

Enhancing practice

Research-Teaching Linkages: enhancing graduate attributes

Arts, Humanities and Social Sciences

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Research-Teaching Linkages: enhancing graduate attributes

Arts, Humanities and Social Sciences

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Preface

The approach to quality and standards in higher education (HE) in Scotland is enhancement led and learner centred. It was developed through a partnership of the Scottish Funding Council (SFC), Universities Scotland, the National Union of Students in Scotland (NUS Scotland) and the Quality Assurance Agency for Higher Education (QAA) Scotland. The Higher Education Academy has also joined that partnership. The Enhancement Themes are a key element of a five-part framework, which has been designed to provide an integrated approach to quality assurance and enhancement. The Enhancement Themes support learners and staff at all levels in further improving higher education in Scotland; they draw on developing innovative practice within the UK and internationally.

The five elements of the framework are:

- a comprehensive programme of subject-level reviews undertaken by higher education institutions (HEIs) themselves; guidance is published by the SFC (www.sfc.ac.uk)
- enhancement-led institutional review (ELIR), run by QAA Scotland (www.qaa.ac.uk/reviews/ELIR)
- improved forms of public information about quality; guidance is provided by the SFC (www.sfc.ac.uk)
- a greater voice for students in institutional quality systems, supported by a national development service - student participation in quality scotland (sparqs) (www.sparqs.org.uk)
- a national programme of Enhancement Themes aimed at developing and sharing good practice to enhance the student learning experience, facilitated by QAA Scotland (www.enhancementthemes.ac.uk).

The topics for the Enhancement Themes are identified through consultation with the sector and implemented by steering committees whose members are drawn from the sector and the student body. The steering committees have the task of establishing a programme of development activities, which draw on national and international good practice. Publications emerging from each Theme are intended to provide important reference points for HEIs in the ongoing strategic enhancement of their teaching and learning provision. Full details of each Theme, its steering committee, the range of research and development activities as well as the outcomes are published on the Enhancement Themes website (www.enhancementthemes.ac.uk).

To further support the implementation and embedding of a quality enhancement culture within the sector - including taking forward the outcomes of the Enhancement Themes - an overarching committee, the Scottish Higher Education Enhancement Committee (SHEEC), chaired by Professor Kenneth Miller, Vice-Principal, University of Strathclyde, has the important dual role of supporting the overall approach of the Enhancement Themes, including the five-year rolling plan, as well as institutional enhancement strategies and management of quality. SHEEC, working with the individual topic-based Enhancement Themes' steering committees, will continue to provide a powerful vehicle for progressing the enhancement-led approach to quality and standards in Scottish higher education.



Norman Sharp
Director, QAA Scotland

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Foreword

This Enhancement Themes project - Research-Teaching Linkages: enhancing graduate attributes - has over the last two years asked institutions, departments, faculties, disciplines, staff and students to reflect on the intended outcomes of HE, and has examined how links between research and teaching can help develop 'research-type' graduate attributes. The 'attributes' in question are the high-level generic attributes that are necessary to allow our graduates to contribute to and thrive in a super-complex and uncertain future where the ability to question, collate, present and make judgements, quite often with limited or unknown information, is increasingly important; key attributes, it is argued, that are necessary for our graduates to contribute effectively to Scotland's civic, cultural and economic future prosperity.

The Enhancement Theme adopted a broad, inclusive definition of research to embrace practice/consultancy-led research; research of local economic significance; contributions to the work of associated research institutes or other universities; and various types of practice-based and applied research including performances, creative works and industrial or professional secondments.

The Enhancement Themes comprise one sector-wide project and nine disciplinary projects: Physical sciences; Information and mathematical sciences; Arts, humanities and social sciences; Health and social care; Business and management; Life sciences; Creative and cultural practice; Medicine, dentistry and veterinary medicine; and Engineering and the built environment. The aim of the projects was to identify, share and build on good and innovative practice in utilising research-teaching linkages to enhance the achievement of graduate attributes at the subject level. The sector-wide project comprised an ongoing discussion within and between Higher Education Institutions, involving staff and students reflecting on and exploring research-teaching linkages, how they can be structured and developed to achieve 'research-type' attributes, and how students are made aware of the nature and purpose of these in order to fully articulate and understand their achievements as graduates.

Research-Teaching Linkages: enhancing graduate attributes has provided the sector with a focus for reflection on the nature and outcomes of HE - along with the opportunity to develop a rich array of resources and supportive networks to add to the student learning experience and enable our graduates to contribute effectively to Scotland's future.

Professor Andrea Nolan

Chair, Research-Teaching Linkages: enhancing graduate attributes
Vice-Principal Learning and Teaching, University of Glasgow

I Executive summary

This project for the Quality Enhancement Theme of Research-Teaching Linkages examined the experience of academic staff within subject areas designated as arts and humanities or social sciences. Perceptions of staff within these disciplinary areas were explored through the development of practice case studies. These case studies were constructed by the project's research assistant, Mel McKendrick. Mel undertook semi-structured interviews with 15 academics at institutions across Scotland and received a voluntary submission of a solicited example of practice (in which the staff member filled in a template). The disciplines covered were sociology; history; literature; theology; psychology; public policy; classics; and education. Additional information came from discussions in discipline-oriented workshops led by the Project Director, Vicky Gunn, and both generic and discipline-specific educational literature.

Key findings - staff perceptions

- Staff were enthusiastic about implementing research-type activities within their courses.
- Staff believed in the reciprocal nature of the relationship between staff and students. For many staff, research informed and engaged students, but students also informed research.
- Staff differed on their views about when to introduce opportunities for research-teaching linkages. There was a division between:
 - those who suggested that the process of progression meant that core skills were a better 'fit' in levels 1 and 2, with honours as the focus of research-teaching linkages and
 - those who saw such linkages potentially running throughout the programme from level 1.
- Staff were not ideologically opposed to the notions of generic skills or graduate attributes, but tended to struggle in the face of quality assurance language or phrases perceived as jargon.

Key findings - practical issues

- Staff noted a lack of continuity of practice between one level of study and another as well as between one course within a programme and another. In these cases the identification of systematic exposure to research-led practices might be complex, but should be considered as of value.

Staff noted key implementation issues as:

- managing the heightened anxiety of students who found research-led learning environments unfamiliar
- clarifying course objectives and expectations
- timetabling constraints.

- Staff acknowledged that there was little in-depth evaluation of courses. Where evaluation had taken place, it suggested dislike of and resistance to the unfamiliarity of some of the processes, followed by recognition of the benefits once the course was completed.
- Most of the staff interviewed believed that students received the research components with enthusiasm, but others were less convinced.
- In two cases there were perceived increases in exam scores since the introduction of the initiatives.

Recommendations

The following recommendations were drawn up from the project team's experience of discussing the case studies at dissemination events. They therefore reflect not just the conclusions we drew from the interviews we undertook and the literature we used, but also participants' responses to the materials we presented.

Institutional level

- Explicitly link and, where possible, integrate the variety of learning and teaching imperatives to help staff to manage 'imperative fatigue'.

Institutional and disciplinary bodies

- Reward and recognise 'champions' at the same time as offering heads of department development aimed at supporting transfer of capabilities from champions to other staff members (for sustainability).

Institutional-level academic staff development

- Encourage debate about practice among academics from different disciplines.

Departmental level

- Use programme review to identify and map attributes across the curriculum. Without this, experiences can be lost across the levels of study and it might be difficult to identify criteria for progression.
- Recognise the need to redesign assessment processes in the light of changes to programme/course design. For advice on redesigning assessment processes, the Re-engineering Assessment Practices (REAP) project website is useful (www.reap.ac.uk).
- Use postgraduates in connection with their research (not just as base-level teaching assistants). If this approach is taken, it is necessary to offer the postgraduates a thorough induction. Institutional learning and teaching centres can normally offer assistance in induction design.
- Encourage debate between staff and students, from level 1, about the value of the research environment and activities occurring within the department. Consider, for example, that the learning environment is suffused with research content, approaches and culture from level 1. Students at different curricular levels could be invited to attend research seminars delivered by their staff as well as being involved in other research-focused activities undertaken by active researchers in the discipline. Also, survey courses can be designed where staff

interests are explicitly represented through different sections of the survey and linked to seminars which students can opt to attend. The seminars would be led by particular members of staff researching in the chosen topic. This allows for level 1 and 2 students to have access to explicit research culture.

- Redesign evaluations to value research-teaching linkage aspects of the student experience. Evaluation processes are a potential vehicle for engaging with students in the discussion about awareness of and engagement with research processes and practice.

Departmental and disciplinary bodies

- Recognise the real and perceived benefits of research-teaching linkages in an undergraduate environment which also needs to grapple with notions of employability.
- Raise staff's confidence in their activities as having value outside the academic world. Currently, the way in which research outputs are 'measured and valued' within the university sector can result in academics only focusing on research as an inter-university responsibility. Professional and disciplinary bodies could do more to raise the profile of knowledge transfer, especially recognising that the culture of research informs public interest in the disciplines.

