good Web Guide to World Religions* (Bunt 2001), Gary Bunt (Lampeter) uses the Internet as a teaching tool with students at Lampeter, and engages their critical faculties of web resources and virtual religion by asking questions about authenticity, authority and authorship. Furthermore, an increasing number of institutions are offering distance learning courses, and this is as true of Theology and Religious Studies (e.g. at Lampeter) as other subject areas. The world wide web is an important means for ‘breaking down the classroom walls’ by enabling students to study in their own time, and offering them access to a wide variety of resources. Giving them the critical skills to engage with this

new medium and use it as part of their own research has added another dimension to the standard pedagogical task of teachers.

More of our institutions are now installing data jacks and docking stations for laptops into teaching rooms. This enables us to meet this challenge of educating students about the authority and authenticity of material on a web site, and how to handle and evaluate contradiction and disputed material. They also learn how to question the 'agenda' of web authors, and to identify how the Internet is used for proselytism and recruitment to both real and 'virtual' religions (Dawson and Hennebry 1999). The way in which boundaries and traditional authority structures of religions are being contested through the Internet is clearly illustrated by many of Gary's recent writings (see also Bunt 2000).

Drama

My colleague in Cardiff, Dr Will Johnson, has brought ancient Indian religious texts to life through dramatic performance, thereby giving students the chance to learn, through action and experience, what it might be like to be the character they portray. As preparation for an eventual undergraduate course in 'Indian Epic, Myth, and Drama', he has been exploring ways in which drama and dramatization might be used as a means of approaching textual and other material. The project has its roots in a new translation he is preparing of the famous Sanskrit play, *The Recognition of Sakuntala* by Kalidasa. Initially, he was interested to see how this might work in performance outside the Indian context, and to that end gathered together a small group of postgraduates to rehearse and perform the first act of the play. He was encouraged by seeing that certain key concepts in Indian religious culture (such as the notoriously difficult to define *dharma*) could be transmitted and illuminated in a dramatic context. Wanting to explore this further, he subsequently worked with a small group of undergraduate volunteers on dramatising a section of the Sanskrit epic, the *Mahabharata*, addressing such questions as how to convey ideas in dialogue, and the relation of the epic narrative form to philosophical or didactic passages. This small workshop suggested that there is plentiful scope for identifying and concentrating religious attitudes and ideas in dramatic dialogue, and that involvement in that process is potentially a valuable and engaging tool in promoting student learning.

This kind of approach may appear to be particularly appropriate to certain classical Indian texts, sections of which are already in dialogue form (e.g. some *Upanisads* and the *Bhagavad Gita*). However the process

of dramatizing philosophical, didactic, and ritual texts in general has further potential benefits for student learning. Not the least of these is that such a process requires the student to identify the central issues in any textual passage and articulate the questions they raise in a wider context. Such an approach also provides an excellent opportunity for students to collaborate creatively, and may well build a good platform for introducing an element of group assessment into the eventual course. The overall pedagogical aim of such a course would be to provide a mechanism for students to play an active, ‘hands on’ role in bringing a wide variety of textual material to life in a relevant but creative way.

Art

In a new course at Cardiff University entitled ‘The Social Context of Religion’, instead of introducing students to the ideas of Durkheim through established sociology of religion textbooks (or even *The Elementary Forms of Religious Life* itself), instead I shall be using the commentary on Durkheim’s ideas that were linked to the major 2001-2 UK touring exhibition ‘Sacred and Profane’³. The exhibition sought to explore society’s apparently contradictory tendencies towards sacrilegious transgression and spiritual transcendence, via photography, sculpture and installation. The artists juxtaposed powerful themes of physical and spiritual, good and evil, death and sex, repulsion and desire and through these they tried to explore the idea that perceptions of the profane might be integral to understanding of the sacred.