Individual practitioner level

- Formally recognise students' input to research (through footnotes, acknowledgements, or where appropriate as named authors) and let them know this has been done. It is perhaps an oversimplification to perceive student input into our research as minimal. Our teaching environments are places where we clarify, if not construct, some of our ideas, and some students are active (if informal) participants in this with us.
- Subject networks through the Higher Education Academy offer some useful case studies. These are useful resources to start with.
- Students need reassurance and fast feedback when faced with unfamiliar activities, especially ones that have a bearing on the grades they might receive. When designing research-type activities, try to establish criteria upfront for what it is hoped students might achieve, and factor in time for rapid feedback. Advice on how to design and give feedback can be found at: www.reap.ac.uk
- Where possible and/or appropriate, make links with other academics involved in learning and teaching imperatives (particularly those implementing employability strategies or enhancement projects such as the 'first year experience' and curriculum redesign), so that good practice can be cascaded as part of an integrated approach to enhancing learning.

2 Introduction

Reading this document

This document represents one output of the Quality Enhancement Theme of Research-Teaching Linkages: enhancing graduate attributes. It has been designed with more than one audience in mind, and within its different sections has attempted to incorporate features that relate to those different audiences. Thus sections 2-5 relate primarily to the project outcomes of use to educational developers and arts, humanities and social sciences academics looking for approaches to enhance their practice, and other non-discipline-specific readers who may wish to compare the findings of this project with those of other projects under the Theme. These sections are styled more like a report, using summation and bullet points for ease of use. Section 5 comprises in-depth case studies, which require more time for reflective reading but are nonetheless intrinsic elements of the report.

Section 6 is designed with a more discursive-oriented audience in mind. It acts as an introductory discussion of the evidence from the interviews undertaken by the team. In tone, it leans more towards an essay than a report.

Section 7 explores project conclusions and recommendations for the future, and returns to report format.

There were more case studies and discussion than we could hope to fit in this document. As part of the project, the team established an updateable website where further case studies, resources and discussion can be found (<http://rtlinks.psy.gla.ac.uk>).

For an invaluable companion to this publication, see the work of Alan Jenkins, Mick Healey and Roger Zetter (2007) *Linking teaching and research in disciplines and departments*, York: Higher Education Academy (HEA).

This project came out of a call for bids by the Quality Assurance Agency for Higher Education (QAA) Scotland as part of its Quality Enhancement Framework Theme on Research-Teaching Linkages: enhancing graduate attributes (www.enhancementThemes.ac.uk/background/default.asp). The Enhancement Theme was divided into 10 project areas: one overall, sector-wide project and nine projects targeted at discipline-oriented approaches. To focus the debate, the Enhancement Theme steering committee opted for the following definition of research graduate attributes.

At undergraduate level:

- critical understanding
- informed by current developments in the subject
- an awareness of the provisional nature of knowledge, how knowledge is created, advanced and renewed, and the excitement of changing knowledge
- ability to identify and analyse problems and issues and to formulate, evaluate and apply evidence-based solutions and arguments
- ability to apply a systematic and critical assessment of complex problems and issues

- ability to deploy techniques of analysis and enquiry
- familiarity with advanced techniques and skills
- originality and creativity in formulating, evaluating and applying evidence-based solutions and arguments
- understanding of the need for a high level of ethical, social, cultural, environmental and wider professional conduct.

At master's level:

- conceptual understanding that enables critical evaluation of current research and advanced scholarship
- originality in the application of knowledge
- ability to deal with complex issues and make sound judgements in the absence of complete data.

The project team responsible for this publication was commissioned to explore discipline-specific interpretations of research-teaching linkages and their relationship to enhancement of the above research graduate attributes in the arts, humanities and social sciences. To do this we decided to focus on three central activities:

- develop an 'ongoing' website that could be used by academics in these subject areas who wished to reflect on their curricular designs in light of the research-teaching nexus and graduate attributes
- interview a range of subject specialists from whom we could develop case studies and discussion materials
- offer workshops to engage arts and social sciences schools in the process of project development and to act as vehicles for dissemination.

From the outset it was clear that the focus of this project should be on how the research-teaching nexus can be used to enhance graduate attributes. As a result, the team opted to tease out with academics not only the research-teaching linkages of their work but also how these aligned or did not align with their perceptions of graduate attributes. To initiate these discussions, the project invited academics to consider current models described in educational literature with respect to how research can be used within undergraduate programmes.

A commonly referenced framework used within current debates on research-teaching linkages is that drawn from Healey's (2005) two-dimensional model of curriculum design and the research-teaching nexus (figure 1).

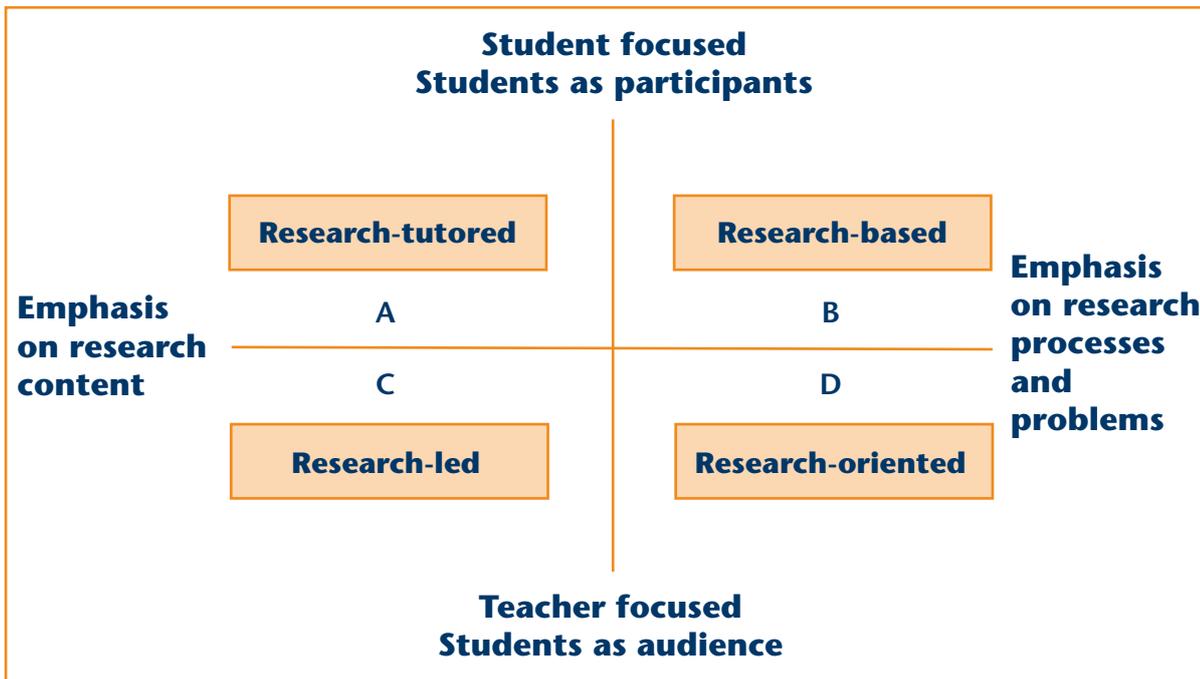


Figure 1: Curriculum design and the research-teaching nexus (adapted from Healey, 2005)

If considered in a linear manner, each of the quadrants identified by Healey can be described as follows (to simplify the explanation, each quadrant of the model has been designated with a letter).

Quadrant A - represents curricular approaches that emphasise the discursive element of small-group environments and the exposure of students to research papers and monographs which they then discuss with a tutor. An example of the assumptions underlying the approaches in this quadrant might be as follows: active researchers shift the understandings of a subject and, from this, are able to facilitate a deeper, more reflective form of questioning in their practice and subsequently in their students' practice.

These paradigmatic movements on the part of researchers are an important (though not exclusive) condition for establishing opportunities in the classroom in which they can foster 'benign intellectual disruption' - challenging students to become uncomfortable with fixed ideas and current understandings (Roberts, 2002). They are also a personal experience of learning for tutors, which assists them to identify with their students' learning processes, though of course this can also cause misidentification¹.

Quadrant B - represents 'enquiry-based' approaches. Arguably, these approaches provide opportunities for students to engage actively in enquiry about the discipline in a manner that mimics/simulates research processes or, indeed, achieves the result of a discipline-oriented research process.

The main assumption behind research, learning, teaching and attribute development in this quadrant can perhaps be explained thus. There is a potential connection between one form of research process - enquiry-based learning within a community of scholars - and the notion that experience of this process is most likely to provide students with the attributes necessary for dealing with the complexities of the world in which they will

¹ For a theoretical economist expressing the importance of their own learning experience, see Henkel, 2004, p 24.

subsequently move. Behind this assumption lies the hypothesis that a good research process involves critical inquiry and that enabling this through the curriculum enhances criticality in graduates for the super-complexity they face in society (Barnett, 1997; Barnett and Coate, 2005). Thus to educate students we need to work with them 'to develop approaches to learning which teach both them and us how to live' (Brew, 2006). Teaching which engages students in this process is more likely to have effective outcomes in the development of graduate attributes (Jenkins et al, 2003; Robertson and Bond, 2005).

Put simply, making the processes of research (critical thinking/critical 'being') an explicit experience within a curriculum improves a whole range of skills, not just the ones required to continue as a researcher in the discipline area. Additionally, it may enable some students to make more sense of research methods formerly perceived as abstract and help them to begin to engage with the sophisticated philosophical concepts behind the generation of research in their disciplines². At a more basic level, it is also conceived as the implementation of assessment methods that resemble aspects of the research process.

Quadrant C - represents a research-led curriculum in which research subject content drives curriculum design. Assumptions behind this approach can include, for example, the idea that research-led teaching enhances graduate attributes because it shows students the most up-to-date expertise in the field at the same time as encouraging them to recognise the provisional nature of knowledge in the arts and social sciences.