Like Deacy, who suggests that perhaps movie theatre might be performing a religious function, the curator of the ‘Sacred and Profane’ exhibition poses the question as to whether “art has become the new religion, the gallery a church, and the artist the sacred messenger who explore for us the fundamental questions of life?” (Milne 2001 p 13). In reply, one of the exhibitors, Marc Quinn, presents an illuminating answer: “I think art might ask such fundamental questions...the artist has the time and energy to concentrate on things which others only contemplate in passing because they have to deal constantly with the banalities of life” (Quinn 1999). Even more reason then perhaps to explore the works of film-makers and artists in teaching theology and religious studies today. Through the artistic imagination of creative photographers, sculptors and artists working through diverse media, students might come to see the possibilities for recognising the extraordinary within the ordinary, the divine within the prosaic. The home page of the ‘Sacred and Profane’ web site offers the tantalising

³ <http://www.sacredandprofane.org.uk/home.html>

thought that “when artists put the grubby, the everyday, next to the wonderful, the hallowed, the sacred, strange things happen”. To what extent dare we employ unpredictable media in our teaching, for fear of ‘strange things happening’? The artists in *Sacred and Profane* are not creating illusions to convince us to believe in God, as were the early painters of the Christian faith. Instead they are forcing us to think hard about difficult subjects, and they do this by using materials that we know so well that we can’t help having an immediate gut reaction. Initiating a ‘gut reaction’ in this way can be a powerful teaching tool in helping students to become critical and reflexive, especially where they are challenged to develop “a deeper understanding of their own tradition or perspective” and to “challenge their own tradition and become self-critical” (Theology and Religious Studies Benchmarking Group, *Theology and Religious Studies: Mapping the Subject*).

In his paper at the Gregynog conference, Chris Deacy cited Walter Capps, author of *Religious Studies: The Making of A Discipline* who noted that scholars are often “taken by surprise by hosts of topics that are not within the range and focus of that at which they have been trained to look”(Capps 1995 p 342). Capps argues that religious studies has tended to proceed along well-established, repeatable lines of inquiry, and the classification of identifiable patterns, essences, natures and structures. By concentrating attention on the methodologically accessible and the duplicable, other more esoteric realities may be missed. “Why is the mentality of the technician sanctioned in religious studies while the attitude of the artist is treated with suspicion?” (ibid). He suggests that many important subjects are “overlooked, underestimated, or deliberately shunned because they do not qualify for high-priority assessment given their place within the world from which intelligibility is being approached and by which it is also measured” (ibid).

The use of non-traditional, and especially audio-visual teaching resources is one way out of this impasse. As Deacy argued in light of Capps’ comments, although a course such as ‘Holy Hollywood: Religion and Film’ should not necessarily be on the syllabus of every degree programme in Theology and Religious Studies, its inclusion would not be wide of the mark. Such a course would give students new avenues for thinking about issues such as death, hope, and human meaning. “Theologians and Religious Studies scholars are being faced with a new challenge—one which involves coming to terms with the fact that people’s hopes, aspirations, fears and anxieties, as traditionally expressed through traditional religious institutions and agencies, are being

articulated through new vehicles of expression and outside of traditionally demarcated boundaries of religious activity”. If Deacy is right, it becomes beholden upon contemporary teachers of the discipline to engage with this reality and find new ways and technologies of bringing it alive to students.

Within the University of Wales, there is therefore a burgeoning expertise and interest in creative teaching that is breaking down the classroom walls by allowing ‘secular’ media and methods to inspire student-centred learning. This article has been written in order to share some of this good practice, but prior to any conclusion, it is perhaps necessary also to reflect on the pitfalls and limitations of ‘non-traditional’ resources for teaching in Religious Studies, alongside the opportunities and possibilities. In addition to the potential for technological hitches and mishaps, where do the dangers of simply ‘entertaining’ students via contemporary media outweigh skilful approaches that inform and connect with the experience of those we are trying to teach? What criteria might inform a decision to favour a non-traditional or multi-media resource as opposed to a more conventional teaching method? Clearly the answers to these questions will be shaped to some extent by the area in which one specialises and the range of resources available, but some of the following points are perhaps worth considering.