The research-teaching nexus in this quadrant is essentially one in which curriculum design is aligned with particular research interests. An effect of this may be the acquisition of a range of graduate attributes, skills and dispositions (or 'graduateness'). This perhaps depends, however, more on the outlook, intention and motivation of the student interacting with the discipline than a specific pedagogic environment.

Quadrant D - represents curriculum design which focuses on enabling students to acquire research-type attributes through exposure to research-skills type courses. Assumptions behind these approaches may emphasise co-existent courses which separate content learning from process learning.

One of the aims of this project was to explore how practice in the arts, humanities and social sciences mapped to these quadrants, while also exploring the usefulness of the typology in terms of enhancing practice.

² For a discussion of this point in an education faculty context, see Deem and Lucas, 2006

3 Contextualising the project

3.1 Disciplinary cultures?

This project aimed to enable members of the same disciplinary areas to explore the ways in which their research practices influence the learning environment of their students and ultimately have an enhancing impact on the developing attributes of their graduates. Less prosaically, the following quotes perhaps capture some of the cultural perceptions of research-teaching linkages within the arts, humanities and social sciences.

...bodies of knowledge and pedagogic practices are inextricably linked. Subjects are produced in the arguments and dialogues of the corridor and classroom...as much as in the monograph or learned journal. In turn, professional debates, themselves forms of rhetoric, embed and promote styles of pedagogy even when they least appear to do so.

Ben Knights (2005, pp 33-34), Director of the HEA English Subject Network

English students were...aware of research as a shared activity: 'I feel, even though I am a first semester student...that I am working alongside people...there is a collegial aspect you didn't expect to find. As though we are all discovering something and that they [lecturers] are just doing it at a different level.'

English literature students at the University of Canterbury, New Zealand (Robertson and Blackler, 2006, p 225)

...the research I did into language and narrative structure gave me a...deeper grasp on the topic that meant that when I was in seminars with the students I could draw them out in discussions because I had more to draw on, in order to build on what they were saying...

Lecturer in American literature at a post-1992 university in England (Henkel, 2004, p 22)

Though unrelated, these quotes hint at a sense of alignment between academic staff and students within the subject of English literature. Here, key themes of mutuality and dialogue, research and learning environments, motivation and discovery are encapsulated in narrative sound bites that seem to cut through any functional division of the academic environment into its constituent parts. Of course, perceptions of research-teaching linkages of academic staff and students are not limited to such idealistic statements. However, they point towards an aspirational integration of scholarly activities, relationships with people/texts/materials, pleasure and intellectual development that can perhaps be said to inform the dynamism of the disciplines considered here.

The dialogic relationship expressed in these extracts provided a backdrop to the project and informed two overarching questions with which to read the evidence:

- 1 Do we generally accept that graduate attributes are developed within the undergraduate curriculum and that some of this development can be attributable to the research environment in which students learn?
- 2 If so, how does the research environment influence development and can we make students more aware that this is happening?

Additionally, we asked two sub-questions:

- 3 Do our disciplines/faculties have cultures of research-teaching that staff and students are both engaged with and immersed in simultaneously?
- 4 Do these cultures help to further equip undergraduates who come into our universities in possession of a range of skills and capabilities, or do they on occasion hinder this development?

3.2 Disciplinary (in)coherence?

On the whole, academics value case studies that relate directly to their disciplinary background. At least, that is one assumption behind the separation of the larger Research-Teaching Linkages Enhancement Theme into discipline-specific projects. Of course, one might argue that this approach is a fraught one. After all, it is clear from the interviews the project team undertook, the workshops in which they engaged and the published literature that the subjects which make up the arts, humanities and social sciences are diverse in epistemologies, methodological approaches and identities³.

From the project's conception, the team was aware that a notion of disciplinary coherence within the arts, humanities and social sciences was problematic. They cover a range of subjects rather than an integrated single body. Indeed, the subject areas under discussion include abstract, so-called non-vocational subjects such as history, classics and literature; subjects which in some situations are applied and in others not, such as practical theology and theology/religious studies or psychology; and professional, applied vocational subjects such as social work.

Despite this difficulty, it was also clear that there was sufficient commonality for 'cross-border' discussions to occur and be profitable. Effectively, the experience of the project team was that the discipline groupings identified by Enhancement Theme Steering Committee were useful in the process of 'identifying, sharing, and building'⁴ potential enhancements in the undergraduate and postgraduate taught learning environment. Even where disciplines clearly diverged in approach (especially, for example, as seen in the different requirements of psychology when compared to the more general humanities and social sciences subjects), there was evidence of a 'common ground' in some of the attributes identified. Arguably, one of the strengths of the arts, humanities and social sciences is the potential to expose students to diverse styles, approaches and ways of being and thinking. This variety was certainly emphasised in our discussions with academics.

³ There is also internal variation within the disciplines. For example, some educationalists value the heterogeneity of their discipline to such an extent that other educationalists fear the end of educational research as an enterprise (Hammersley, 2005). However, this project was called to use the groupings as an enabling organisational structure, and to this end the groupings were arguably useful. Perhaps the only concern the project team had was the inclusion of psychology, as it was clear that the laboratory-based nature of the subject at undergraduate level made it practically and physically different from the other subjects.

⁴ QAA Scotland, Call for bids, p 5.

3.3 Range of disciplinary activities

From our dissemination meeting discussions and interviewees, and from published materials, it was also clear that a range of excellent UK examples of practice were represented across the different disciplines. This document can only capture a few of these and we were well aware that there would be other examples of practice worth sharing that we had not identified as yet. Nonetheless, the project team is dedicated to sharing examples of practice and will continue to expand a database of examples through the project website. The following examples provide a taste of the range of practices we encountered.

Those with whom we engaged.

- A Scottish historian at the University of Glasgow who not only stressed the importance of the existence of multiple arguments through lectures but also required students to do an assignment in which they identified a relevant research-type question (Karin Bowie, level 1, Scottish History).
- A psychologist at Glasgow Caledonian University (GCU) who has abolished lectures and replaced them with three-hour research-based workshops (Elaine Duncan, Psychology, level 1).
- Theology and religious studies academics at the Universities of St Andrews and Stirling who engaged their undergraduates as ethnographic-type researchers (Eric Stoddard, honours, St Andrew's and Alison Jasper, honours, Stirling).
- A theologian who used technology to enable his students to engage with the international research community (James Davila, Theology, honours).
- Educationalists at the University of Strathclyde who required students to reflect on practitioner-based lectures as well as undertaking a group research project, supported by academics (Aileen Kennedy, Education, level 4). Also, a first-year course which used collaborative learning with increasing self-regulation and critical reflection as central elements of the curriculum design (Mary Walsh, Education, level 1).
- A public policy lecturer at the University of Glasgow who engaged her students in both the theoretical and practical sides of public policy decision-making (Vivien Leacock, Public Policy, level 2).
- A sociologist at the University of Edinburgh who focused students on raw data and encouraged them to analyse it from the outset of their undergraduate studies onwards (Angus Bancroft, Sociology, level 1).
- A literature specialist at Crichton campus (University of Glasgow) who encouraged students to learn key research skills, including location of material, engagement with theoretical perspectives, and reasoning and presenting skills (David Borthwick, Scottish literature, level 3).
- Ministry development for ordinands and lay readers of the Scottish Episcopal Church, which used enquiry-based learning approaches in a level 1 and level 2-equivalent course (Theological Institute of the Scottish Episcopal Church).

Others in the literature.

- Anthropologists at the University of Aberdeen who engaged their junior and senior honours students in 'learning through doing' and saw such an approach as intrinsically linked to research (Tim Ingold, case study described at www.c-sap.bham.ac.uk/resources/guides/linking.htm).
- A psychologist at Napier University who required level 3 students to undertake a module in which they used a range of investigative research techniques and presented their findings through the medium of a poster (Maire Brennan, Psychology, level 3, case study described in Thomson, 2008).
- A sociologist at the University of Warwick who used second and third-year undergraduates as researchers to evaluate student experiences of teaching and learning (Christina Hughes, case study described at www.c-sap.bham.ac.uk/resources/guides/linking.htm).
- A classicist from The Open University who proposed a processual model for classics learning based around a tripartite dialogue with the past and the present (Parker, 2001).
- Evidence of the expansion of research-teaching linkages across the field of Education, particularly for recognition of the importance of applied research (Brown, 2005).
- Examples of the development of inclusive scholarly knowledge building communities through enquiry-based curricula in Education in Scotland and England (Lucas, 2007).
- Collaborative enquiry approaches in undergraduate Education at the University of Plymouth (Waite and Davis, 2006).
- The introduction of enquiry-based teaching methods in Literary Studies at the University of Manchester (Hutchings and O'Rourke, 2003).

4 Project methods and questions

4.1 Methods

This project for the Research-Teaching Linkages Enhancement Theme examined the experience of academic staff within subject areas designated as arts and humanities or social sciences. Perceptions of staff within these disciplinary areas were explored through:

- the development of practice case studies constructed by a research assistant following semi-structured interviews with 15 academics at institutions across Scotland and on one occasion through the voluntary submission of a solicited example of practice in which the staff member filled in a template (template available on the project website: <http://rtlinks.psy.gla.ac.uk>)
- feedback and discussion in project-related seminars held at the Universities of Aberdeen, Glasgow and Cardiff, as well as at the Institute of Historical Studies and the QAA Scotland Enhancement Themes Symposium at Heriot-Watt University (March 2008)
- research literature on the research-teaching nexus as it relates to the disciplines in question.