- Over-enthusiasm for teaching via popular culture needs to be tempered and we need to be cautious of over-reliance on wholly passive or wholly active teaching strategies. Students will vary in their receptivity to different methods. The findings of research conducted by Mike Fearn at Bangor on personality and perceptions of teaching methods confirm the necessity for lecturers to use a broad range of techniques and devices.
- As our classrooms become more multi-faith and international, we perhaps need to consider the sensitivities of students to more explicit sexual or violent themes in film, art, or music, and the potential for causing unnecessary offence.
- There is a danger of over-entertaining students with constant activity and discussion, to the point that they lose traditional skills of taking notes and following a spoken argument and critique.
- However, the use of non-traditional resources, such as listening to a popular song or watching clips from a movie, is a means of giving students an ‘experience’ of religion without them actually *doing* anything that some might find uncomfortable in a classroom context, such as experimenting with yoga or chanting (though

some degree courses in religious studies in the USA do follow this 'hands-on' path!). Experiential learning is likely to prove a much more powerful, memorable and 'active' way of understanding and acquiring new information.

- The religious 'literacy' of students is enlarged through the use of diverse, non-traditional teaching resources as they become proficient in identifying the ways in which religion is articulated across historical periods and in different cultural settings.
- The use of the various media of popular culture in teaching further pushes at the (necessarily) fluid boundaries of Theology and Religious Studies as a subject area, and thereby engages students in the process of debate about, and construction of, the nature of the discipline and dialogue between different traditions and approaches.
- The use of non-traditional resources for teaching can be used to enlarge student understanding of the myriad forms, qualities and manifestations of religion. For example, through an analysis of the lyrics in some popular music songs, religious imagery, critique and language, previously 'taken for granted' become identifiable and they see religion "out there" in contemporary life. That there might be differing interpretations of what song lyrics or film themes mean deliberately takes students beyond 'A' level mode by showing them how differences of interpretation have characterised religions throughout history.
- Some students (especially perhaps mature students) are likely to bring considerable prior knowledge of some kind of popular culture to their learning in Theology and Religious Studies. The use of familiar film or music in class allies previous knowledge and interests with new learning, and would be likely to build the confidence of students who may struggle with 'traditional' teaching methods and approaches. Furthermore, through their knowledge of popular culture (probably more extensive among younger students than their teachers), the power balance of the classroom becomes more evenly balanced as teachers learn from students.
- Teaching via the media of popular culture lends itself to alternative means of assessment, e.g. placing a review or critique of a film on a web site.

Using diverse media, especially those derived from popular culture, seems an entirely appropriate way of responding to the many avenues of religious expression and performance in contemporary society.

Furthermore, as higher education becomes less elite, the use of popular culture is a way of meeting the interests of a new generation of students. If eclecticism is the dominant hallmark of religious believing and belonging, then so too our teaching methods need to draw from a variety of sources.

In later editions of his classic *The Religious Experience of Mankind* the late Ninian Smart added a seventh component to his ‘dimensions’ of religion. In addition to the social, the mythological, the experiential, the ritual, the doctrinal, and the ethical aspects of religion, he went on to add ‘the material’. Were he still alive today, I wonder whether he might have gone on to add an eighth dimension, perhaps along the lines of ‘the virtual’ or ‘the digital’?

Bibliography

- Bruce, S. 2002, *God is Dead: Secularisation in the West*, Oxford: Blackwell.
- Bunt, G. 2000, *Virtually Islamic: Computer-mediated Communication and Cyber Islamic Environments*, Cardiff: University of Wales Press.
- Bunt, G. 2001, *The Good Web Guide to World Religions*, London: The Good Web Guide.
- Capps, W. 1995, *Religious Studies: The Making of a Discipline*, Minneapolis: Fortress Press.
- Casanova, J. 1994, *Public Religions in the Modern World*, University of Chicago Press.
- Dawson, L. and Henneby, J. 1999. ‘New Religions and the Internet: Recruiting in a new public space’ *Journal of Contemporary Religion* 14: 17-39.
- Deacy, C. 2000. ‘Redemption and Film: cinema as a contemporary site of religious activity’ *Media Development* 1:
<http://www.wacc.org.uk/publications/md/md2000-2001/deacy.html>.
- Deacy, C. 2002. ‘Integration and Rebirth through Confrontation: *Fight Club* and *American Beauty* as Contemporary Religious Parables’ *Journal of Contemporary Religion* 17: 61-73.
- Milne, J. 2001. ‘Sacred and Profane: Contemporary Expressions of the Spiritual’. Sheffield: Sheffield Galleries and Museums.
- Ortiz, G. and MARSH, C. 1997. ‘Explorations in Theology and Film’. Oxford: Blackwell.
- Quinn, M. 1999. ‘Marc Quinn, “Klaren was es Heibt, ein Lebendiges, Materielles, Wesen zu Sein”’ *Kunstforum International* 148: 182-193.