4.2 Project evidence base

The project team realises that some scholars may consider this evidence base as too small a sample to come to any major conclusions. However, to strengthen the representative nature of such a small sample, we divided our focus into four areas: academics from 'abstract' arts and humanities (history, classics, literature); academics from 'applied' arts and humanities (theology); academics from 'abstract' social sciences (sociology); and academics from 'applied' social sciences (psychology, public policy).

Within these categories we opted to interview individuals from a range of institutional backgrounds at a variety of departmental levels: three ancient (Universities of St Andrews, Glasgow and Edinburgh); two modern (Universities of Strathclyde and Stirling); and one post-1992 (Glasgow Caledonian University)

In general, our evidence suggested that:

- those we interviewed accepted that the idea of engaging with graduate attributes through understandings of research-teaching linkages was not just possible but desirable
- the literature on the topic tended to reinforce what we heard in interviews and allowed us to emphasise the possible importance of the more intangible notion of 'disciplinary cultures'
- it could be used for the exploratory purpose of developing additional hypotheses rather than holding to any sense of rigorously confirming or challenging positions already proposed in the existing literature.

We had difficulties recruiting students to discuss the topic. This resulted in our reproducing perceptions and projections of academic staff without the necessary complementarity of those of students.

4.3 Underlying questions and tentative answers

From the outset, the project team established a series of reflective questions with which to interrogate both the educational literature on the subject and the interview materials garnered from academic staff.

The project team believes that these questions are useful for departments considering programme/course review, as they help to establish 'buy in' in terms of depth of engagement with the QAA Scotland Quality Enhancement Framework initiative behind the project.

The questions, with some tentative answers from our interviewees, were as follows:

- Should we consider the problems with the current research model as favoured in the UK through the Research Assessment Exercise (RAE) and its negative impact on undergraduate experience and graduate attributes (McNay, 1999; Lucas, 2006)? Which research model are we talking about? How would we define our research model in our disciplines? Do we like it, value it, or even think it has enabled us to have a wide range of attributes, including adaptability to new environments and contexts?

Those we interviewed were not particularly concerned about the impact of the RAE on the nature of research processes and the outputs from them. These staff clearly valued the research environments in which they moved and believed that the attributes developed through exposure to research processes were important for subsequent graduate experience.

- Is there a problem with the notion that research attributes and skills are the same as those required for 'graduate attributes'?

Those we interviewed did not seem particularly concerned by this. Indeed, it was clear that though there was some distinction between research attributes and generic skills, the notion of developing students in a range of ways while they were undergraduates was not just accepted but considered important.

- Do the aims that lie behind the notion of developing graduate attributes actually require a different framework for expression and analysis than those associated with disciplinary traditions, cultures and codified knowledge?

This was not a particular concern of those we interviewed.

- How do different fields of study explicitly and implicitly use their research professionalism to inform and encourage student learning at undergraduate level in a manner that offers a greater possibility of currently valued graduate attributes being achieved?

The case studies provided in this document (section 5) suggest some examples that respond to this question.

- Should we include a conception of the research-teaching nexus as teaching merely being a pragmatic aspect of a research economy? That is to say, is teaching just a way of ensuring income to sustain research productivity?

Economies of scale certainly came up as a concern, but not in terms of gaining research funding. The issue was perceived much more as one that allows for the management of teaching workloads. It was clear that teaching what you were researching was more efficient than teaching what you were not researching.

- Is the question of research-teaching linkages and graduate attributes actually a useful one at all?

Yes, because it allows disciplinary members to articulate what they value, and also to map what they value against what students might additionally need.

- In some conceptions of research-teaching linkages are we mistaking pedagogical models for research processes? (Especially with regard to those conceptions which correlate enquiry-based learning with research-teaching linkages?) And more specifically, in the arts, humanities and social sciences can we actually talk of an authentic research experience for students throughout an undergraduate programme? Or are we talking about different forms of pedagogy that mimic aspects of the research process without delivering the products expected for publication and dissemination among the discipline? Can the product and the process of research in these disciplines be separated?

These were more complex questions to answer and related in part to the role of universities as educational institutions. Perhaps for the arts, humanities and social sciences we need to avoid getting too caught up in a discussion about authenticity which only relates to the standards of publication in the disciplines. Our interviewees were not particularly worried about 'authentic' experience as something that got in the way of implementing change. They were mostly worried about ensuring effective ways of assessing students at different stages of an undergraduate programme, in a manner most likely to expose their students to research processes and products throughout a degree rather than just sporadically.

The project team also used the interviews to explore comparability of views and practices with previously established taxonomies as given in the educational literature on the research-teaching nexus (especially the work of Alan Jenkins, Mike Healey and Ron Griffiths) and those of Simon Barrie regarding the development of graduate attributes within the curriculum.⁵ We would suggest that while the taxonomies presented in this literature are pragmatically useful for 'audit' purposes, more flexible tools using the questions above as starting points might be equally useful for academic staff who wish to engage more profoundly with the issues.

4.4 Reading the case studies

The project team selected six of the 14 interviews from which to develop case studies; these can be found in section 5. The selection was made so that a variety of disciplines were represented, and was limited only by considerations of the appropriate length of this document.

⁵ For those readers wishing to gain an insight into the educational literature on this topic, we would encourage exploration of the references listed in the bibliography (section 8).

In designing the case studies, we focused on eight areas: background to the example; context of the example; reasons for developing the practice; in practice; levels of student awareness; course design and graduate attributes; informal outcomes and lessons learned; and course evaluation.

To capture the tone of the interviews, we decided to ensure that the academics in question had their 'voice' maintained. As a result of this we used transcribed passages of speech within the case studies. These may seem dense in places, but with perseverance they carry the thoughts these academics used to try to articulate the complexity of student learning in a research-led environment. In some cases, these transcriptions also illustrate how interviews for projects such as this one enhance an academic's ability to think about initiatives designed to improve student outcomes. The project team believes that these case studies are complementary to any analysis of practice using the taxonomies in current HE literature, as they add nuances of academic approaches to these more stable models.

These case studies, as well as others derived from the transcripts (but not used here) and voluntary submissions, can be found on the project website, cited in section 8.

Finally, the case studies represented here are examples of practice within the Scottish HE context. Unfamiliarity with this context can make the description of level and progression in the courses confusing. In the Scottish system, level 1 is equivalent to first-year studies; level 2 is an intermediate stage prior to honours; level 3 maps to junior honours, while level 4 maps to senior honours. In terms of progression, particularly in general-entrance faculties, there is not necessarily a clear delineation between levels 3 and 4 (thus in some courses level 4 students can take level 3 courses.) Moreover, in those universities with general-entrance faculties (this applies especially to faculties such as arts, humanities and social sciences but less so to theology, education, public policy and social work, for example), students may take up to three subjects in levels 1 and 2. This makes mapping the progression of disciplinary research-teaching linkages and graduate attributes more complex.

4.5 Summary of practical issues

Certain themes concerning the implementation of research-teaching linkages in the undergraduate curriculum were reiterated in the interviews we undertook. The most common themes were as follows.

4.5.1 Continuity

For most of the courses, there appeared to be a problem of lack of continuity over progressive years in terms of sporadic instances of good practice. For example, students might suddenly find themselves being expected to work independently in the fourth year despite having had no opportunity to do this previously. In some cases, they may have been exposed to good practice in the first year, but then might not encounter anything similar again, so there may be a lack of reinforcement of skills (Aileen Kennedy, Strathclyde, Education, level 4; Karin Bowie, Glasgow, Scottish History, level 1). There was some feeling among staff leading senior-level modules that their research-teaching practices could be implemented at a much earlier stage (Aileen Kennedy, Strathclyde, Education, level 4; hinted at by Eric Stoddard, St Andrews, Theology, level 4).

4.5.2 Implementation

Challenges to implementation included:

- heightened anxiety among students due to the unfamiliar nature of the tasks set or environments developed (Karin Bowie, Glasgow, Scottish history, level 1; Aileen Kennedy, Strathclyde, education, level 4; Eric Stoddard, St Andrews, theology, level 4)
- confusion expressed about course objectives or reading lists (Aileen Kennedy, Strathclyde, education, level 4; Karin Bowie, Glasgow, Scottish history, level 1).
- problems with individual staff members being unwilling or unable to adhere to the model of practice, and minor technical problems (Mary Welsh, Strathclyde, education, level 1)
- timetabling constraints (Eric Stoddard, St Andrews, theology).

4.5.3 Evaluation

There was little systematic evaluation of these initiatives other than departmental requirements. Those evaluations which had been done suggested dislike of and resistance to the unfamiliarity of some of the processes, followed by recognition of the benefits once the course was completed. The feeling among some staff was that students received the research components with enthusiasm (Aileen Kennedy, Strathclyde, education, level 4; Steve Kelly, Strathclyde, psychology, level 3), while others were less convinced (Paddy O'Donnell, Glasgow, psychology, level 4). In two cases there had been increases in exam scores since the introduction of the interventions (Mary Welsh, Strathclyde, Education, level 1; Jim Baxter, Strathclyde, psychology, level 1).

4.5.4 Cost/benefit ratio

In terms of staff time, some modules required tutors to attend the lectures (Aileen Kennedy, Strathclyde, education, level 4), while others had more preparation for activities such as customised essays (Karin Bowie, Glasgow, Scottish history, level 1). However, in some cases initiatives had reduced staff time (Mary Welsh, Strathclyde, psychology, level 1)

Benefits for students included social aspects when students were involved in group work (Aileen Kennedy, Strathclyde, education, level 4), as well as giving them confidence in being able to engage with material at a more independent level and a greater understanding of the research process (Mary Welsh, Strathclyde, education, level 1). In some cases, there was even the possibility of students having their name included in a published paper based on the research project (Steve Langton, Stirling, psychology).

Benefits for staff included making them think more explicitly about their expectations of students and how to convey them, and keeping them informed of current debates within their own and other staff members' research fields (Aileen Kennedy, Strathclyde, education, level 4).

5 Case studies

5.1 Arts, Humanities and Education

Karin Bowie, Department of History, University of Glasgow, Scottish history, level 1

Background

Karin Bowie is a lecturer in the Department of History at the University of Glasgow and described research-teaching linkages as teaching that is led by research. She emphasised the importance of introducing students to the latest thinking and debates on the subject as well as enabling them to interact with the subject's materials 'like researchers'. The course discussed in this case study attempts to reconcile students' learning experience in terms of comfort with a design that, while challenging, has apparent benefits in terms of enhanced research skills and potential increased assessment grades.

Context

Karin lectures a level 1 Scottish history course along with course convenor Dauvit Broun. This is an introductory history course, covering medieval and early modern Scotland from 1100 to 1707. Approximately 150 students are enrolled on the course, mostly first years with some second years. The research element spans the whole course and includes a specially adapted essay assignment, which reflects the research focus. Summative assessment methods include seminar participation, the essay and an exam.

Reasons for developing the practice

In summary, Dauvit and Karin:

- desired to ensure that students had access to the most up-to-date discussion material and primary sources
- aimed to ensure that students were aware of the range of debates and positions taken by different historians concerning any given topic, and were not dependent on 'textbook' approaches
- wanted students to be participants rather than audiences in the research process of the discipline
- recognised that inspiration for lecturers can come as much from how they design their teaching as research activity.

Karin highlighted the importance of lecturers' inspiration in part being influenced by their teaching design. She also emphasised the need to provide students with cutting-edge research that was not yet necessarily available in published form. Indeed, to this she added that any reliance on a textbook was problematic as it 'would deprive students of the latest debates'.

This was Karin and Dauvit's third year of teaching the course. They redesigned it in 2005-06 with more of a sense that students should be exposed to both the research

process and the emerging outcomes from it as relevant to the discipline. In their redesign they replaced a traditional, lecture-centred, political history format with more of a research-based approach. Regarding the focus on contact with cutting-edge research, Karin noted:

I came to this new, this is my first lecturing job so really I have to give credit to Davit my colleague, because it was he who pointed out to me, 'look there isn't a book we can use'. There are actually lots of books out there on this period that you could potentially use, but he had already looked at a lot of them and said, 'you know, I'm not happy with the particular view that any of these present and anyway, we want to bring our own research into this...'.

As a consequence of this approach the lecturers identified and mutually agreed themes so that their research interests drove the underlying design.

In practice

This means that although content design for the course has been shaped by the academics, the way in which the course is structured encourages students to be more participators in the research process than an audience of it:

Level 1 and 2 in history are very lecture driven and the one thing we tried to do this year was make the lecture less of a performance to an audience...we introduced activities where we could get people to interact. But where they really become participants is in the seminars and that's also where our work has become more research lead in that we have brought primary sources into the seminar...so that when they [the students] come to seminars they are being asked to evaluate extracts from primary sources that are on a worksheet with some background reading to go with it and it's much more them creating the knowledge of the subject, compared to the lecture where it is much more of us just giving them information.

Levels of student awareness

Although Karin acknowledged that the redesign encouraged more interaction, and the research interests of the lecturers were mentioned in the introductory session, the extent to which students were aware of their research roles was unclear. Karin also noted that the primary sources which students used in seminars were at times based on the work of the staff, but again doubted whether they would be aware of it. She elaborated:

No they wouldn't, I realise now that it's very subtle. I mean the fact that there's maybe a bit of a document there that's from an archival source that's not printed, they're not going to realise that it's something I've transcribed from an archive, and they wouldn't see it anywhere other than on that worksheet. Yeah, so that's making me think actually, we don't necessarily point that out.

She went on to note that the level of awareness changed over the period of a whole programme, noting that research, 'becomes most obvious in history in things like special subjects in fourth year because that is usually the researcher's own area of expertise. That said, across the honours curriculum, typically what people teach at honours level is what they research'.

Course design and graduate attributes

Karin considered that attempts to enhance graduate attributes were not a driving force at level 1, viewing it more as a foundation course for students who may be potential history honours candidates. She explained that:

We also look at them as people who potentially go on to do Scottish history and we have a sense of this being a foundation of knowledge about medieval and early modern Scotland to then take in more complicated or higher level courses. So we weren't thinking about graduate attributes at level 1. We were thinking foundational skills and knowledge for the next four years. However, at honours we most definitely do. For example, I think that presentation skills are crucial and I do a lot with that in my honours courses but less so at level 1. You don't make a presentation in history until level 2 so there's a progression there. There are some very basic skills that come in at level 1 in terms of dealing with primary sources and starting to get into historiographical debate.

Perhaps of interest here, Karin also implied that it was important from level 1 onwards to raise students' understanding of the notion that different positions are often taken on the same topic by different historians. This identification of the situated, temporary nature of knowledge (often referred to by the academics as the provisionality of knowledge) is, as noted by the Enhancement Theme Steering Committee, considered a core graduate attribute. In this sense, the foundational skills of levels 1 and 2 are part of the wider research environment. For Karin, however, although she considered this to make the course research-informed, it was 'still at a fairly boiled-down level'.

It was clear that the notion of graduate attributes was an area to which the historians paid attention in honours:

It's not really until honours that we start to seriously think about what someone needs to know if they are going to be going on to be a professional historian, because we do have a sort of service function where a lot of non-historians take our level 1 and 2 courses.

Moreover, Karin commented on the need for history to offer opportunities for developing a range of attributes that go beyond disciplinary needs:

A lot of the people who end up doing history at honours are not going to be PhD students or historians. It's the vast minority really that become historians per se. So our definition of graduate attributes is actually quite broad, it's really about being able to think critically, evaluate information, solve problems, to write, to speak. It's the classic arts phrase 'graduate attributes'.

Students tended to work on an individual basis in the level 1 course, although there were small-group activities during the seminars in which students discussed the material or engaged in debates. Karin felt that knowledge construction was the most appropriate description of the main research focus. This could be further enhanced by placing more emphasis on the debate component rather than on the current thematic seminar design. However, engaging with the raw sources resulted in a more progressive process of knowledge construction than in more traditional seminars.

Yet Karin acknowledged that the absence of a set text could result at times in an uncomfortable experience for students. She explained that students often asked what they should be reading, since they may be more accustomed to being prescribed set

reading for lectures. In contrast, she simply provided a series of references at the end of each lecture so that students could actively pursue various reading materials in order to build on the themes presented in the lecture.

As Karin illustrated:

Our main experiment this year was to make the lectures more interactive, although that's not really research-teaching, that's just more of an active learning. We tried to have a moment where we stopped and asked the class a question, all different things, we might get them to vote on a question. For example, if there is a decision historically which way would you go, or ask them to say here's the problem faced by people here, what are the issues? What's going to shape their views?

...A lot of people really didn't like it.... It's hard to be active, it's hard to have to stop and think, particularly if I posed a question where they were supposed to respond. It was much easier to get them just to raise their hands and take a vote and go on but we tried to put it somewhere in the middle to break it up.

Karin also described the limitations of this process with regard to the earlier year levels:

We think at level 1 that we should be getting the latest views, but at the same time you do have to provide a foundation.... I don't think those necessarily conflict. The one limitation at level 1 is that we are running across 700 years in 12 weeks and so there are things that you just cannot go into in the kind of depth that you would like to. We get to the topic that was my PhD and I've spent years on and it's about a third of a lecture so you know you cannot, and a bit of that comes through in the seminar that week. But however much we try to, the research...coming through then [is] not in any sort of detailed sophisticated analysis in one moment, it's coming through in the themes that we are choosing and the topics that we choose to emphasise across the conceptual construction of the course, as opposed to being able to dive into real wonderful detail that's very rich and filled with lots of sources.

The essay theme was the other research-led area in the module. Traditional modules typically have several essay titles with quite specific questions and a recommended reading list for each. Karin and Dauvit revised the essay in this module to cover three themes, with a very broad question for each. Students had to think about this question across a period of 700 years and come up with at least two examples or events from that period which illustrated this theme. Given the breadth of the questions, students had to:

do an initial piece of research where they read round the question and then...have a tutorial where they talk[ed] about how they might essentially refine the question, what two things they want[ed] to talk about and at that point the tutor [gave] them some more recommended reading to specifically pursue those avenues.... They [went and did] more work and then [did] the essay.... That's the way it's envisioned that it [will] work and that's challenging at level 1.