Report:
**Third Colloquium on Learning and Teaching
Support in Theology and Religious Studies***
Theme: BA to MA Student Progression

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Introduction

The third PRS-LTSN Theology and Religious Studies Colloquium addressed the question:

As departments teaching Theology and Religious Studies attempt to attract an increasing number of taught postgraduate students, how can a wide range of modules be sustained with existing, or declining, resources?

In answering this question, an obvious way to achieve a balance is to integrate postgraduate students with undergraduates, especially into undergraduate modules running at level three. This is a course of action that many departments have historically followed, or are now choosing to adopt. However, justifying this practice in the face of Quality Assurance Agency (QAA) guidelines can be difficult, whilst maintaining a distinction between what constitutes Masters level work and what constitutes Bachelor level work. If the two groups are learning the same material together, to do so requires at the least additional measures and skilful clarity of definition of assessment criteria; especially if the differentiation is *only* made through separate learning outcomes and assessment methods.

It was clear from the responses of participants in the colloquium that a degree of stealth—from semantic through to practically applied

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levels—is being employed to work round this issue; mainly in the presentation of Masters programmes to prospective students and, importantly, to external evaluators (QAA) or other stakeholders. There are, however, divisions in the attitudes, approaches and concerns of teaching staff that are due, in part, to the overall character of the institutions in which they work as well as the demographics of the students that are attracted to their courses. In the absence of any real consensus, relatively few conclusions were reached, although some example models were proposed that might be useful to consider.

Several participants stated they were currently in the process of revising and re-writing modules and course formats, some of these efforts being undertaken in line with the National Qualifications Framework. The colloquium was therefore a timely event that linked together professional experience and knowledge, current departmental activities and future planning in a productive, yet informal, manner.

Mode of Study and Postgraduate versus Undergraduate Numbers

The postgraduate community within Theology and Religious Studies (TRS) departments has, arguably, always been highly diverse, even prior to recent formal Widening Participation initiatives. Building upon this diversity to ensure continuing recruitment, is now the central aim that TRS departments have to address, in considering the kinds of programmes and provision they are able to offer. This is diversity not only in terms of the *kind* of students that Masters TRS programmes attract—varying in age range, educational and social/cultural background, motivation for continuing study, intended destination after study etc.—but also the mode of learning. For example, some departments cater predominantly for full-time postgraduate students, while others deal mainly with part-timers who are often working in full-time jobs as well as studying.

Equally, the balance of student numbers can vary from department to department with some recruiting small numbers of postgraduate students compared with undergraduate enrolment. This raises the question whether, for the sake of efficiency and cost, it is feasible to run *separate* Masters level modules while there is a more complete and wide-ranging BA modular system available. It should follow that the more postgraduate students there are studying within a department, the more feasible it would be to run exclusively Masters level modules and courses. Of course, the situation is not as black and

white as this, since some postgraduate students request registration for undergraduate modules to supplement the content of their programme or to access support for skills, or background information they lack and cannot obtain elsewhere from their own programme.

These practical concerns are key issues in the progression debate as they determine the amount of freedom a particular department has in constructing its taught Masters courses. For some departments an integrated model, where postgraduates and undergraduates are taught together, is an option that can be explored without undue pressure. Other departments, for a variety of reasons, may not have so much choice in determining the format their courses will take, with integration being a necessity.

The questions that remain though are, given a free choice and being unhindered by costs, time constraints, and the recommendations of bodies such as the QAA, what would departments *choose* to do? Are there benefits to running undergraduate and postgraduate courses together that transcend practicalities? Is integration an educationally sound practice with benefits for learners? These questions were not tackled by participants, though whether this is because it is felt that there are no benefits to shared learning of this kind is unclear; would choice always lead to distinct and separate learning for MA/BA students?