We did it because we thought that it was important to get them to think broadly across the whole time span, because we have these three themes and we try to show how they develop across quite a long time period.... We felt that the essay should do that as well. It created discomfort though because they wanted to have a specific title and they wanted to have a reading list, but obviously what we

[were] trying to do [was] to get them to be active researchers and get them to identify an initial phase of research and then go into more specific research.

Karin noted that there may be a progression issue in that what happens in the level 1 class does not necessarily get repeated or developed in any other level 1 or 2 classes. Then, in level 4, students have a dissertation where they have to:

devise their own research question, come up with a bibliography and then produce a 12-15,000-word paper across just over [the] year they have to work on it.... My observation is that students really struggle with that because they are suddenly being asked to jump up a level.

Ideally, Karin would start this process much earlier at level 1 or 2. She believes that her module goes some way to achieving this by customising questions while not actually constructing them. Students should then be able to build towards tailoring their questions before their dissertation, which is what Karin has attempted to do with her honours class. She explained:

I've just done that this year for the first time and I do give students an option because I find there is a difference, some students are more comfortable with this than others. I tell them, 'you have to set your own essay question but you can do it in consultation with me. We can talk about it in person or by email'. I did speak to every person and agreed their question with them and helped them to shape it if they were in trouble. The easy way out was for them to choose a seminar topic and write an essay on that...topic as long as they had not done a seminar paper on it. So for the less aggressive or imaginative students, that was an easy way to get a topic. Some of them went halfway and merged two seminar questions and did a compare and contrast...others just really went with it and came up with completely original questions, which was brilliant.

Informal outcomes and lessons learned

On the whole, the student response has been positive, although Karin noted that:

We do get discomfort from students...the pre-essay tutorial is critical and so we have to make sure that [it] is offered and made available, which it is supposed to be for level 1 but it hasn't always been.... There's always a cohort of students who fail to turn up for their tutorial and just do the essay without support...[although] we have never done analysis on tracing who that was...I would guess they don't do as well. The student feedback is that the tutorial is very, very helpful, and if nothing else it gives them confidence on what they have come up with for a question is OK...they get a bit of a steer on any sort of reading that they should look into.

Time demands on staff have increased, but these were justified in light of the benefits for students, because as Karin outlined:

The essays require more effort. A customised essay needs just a bit more mental energy and the tutorials are a lot more difficult than a straight tutorial would be; students do a little more hand-holding so it's not a big deal, but yes it is slightly more challenging to administer. In terms of the way that the themes in the lecture are lecture driven and there's no textbook...I just couldn't imagine...teaching a straight textbook-driven course to them, it's not an option really.... I wouldn't say it's more work, it's just what we need to do...we continue

to debate about our essay every year because...it's harder to administer, it's harder to mark, it's harder for the students...this is our third year, and we keep concluding that the principle of getting them to think about a theme across the whole period of the class is important, because that's ultimately what they have to do in the exams as well. It's about integrating that knowledge and not seeing the class as just 10 little topics or something, but to think across those... ultimately I suppose that's a pedagogical issue where we keep saying, 'yeah this is what it's doing'.

As well as the benefits for students, Karin pointed out the benefits for staff too, commenting:

The last week of the class is my PhD research so I think that's always the most interesting to do. You always feel more engaged in a topic that you've researched yourself...it feeds back as well, because the lovely thing about a level 1 class is that it is often a survey class and you end up on things that you actually don't know that well yourself...you feel that contrast between the stuff you know really well and the stuff that you are going to have to lecture on...that impels you as a teacher to go and research that more and understand it better, and next year, let's bring a bit more to that subject as you build on your own knowledge.

Course evaluation

Yearly evaluations have included a student committee feedback session and written evaluations, including a detailed one on the essay and seminars which illustrated students' discomfort with the format. For example, many students replied to one open-ended question where they were asked, 'what would you say about the essay?' with comments like: 'I wish there was a reading list', 'I wish there were more questions', 'I wish you did this like other classes, which I feel more comfortable with and which would be easier for me'.

Responses from the student committee were more positive, with one student commenting 'we do acknowledge that it's harder, but we also see that it forces us to think across this period and in the end we think it's good'. Overall, the results of the class over the last three years have been better than from the class as it was before, including a higher proportion of A grades.

Karin also felt that the experience of being interviewed about research-teaching linkages helped to enhance her own understanding of them:

...I think that the first definition of research-teaching is the simple idea that you teach the subject you research...the most straightforward translation of that is a special subjects or an honours module where you teach something that you have personally researched. What we're talking about with this level 1 course is a different kind of thing. It's partly about getting the students to think about how they research and to be aware of the changing nature of literature. So I guess what I would be interested in are these more lateral ways of thinking about research-teaching linkages. I suspect that my first reaction might have been in line with the more simple translation of research-teaching that's about teaching what you research...I do that in my special subjects so there's nothing else I need to know. But by just talking about level 1 you start to think 'oh actually no, there's potentially other ways to think about what that means'.

Aileen Kennedy, Department of Education, University of Strathclyde, education, level 4

Background

Aileen Kennedy lectures on the Bachelor of Education honours course (BEd4) at the University of Strathclyde. She believes there are several components to research-teaching linkages, but an overarching theme is that much of her teaching is implicitly research-informed in terms of content or pedagogy. She also believes that teaching involves modelling explicit research practices for students, both in teaching them to be researchers and in helping them to access or use research.

Context

The module described here is a double module in Professional Studies, the first part being a new component in the fourth year of the BEd Primary degree. The second part, Contemporary Professional Issues and Education, is based on what had been done in previous years. Approximately 150 students are enrolled. As Aileen explained:

The first part of the module is about accessing, using and understanding research, both in terms of just general practitioner research and being a teacher-researcher, but also with specific reference to their own major projects...we've found in the past that while we have put demands on them about the kinds of projects that they are expected to do by Christmas, for example, that hasn't really happened...we're trying to give them a bit more explicit support in developing their own major projects, particularly with the literature review and the planning, the empirical part. But alongside that we are trying to show them how teachers research and to give them examples of teachers who have undertaken research so that they don't see the major project as just a hoop to jump through.

The second part of the module is much more focused on contemporary issues and students' ability to be critical and analytical, which Aileen described as being 'a real teacher skill'. Students are encouraged to identify current topics, and speakers are invited to present to them. They are explicitly taught how to be critical and analytical, but lecturers also try to increase their familiarity with current knowledge, policy and issues.

To summarise, this module has provided students with enhanced opportunities to gain higher critically analytic skills while gaining practical research skills and knowledge of real research issues and activities within and outside the Department. They have also gained the opportunity to work in teams, but at a fairly autonomous level. Together, these progressive skills are considered by teaching staff to have endowed students with stronger graduate attributes in the sense that they are being prepared to be teachers with a deeper understanding of the research process than might previously have been achieved.

Reasons for developing the practice

In summary, Aileen:

- desired to offer students a learning process that authentically helped them to develop skills they would need as teachers
- wanted to engage the students to be intrinsically motivated rather than instrumental in their approach to being a teacher

- hoped to raise the importance of aspects of teacher development that are not generally favoured within the teaching standards framework, particularly those which are included within the employability literature.

Aileen developed the module from an outline devised by her predecessor, but felt that she had driven much of the design with the support of a consistent tutor team. She explained that while they were encouraged to retain the exam, one of the key driving forces was about sustainable assessment. The team wanted to find an authentic way to help these students to develop skills they would actually use when teaching.

The new part of the module was similarly about authenticity and sustainability.

As Aileen explained:

We don't want them to see projects or teacher research as something that other people do just for academic credit...it's something that is really powerful and...you do need skills in order to do it, but...you also need a conviction that it's important and that it's part of the repertoire of teacher skills and teacher knowledge.

Graduate attributes were to some extent a driving force, specifically in relation to teaching. Traditionally, implementation of the Standard for Initial Teacher Education did not, in the opinion of the teaching team, prioritise the types of skills, knowledge and attitudes developed on this module, but favoured practical classroom techniques.

Thus as Aileen highlighted:

We want more of an impact in some of the less privileged parts of teaching standards, but these should be, and are indeed, part of wider employability.

In practice

Level 4 research project: Students often only have a major research project to undertake in their final year without having any practice or teaching directly relevant to that task. In contrast, lecturers and tutors in this module provide input to students, who work in small groups of three or four.

Students set their own agenda and research questions, report and quantify areas they have difficulties with, and conduct literature reviews. Students can discuss with their peers whether they could help each other to gain a clearer understanding of problems or whether an issue has to be addressed as a class, and staff respond to that. Thus while being sustainable research, the process is peer supported and student driven.

The second part differs in that the focus is on critical and analytical skills. Students have noted the difference, in that they were not just accumulating knowledge, although they were still expected to have knowledge of contemporary issues. The assessment for that part of the module was an exam that, initially, Aileen was unsure about, but felt that on reflection seemed to work. She commented:

I think the students do find it different in that they are asked to select three pieces from a selection of seven and to write a critical response to these, so they are not asked to go away to remember things and then write it down in the lecture.... I know a lot of them find [or used to find] that...it made them quite anxious, it's their last exam. It had a bearing on their degree classification, but as we, as a tutor team, have become more used to that, I think we are able to reassure them that if we work each week on skill development as well as topic knowledge, and...we relate that to the criteria we use in the exam and...we get them to

assess each other...it's actually a real-life skill that they are developing as they go along, and...if they attend then we can engage them.

Some students appeared to be enthusiastic about being participants in the research process, but although Aileen hoped this was the case for all of them, she felt that in truth there was a mixture. As she explained:

I think we've got some who are really excited by it and excited about talking about their own work and it's absolutely fantastic to see...there are still others who, it's instrumental really for them, it's about getting through...we're always going to have that, but we'll fight to get as few of them as we possibly can.

Aileen noted that an expectation of graduate researchers was independence, and that:

Students expect that when they get to fourth year...they are suddenly able to do things independently, and yet we haven't actually asked them to do it or given them opportunities to do it before.... In the past when we have set them the task of their major project, we've told them what it is, they have an individual supervisor, but to all intents and purposes they [were] left to get on with it...I think what we are doing now is recognising that there's a gap there and that we need to be developing these skills.

Level 1 skills for learning module: As part of the design of the new BEd course, students take a first-year module called Skills for Effective Learning, which is part of their shared learning portfolio. In all the undergraduate degrees in the Faculty, students are introduced to study skills, writing skills and referencing outside the content of individual modules and tasks.

Aileen felt that a gap remained in the middle of years two and three, but that this was now being addressed by encouraging students to support themselves and each other, and that this module was part of this 'halfway house' to independence. However, she felt that it was not really possible to slot the curriculum design into a taxonomy such as that offered by Griffiths 2004, since it involved many different aspects. She felt that:

Some of the students see different aspects as a priority, in that some of them see it as research skills, and some of them see what we are doing when we bring in practitioner researchers as showing them things that they might need to know for their major project...while that's a part of it, that isn't the whole of it. We're hoping...to show them researcher attitudes and dispositions and those kinds of things as well, so I think it is much wider than just identifying one subset of things to with research.

Levels of student awareness

Aileen felt that students were unlikely to be particularly aware of the research that was going on in the Department and felt that this was the responsibility of the teaching staff. Although as she pointed out:

One of the practitioner researchers that we had speaking to them this year was a departmental colleague who, by his own admission, [hadn't] been involved in the past terribly much in the way of research, but was driven to do action research because of a problem that he saw. So it was a very, very real situation that is similar to the situation that we imagine a student will be in.... He then spoke about it in relation to a higher education perspective, but going through exactly

the same processes, almost finding yourself in it before you realise that you are actually doing research...then doing things back to front and not the way your supervisor would tell you. He [also] talked about all the additional spin-off learning that you get from that [which] you hadn't planned.

Aileen had personally discussed her own research and the problems she had writing when the students were discussing their own difficulties. She also explained that:

We try to model to them as a tutor team the fact that we're all teachers and we all research as well, and that while it is slightly different in terms of proportions, it's the same kind of thing...we haven't been explicit about what someone's doing, although I suppose some of the lectures in the second part of the module might do that...in that we've got a mixture of external speakers and not so [many] 'departmental colleagues' but faculty colleagues who are specialists in their own areas and are coming in to talk to them.

Course design and graduate attributes

There is more crossover between material that the lecturer and students work on in the second part of the level 4 course, in that before each lecture students are given a piece of text to take away, read, make notes on and critique before coming to the next lecture to engage with what they hear.

Subsequently in the tutorial, students are asked what they thought of the piece of writing and whether they had changed their mind as a result of hearing the person. Students are encouraged to think not just about 'what did that person say and can you repeat that back to me?' as often happens, but also 'who is that person, do you know anything about them?' And if you do know anything about them does it help you to read what they are saying?' As Aileen noted:

I suppose it's a lot of active discourse analysis and we try to encourage them to think about what might the person say, what didn't the person say? Why didn't they say that? If you want another perspective where would you go? How trustworthy is what the person's saying?

This has helped to enhance students' critical analysis skills and shown them that staff are not afraid to acknowledge that there may be other ways of considering the same material. As Aileen commented, in lectures there is a tendency for staff to expose students to one particular line of thought, whereas overall the course exposes them to the possibility of constructing other approaches.

Aileen was unsure of the extent to which research developed through interaction with students. Although students were encouraged to engage with the lecturers, only a minority of students did so in the lecture. Students tended to defer to the perceived authority of the speaker, but in the tutorials there was an opportunity to critique the speaker's work in a non-personal and constructive way. Teaching staff were realistic about the extent to which students would be able to engage with various issues and did not overestimate the amount of extra reading they would engage in, but expected them to do a little more reading than they would normally do for their teaching.

Staff had also decided to try to model some of what they taught the students in terms of action research. One of their immediate projects could be action research or literature based. In the first tutorial, the tutors did some group interview techniques with the students about what they believed made a good teacher, and this process was to be

repeated at the end of the module, or another method used to get some similar data. It was agreed that this would be shared with students at their end-of-term conference, and Aileen hoped this would provide some pointers that could be used to fine tune the module. Thus students were an integral part of the process.

Informal outcomes and lessons learned

The expectations of students were mainly that they would look beyond exams and the practical aspects of teaching to the debates underpinning the pedagogy.

As Aileen explained:

I expect them to change from the majority view, which is 'tell me what you want from me in terms of assessment and I'll try to work out how best I can play you at that game to pass'. I want them to change to, 'that assessment might have hurt me, but it was worthwhile because I think I really learned something and actually I see why I should be more concerned about things that are going on around me, [rather] than just how I practise the physical art of teaching'.

She considered that many of the students met those expectations, and cited student comments such as that the module had:

...changed the way I read newspapers, and you know, now I find myself questioning my Dad, because I used to always think what he said, he was more informed, but now I'm thinking, 'Dad, where did you get that from?'

Aileen continued:

So I do hear things from them that in some ways you think are things we really should be achieving much earlier in an undergraduate course, but I think with the emphasis on the vocational part of it and the teaching standards, that it's easy for us to lose that and for them to [do so]. I'm realistic enough to know that their priority is to get through to pass the standard and to be allowed to teach, and sometimes there's a bit of a conflict there.

The students, however, tended to be enthusiastic because the demands, in Aileen's opinion, were realistic and with the level of peer work and tutor support students were not spoon-fed and had a lot of freedom. Thus there were no real problems with engagement. Even for students who were not intrinsically motivated, the bearing on their final classification was a motivating factor.

The activities also had a social aspect to them, in that the teaching staff deliberately set up the groups to work in an entirely random but prescriptive way. They were open with the students about expecting them to have peer support from their friends in any case, but forcing them to work with other people meant that they actually got a wider group of people from whom they could seek support. Aileen noted that in some cases it was possible to spot friendships beginning to blossom, but for others, while they may never be friends, they seemed to be able to work together. She stressed that being able to work as part of a team was an important attribute for graduates in general, and for teachers it was particularly important. This was cited as another reason for forcing the students to work with other people.

Students are assessed at the end of the first part of the module by giving a presentation to the rest of the class (an outline of their literature review). This aids momentum and gives them something to work towards. As the presentation is summatively assessed,

it also helps their work in groups as they can see a real reason for doing something that has value to them. This mark is then combined with their exam mark.

Aileen felt that students did not panic about this presentation as they were led into it, and that because they were working in groups they were aware of what the others were doing. She added that she had noticed students doing a little more than they might have done in the past when they were left to work on their own. Aileen elaborated thus:

I think the fact that there is an assessment and there is, therefore, a requirement to be further on with the literature review than they might have been in the past, will (and I can't say for definite because this is the first year we've done it) have an impact on the empirical work.... I know from the past, working with major project students as their supervisor, that they haven't always done as much reading as they should, particularly when they go into their empirical phase.

There had been no major problems with implementation, although in the early stages students appeared to be a little confused about the unfamiliar format. Aileen was asked frequent questions like, 'what am I meant to study?'. However, as a tutor team the teaching staff addressed this by becoming, as Aileen described:

...much more explicit about working to the assessment criteria and using them not just as assessment criteria, but as a good guidance for helping you develop skills and critical analysis...we're now much more explicit and we're now much more aware of what we're doing, so I guess that was a difficulty originally.

There were no major additional time implications for staff, but Aileen stressed that staff needed to be committed to attending the lectures as well as the student presentations, as they had a role in enabling students to critique the medium of the speakers as well as the message. If staff are not present:

To be part of the process, to hear how students react, to see if there are any questions, to look at how confident or nervous the person looks, then I think it's harder as a tutor to do a good job of guiding, even though I think that what we are doing as tutors is standing back a bit. We're not directive about tasks and a lot of it is about, where are you with this? What are we going to do? How do you want to go ahead with it? Do you want to write the responses and share them and mark them? Do you want to do your own things in groups? Do you want me to organise something? You tell me.

Thus students had a considerable amount of control, although they had not always used it in the past. This was thought to be partly because of inconsistencies among tutors, but as Aileen noted:

We've had groups of students who have said, 'we didn't do that with our tutor, but I heard other groups did'...we've been trying to say to them 'you know, well you've been told at the outset that you have a lot of freedom so you need to use that and if you want to do something else, you need to say to your tutor and you should speak to other people about what they are doing'.

Tutors also had to communicate with each other. While their job was easier in terms of not being required to prepare a series of tutorial tasks, they had to be more ready to respond to whatever student needs arose in each session. However, Aileen noted that while actual time had not been added in terms of preparation for the tutorials, there

were constraints in terms of staff being expected to attend lectures but not being given the notional hours for work outside the tutorials.

Course evaluation

It was difficult for Aileen to evaluate the benefits for students because this was the inaugural year of part one of the course. She had set up a mid-module student representative meeting, which she hoped would provide some indication of student feeling about the module. While she realised that it was too late in the course to make any significant changes, she hoped to address what she could.