Assumptions: Who is a Masters Level Student?

Even whilst acknowledging the diversity of postgraduate TRS communities, it is evident that there are certain assumptions about what it means to be a Masters level student and it must be considered how these assumptions affect provision and learning development once an individual is enrolled upon a programme.

Eligibility for MA level is contingent upon certain factors, but the most basic of these is a first degree. Although institutions may establish grading boundaries for potential applicants, in that a 'good' honours degree is required to be considered for a postgraduate course, this need not necessarily be a real indication of ability, or indeed of suitability, for MA study. It was pointed out by several participants that, in their experience, some students enrolled on MA courses are at the same level of achievement as mediocre undergraduate students and are not fulfilling the expectations and demands of postgraduate work. The converse can also be true where high level BA students reach a level on a par with a mediocre MA student. The actual difference between the two

levels can be very difficult to draw and is reliant mainly upon the achievement and output of the students.

There may be varied reasons for perceived ‘failure’ if students do not appear to achieve MA level quality output, ability being only one. It must also be remembered that students choosing to pursue a Masters programme in a TRS subject are not always required to have a first degree in a cognate discipline. Consequently, they have to gain ground in unfamiliar territory, because of the expectation that they acquire and refine (new) skills with which their peers are already technically adept, while simultaneously keeping up with the requirements and content of the course. These students, in effect, have to learn *more* than their peers who have come from a cognate background and this raises questions about how best to support these learners and ensure they become skilled as quickly as possible without abridgement of their learning to the point of detriment.

While these students may benefit from being taught with undergraduates who are still in the process of acquiring skills through their studies, socially, as a learning peer group, this may actually be an unhelpful environment where it becomes difficult not only for teachers, but also for the learners themselves to distinguish whether they are operating on a Masters, rather than a Bachelor, level.

Differentiating MA from BA Level

The differences and similarities between what constitutes MA and BA levels, as can be seen, are hard to pin down in real terms when faced with differing student abilities. Students will work to their own level and it is clear that what ‘feels’ like MA level to one student will feel completely different to another if assessment and achievement are viewed as relative. The colloquium focussed upon practicalities proposing that differentiation occurs in the core emphasis of the two levels of study:

Undergraduate/BA level: a focus upon ‘learning to learn’, the acquisition of skills and a broad knowledge of the subject area.

Postgraduate/MA level: a focus upon the application of skills and analysis, development of in-depth detailed knowledge.

Participants felt that on occasion the distinction between the two levels appears almost artificial if students are integrated together, leading to concerns that a BA can ‘look’ like a dumbed-down version of the MA.

The MBA Model

In an attempt to clarify these assumptions and to consider the reasons why students may enrol on Masters programmes, and what defines this level over and above undergraduate degrees, the Master of Business Administration (MBA) benchmarking statement was considered. This was chosen as it is an example of one of the first transparent models tackling the issue outlined above. It is perhaps an extreme case in that both money and recruitment are generally no object for this programme, which means that 'streaming' learners according to their differing needs and abilities is a workable solution in catering for diversity.

The MBA benchmark identifies three kinds of learners:

Specialist—career entry level: candidate taking the MBA as a preparatory step. Usually recent graduates from cognate subject areas.

Specialist—career development: candidate taking the MBA to further/enhance their opportunities in a field in which they are already experienced and working. Usually graduates from cognate subject areas but may have been away from learning for some time.

Generalist—career entry level: candidate taking the MBA as a preparatory step. Usually recent graduates from *non*-cognate subject areas.

The MBA convenors are able to create opportunities for all three types of learners to gain the experiences and outcomes that they are seeking. As consumers in the widest sense of the word, MBA students can make demands upon learning and teaching that other subject areas cannot cater for with quite the same openness and flexibility.

For TRS, as identified above, it is the Generalist types of students that pose the most difficulties, although all three types of student are apparent within MA TRS courses. TRS departments are frequently rather small in comparison to other subjects so to be able to 'stream' students throughout their course after the mode of the MBA model is impractical. There is a possibility however of streaming at the point of entry to a course and for a fixed period of time.

Entry level, Induction or Foundation Skills Courses

To bring these Generalist students up to the standard required of them—the leaving off point for MA level that students from cognate subject areas will be expected to commence from—the idea of induction, or foundation skills courses was considered. A number of institutions are

already employing these modules to induct non-standard and, in particular, adult learners into full degree programmes.

These courses are concerned with improving learners' confidence levels by equipping them with the skills to negotiate pathways through their continuing education. This ethos can be useful for the Generalist student as well; although they do not require as much emphasis upon building confidence in their ability to learn *per se*—they are recent graduates after all—they may need a confidence boost in being encouraged to believe that they can quickly gain the competency required to be working at the higher level.

Some undergraduate degrees now contain a 'Level Zero' component, a preliminary section prior to commencing level one studies and this may be something that could be considered for MA programmes too. The difficulty with this is that Masters courses are very brief in comparison to BA courses, so for those postgraduate students attending UK institutions from overseas on fixed term visas it may be impractical to stretch their available time by requiring attendance on additional preliminary courses; unless, of course, this component of the programme can be conducted electronically, or by correspondence prior to student arrival. This tactic also brings with it financial considerations. Students at all levels are increasingly self-funded, or reliant upon award making bodies, so to increase the duration of a course simultaneously increases tuition fees, living expenses and material/resource costs.

The colloquium considered whether these foundation courses could indeed be a prerequisite for entry onto MA programmes. One option could be that students' performance would not be assessed, attendance being an outcome in its own right. However, this does not necessarily *guarantee* that students will gain anything from simply attending, and it was felt that some proof of development would be needed. It was also queried whether a foundation course should be a requirement for *all* potential MA candidates regardless of experience or qualifications, or only for certain students who might appear to lack the background of knowledge and skills the programme demands. While some in this latter category of students may easily be discerned there are bound to be individuals who slip the net, as locating deficiencies in skills cannot always readily be determined by reading a student's application form; it is something that often only comes to light after a student has been producing work for some time and by this point a foundation module may well be over, or nearing completion. On the other hand, if all students are required to take a foundation module, very experienced

candidates may well feel that they have been patronised by having to refresh themselves with skills with which they are competent.

Measurable competencies—Languages as an example

Fluency in a language, for example, is much easier to determine than many other skills; it has measurable competencies and commencement for further learning can only take place from the point of that competence. This kind of practical skill is surely legitimate for the integration of BA and MA students. Running an MA beginners course in Sanskrit, for example, is not going to differ in any substantial way from conducting a BA beginners course; initially, the acquisition of language will be the same for every beginner, although those who are experienced in other languages may well find the process much easier than some of their peers.

If this is the case, it was asked why this should not apply to other packages, with BA/MA integration being an opportunity for students to learn from a baseline, with bifurcation occurring when skills have reached the point of application, and scrutiny for assessment becomes necessary. This is the method that has very often been followed where postgraduates and undergraduates *are* integrated; it is by reference to a practical skill such as language competency that integrated courses appear valid.

The question that arose from this was whether there are any assessment procedures that are specifically for MA level, or that are at least more suitable at MA level than at BA level; this was left unanswered and is a point for further discussion. At this point the debate tracks back to the question of whether *simply* assessing MA students in a different way from BA students actually constitutes a different and ultimately higher level of learning and expectation.

The solution, or at least the justification for differentiated assessment, rests on placing output from students over and above the input that they make, or the format through which they receive their learning:

Output—must be at Level 4 (MA level)

Input—all paths are valid as long as they lead to the same place i.e. Level 4 *output*. This allows MA students to take undergraduate modules as part of their studies where needed or relevant.

The keys words are *need* and *relevancy* where measuring skills are concerned. Although in small departments, or those with small numbers of postgraduate students, attendance on undergraduate modules is little

to do with *student* needs but rather those of the department instead, in making their budget and provision stretch to accommodate as many students as possible.

Working with the QAA

In discussion it was clear that the colloquium participants were, by and large, happy with the integration of MA and BA students and are chiefly concerned with ensuring that students receive the best value educational package possible within departmental budgets and opportunities. However, it is the interpretation of the parameters of the QAA guidelines that appeared to be causing some confusion. The QAA requires teaching professionals, course convenors and department heads to adequately justify, evaluate and reflect upon why integration is a successful means of programme delivery that ensures MA students are working and graduating from the correct level. In some instances this produces ‘fast talking’ when under pressure to defend certain actions, and the participants did feel that occasionally they *were* being defensive when under external scrutiny.

It was felt that the QAA’s stance on integration is unclear and resulted in some departments having to justify instances of integration on a case by case basis, pointing to assessments and learning outcomes as the marker of success for individual or small numbers of MA students.

A greater degree of flexibility in the QAA’s approach to integration would be helpful as would an increase in the number of available module credits that MA students may take within undergraduate programmes. It would appear that teaching staff within TRS are uncertain of the extent the QAA understands and appreciates the particular circumstances of TRS and the character of the discipline as a whole, which inevitably influences the options and strategies open to departments in catering for both undergraduate and postgraduate students.

The feeling was that providing a quality experience using the option of integration must be predicated on the acceptance that learning at all levels is not about where a student commences from necessarily, but the point they reach, both in terms of their eventual grade, and in terms of moment at which students and their tutors feel they have ‘hit their stride’. It must be asked however, whether this is a helpful attitude in light of Widening Access and Participation.

Widening Access, Widening Participation and ILPs (Individual Learning Plans)/ PDPs (Personal Development Plans)

Though it did not occur in the course of the colloquium, it is worth mentioning the impact that the Widening Access and Participation agenda can have upon the progression debate. MA programmes in TRS, as has already been stated, carry with them a natural diversity and are sites to which departments can easily add a more transparent Access/Participation aspect for recruitment purposes. It has been greatly feared that with the increasing diversity within H.E. in general widespread ‘dumbing’ down of degree programmes will result, something that has also already been mentioned in this article although under different circumstances.

The integration being considered here is that of combining students from two different levels of study together and it is often assumed that the same is true of students enrolled through Widening Access or Participation: that they are being integrated with the mainstream and begin at an automatic disadvantage. The tendency towards this view is inevitable in a success driven system, where success is equated with top level grades and degree classifications, and it was clear from the colloquium that there is a belief that students can and must attain a fixed standard of learning and achievement that identifies them as being correctly placed within a hierarchy of achievement levels.

While this is essentially correct, especially for postgraduate degrees that are basically intended for an ‘elite’ (no matter how spurious a concept this may be), there is still the possibility for students who have fulfilled the fundamental requirements for entry into certain programmes to be working and achieving different levels within that programme without those who are falling toward the lower end of the grading system necessarily being deemed to be ‘failing’. But why then have a grading system at all? Not all students are capable, no matter how well they apply themselves, or how well supported they are by staff, or how well served they are by the educational content of courses, of achieving top grades and so their successes must be seen as relative. On paper, a pass at distinction level for an MA is a fantastic achievement, but someone who barely scrapes past the lowest point of the pass boundary may have cause for equal celebration; the recognition of this is something that is reliant upon appraising students in context as individuals.

The integration of BA and MA students, if students are seen as contextualised individuals, can be held up as an example of equal

opportunities and as sympathetic to Widening Access and Participation. An Individual Learning Programme (ILP) or Personal Development Plan (PDP) may be useful in developing this justification as a legitimate strategy for choosing integration. ILPs can be drawn up early on in an MA programme with students assisted in the identification of skill strengths and weaknesses and competencies requiring development. They can then be registered for courses that will best address these needs; the tacit acknowledgement behind this is that within a group of students there will be a broad range of abilities, and even within an individual's learning programme there will be differences in the level they are working at from subject area to subject area. This is similar in setting to the teaching of core skills in schools, where a student may be in different ability groups for different subjects with the possibility of progression once a certain level is reached. In the case of a language skill, progression may be the result of passing an examination at a certain grade. On a reading scheme it may simply be the completion of a range of books. At MA level in TRS an equivalent example would be a student who wishes to study an MA in Celtic Christianity yet knows nothing about the pre-existing Celtic religions, or the conversion of Europe and the Near East to Christianity by the Romans—if there is an undergraduate module running on this subject it would be helpful for this student to participate in it and receive credits for acquiring the knowledge and background they lacked.

In ILPs and PDPs the emphasis is upon giving the student the best opportunity for success in whatever form that may take. This is a basic restating of the solutions and ideas already suggested by participants in the colloquium. It is another example of how creative planning and attention to wording can impact upon the debate. However, this is still only tackling *need* and *relevancy* issues, it cannot assist greatly in circumstances where postgraduates are taught with undergraduates not because it is good for them, but because that is the direction their programme takes of necessity.

Case Studies

Some participants offered examples both of mass integration and of integration on an individual basis.

The undergraduate programme offered by one TRS department commences with a foundation course at level one followed by rotating modules for the subsequent two years of the degree with level two and level three students being taught together. A greater number of modules

can be offered. Assessment for the shared modules is at different levels, but is of the same type and format.

A clear distinction was made between the ability and level/status of students working in integrated courses. The latter condition is technical, even chronological, and defines groups of students from each other but is not a learning condition in the same way that ability is. Progression in level/status is not wholly reliant upon ability and achievement, ability will find its own level regardless of the technical level of students and one need not be indicative of the other.

The MA programme fits round the undergraduate programme at the point where shared modules commence. There are separate modules for MA students, but those who elect to register for undergraduate courses are advised that they are entering a *reading* course. Attendance at lectures is not compulsory, as it is for undergraduate students, in order to ensure that MA students' learning outcomes do not appear to be reliant upon attending and participating in lectures. The information and activities available through the lecture series are seen as an enhancement or addition to their self-directed study and eventual assessment, which differs from the assessments given to undergraduate students registered for the same module. This scheme has been very successful and it has been found that, for the most part, MA students do attend the lectures.

In another department an individual MA student requested registration for a level one module, which was allowed on the grounds that the student would treat it as a pedagogical case study. The assessed piece at the end of the course covered the teaching methods and considerations employed to convey a particular topic to undergraduate students with the information, knowledge and skills taught through the course being a tacit addition to the MA student's repertoire. This ensured both that the assessment was of the correct level for the student, and that they had attained suitable learning outcomes in the process.

Conclusion

It would appear that the colloquium participants are caught between wanting to preserve the integrity of a Masters degree while at the same time appreciating that practical barriers—such as inexperience and differing abilities—can mean that some students appear not to be attaining the targets that that degree level demands. While they are uncomfortable with this as academics, they are sympathetic with this as teachers and their concern lies in trying to strike a balance between the two.

For those who are involved in juggling finances, recruitment, or designing courses and modules, integration is not strictly a problem as it allows departments to offer a breadth of opportunities for students. “Breadth is the new depth,” as one participant said. But is this really the case if creative assessment techniques drive integrated MA students to locate depth for themselves and take greater control and responsibility for their learning? MA students may end up with a greater choice of modules, but the output they produce is still reliant upon their motivation. If their motivation is good, but their ability appears to let them down, what then?

Left to their own devices, departments would continue to integrate students without undue concern. It is the prospect of evaluation and assessment of quality, in terms of teaching and standards, by external agencies such as the QAA that contributes to a think-tank of strategies for departments. Many of these are not strictly new strategies, but are instead re-worded and re-structured versions of already established practices. This is not an underhand kind of stealth in that departments are refusing to change perfectly good systems and are finding ways to avoid doing so at all costs, but is instead a recognition that departments need to reflect on why they have structured degrees in certain ways and what students get out of it, making changes only where necessary. This kind of stealth shows management structures that are thinking ahead. It is about self-appraisal and evaluation of provision before a formal evaluating body ever sets foot in a building, which can only be a positive, if time consuming, activity.

It is clear that this is an issue that needs further discussion, and it seems certain that there will be future events addressing BA and MA progression drawing on some of the revised courses and modules on which participants are currently working. Several participants requested further guidance on working with the QAA and this will also be something that PRS-LTSN supports through this journal and the website, <http://www.prs-ltsn.ac.uk>.