From her informal observations, she felt that students were not necessarily more confident about their major projects and in some ways were more anxious, but that this was an informed anxiety rather than an anxiety born of failing to engage in the research process early on. Thus some of the anxiety had been redistributed over the course from an earlier period, rather than storing it until the end. As Aileen elaborated:

I think they are much, much more aware of things like accessing literature, thinking about methodologies, because they are talking about not just their own, they are talking about other students in their groups and they are also hearing practitioners talking about the same things; practitioners who most of the time have chosen to do this rather...[been] forced to do it as part of a degree course. So I do think that [it] is all positive and I hope that they will all see that. I think that their whole major project experience will be better paced than usual and I think they will be more aware.... I do hope that they will see practitioner research as a much more normal activity than perhaps previous cohorts have seen.

Aileen also felt that there had been staff benefits, and explained that 'I think it has forced us to think more explicitly about what we are asking them to do and also to be more explicit about the rationale for doing any kind of research as a practitioner'.

She continued that if students witnessed teaching staff lecturing about the same issues repeatedly, it became very obvious to them that material was simply being **delivered to them** rather than being **believed by the lecturer**. Aileen also commented that she found it very useful as a teacher to keep up to date with current debates, claiming that:

I think even just being involved in that is useful for our own professional development, so that's an ongoing benefit of it...personally I've had to engage a lot more with practitioners and [talk] about their research, and it just keeps you a wee bit closer to the profession than you might otherwise be if you are only talking about your own research.

Were Aileen advising someone else to implement a similar project, she emphasised that teaching staff should try:

- to be as explicit as possible with the students about what they are doing and why
- not to pretend that they have got the perfect course:
 - ...all mapped out for them and it will be great, and then spend your time as a tutor team defending things that are maybe not working. I think getting them engaged in it and giving them a genuine voice and being upfront about not always knowing it all, well we can't ever know it all, because we can only know what we implement, we can't know how they experience it and I think we need to be better at being open to that.

Eric Stoddard, Department of Theology, University of St Andrews, theology, fourth year honours

Background

Eric Stoddard teaches on two fourth-year honours modules in practical theology at the University of St Andrews: Citizenship, and Theology, Spirituality and Pastoral Care. He conceptualises research-teaching linkages in taught modules as the practice of lecturers bringing material into a module based on areas they are researching or publishing in, although he felt that this tended to happen more in the later stages of a module. Eric teaches at master's and honours levels to dissertation students and on taught modules. He stressed that these require different teaching processes.

In describing how he generally links research to teaching, Eric divided his answer into two themes:

- exposing honours and master's students to 'currently being constructed' ideas about a topic he is working on, 'I think bringing that aspect of "here's material with fresh thinking, fresh connections that I'm developing"...making new connections that aren't immediately apparent for the students.'
- in dissertation support, seeking to teach students a process that transparently uses his own experience as a researcher/writer to make that available to the students, who often come with preconceptions. Thus he tries to 'help them through the process of doing a dissertation by, as it were, exposing the inner workings and not just the end product'. He went on to note that 'with the dissertation students I am much more concerned about the entire package, the emotional dimension, the experiential side of it, as well as the actual material that comes through at the end'.

Context

The modules discussed in this case study are unusual in that they are based on a cyclical model of personal reflection in the research process. This appears to be an atypical approach within the discipline as a whole, but has strong links with graduate attributes for the type of professions that a degree in theology may naturally lead to. It is probably best suited to small classes and more vocational subjects, but is clearly apt for practical theology. While the model seems to work well, there may be some progression issues that could warrant the introduction of this type of research-based teaching earlier in the undergraduate experience.

The focus for this case study is two of Eric's honours modules: Citizenship, and Theology, Spirituality and Pastoral Care, which he described as 'two radically different subjects'. Eric explained that:

The Citizenship one is the one that most closely relates to the research-teaching linkages, because in the Pastoral Care module we are bringing in guest speakers and we're doing reflective learning that isn't so research based...with Citizenship, I'm really trying to make connections for the students who have predominantly worked within a theological paradigm.

Although many of them are joint honours students, they've never brought those two aspects of their joint honours thing together. They've done philosophy or they've done politics or something as one half of the joint honours and they've

been doing a bit of theology all of the way through, half and half, but there's never been a point where they actually connect those two areas together. So because what I'm doing in my own work as a practical theologian in terms of political science or theological reflection, I'm trying to bring those fields together and I therefore want students to be able to [also do so] in this module, so it's a bit of replicating this material but also getting some of the material for [the students] to interact with.

The Citizenship class comprises 15 students with a one-hour lecture every week and one two-hour tutorial. As Eric illustrated:

A lot of it was based upon following a particular hermeneutical cycle of reflection where we are starting with the students' experience of being citizens and enabling them to actually think that within a practical theological model, the starting point of experience is actually a critical dimension.... We're not starting them with the theory of citizenship and then working from there, we are starting with their own experience of it and others' experiences of it. So that is part of the research model at that stage and then we go into it.

Reasons for developing the practice

These predominantly involved the developmental and theoretical needs of this sub-discipline, particularly for engaging in personal reflection through a hermeneutic cycle.

Practical theology is a relatively recent (1970s) sub-discipline within broader theological frameworks, differentiating itself from other methods of theological reflection by linking experience to more abstract theology. Practical theology modules provide students with a cycle of reflection, which is transferable to any area being taught.

These modules, and the others on which Eric teaches, have developed over the last six or seven years using a recognised process within the discipline. In this, the process of course design and the content of the course have emerged out of the research processes behind the subject at the same time as informing the research processes of the subject.

Eric was very much aware of the research-teaching linkages when developing the model, as he explained:

Not just the sequence of units but the journey that I would be taking the student through is very much in my mind.... I continually refined it so the actual method itself is based on a research methodology and research publications...really trying to find where the students are at is for them quite different from anything else and I suppose so the research linkages come in terms of content, but also in the actual overall creation of the module, in the actual shape it has, the learning outcomes are very much related to specific movements within that hermeneutical process, so that you can actually very clearly map the learning outcomes to exact points on that model.

Both of the modules differ from other modules at the same level, because as Eric outlined:

I think it's very much on that model of personal engagement in the sense of not just engaging the student in being excited about the subject, but the student's actual experience being a resource of authority and...a data source, which probably wouldn't be true of many of the other modules, particularly in the more systematic forms of theology where they're mining the theological tradition to

bring aspects of that to light. Yes, we are doing a bit of that, but my particular sub-field of practical theology straddles so many aspects of these different sub-disciplines of self. So I think that particular model of reflection is very significant.

In practice

The research focus in both modules is directed towards the 'personal'. Students in the Citizenship module are encouraged to explore their own experiences of being citizens in terms of their own marginalisation or their rejection of citizenship. For example, one major assignment is an essay in which students have to write practical theological reflection on their own experience of being a citizen. Eric felt that this could initially be quite disturbing for the students, because they were not used to writing an essay in the first person or having to engage with their own experiences as an academic resource. As he elaborated:

From day one I am working with them in the tutorials so that, yes, they have to have a critical level with the material, but the added component is, how does this actually affect their own understanding and practice of being citizens? So it's bringing in a very personal dimension all the way through the process of the model.

Eric explained that there was considerable overlap between his own research and the material that the students were working with. For example, as he explained:

...when we deal with the spirituality of citizenship that arises towards the end of the module and is very closely connected to work that I've published in that area. Again, towards the end of the module where we are talking about citizenship in a digital context, I've been publishing on cyber-democracy and digital ethics...so again that very directly connects. Essentially what students are getting is my fresh thinking about how that whole area is developing...it's very much new territory in terms of connecting disciplines, so the students are getting stuff that's within a year or so of being published.

Levels of student awareness

Students may have gained an awareness of Eric's own research from being given physical print-offs of a proof for a magazine or journal article with his name on it. Although he felt that this should be a clear statement of his research activity, he was not always so sure that students were aware of the research background to materials in a lecture, because he did not limit them to his own perspectives or publications.

His work was intended as a starting point to students' own investigations. Eric believed that students might make the shift between seeing him as a teacher to a researcher later in the module when they started to cover some of the more contemporary material and make connections from it to other areas. He was, however, unsure whether students placed any greater value on being taught by a researcher than by a teacher, since recent evaluations have not reflected this.

Eric saw the students very much as participants in the research process, elaborating that this:

...becomes much more apparent within the Theology, Spirituality and Pastoral Care module because in the tutorials we are inviting the students to interrogate their own experience of being cared for, of being carers, of validating their own

theological reflection which has perhaps been quite inarticulate. They haven't consciously engaged with theological reflection, but they have actually been doing it, because as they have been, perhaps, a carer for an elderly relative, they haven't sat down and thought, 'how am I processing this in terms of my theological standpoint?', but they have actually unconsciously been doing it but they haven't valued it as such.

So what I'm doing in the tutorial is very much encouraging the students, if they are willing, to talk about how they relate their own theological stance, spiritual stance, to the particular experience of caring or being cared for, whether that's in terms of mental illness or bereavement...with a small group of about 8-10 it has really been quite remarkable how open some of the students have been about their own particular experiences, not to illustrate the material, but to actually...work with the material. So they are very much participants.

Course design and graduate attributes

As well as his teaching and research roles, Eric is the undergraduate admissions and recruitment officer and, as such, presents to prospective students on visiting days. From this, graduate attributes and employability are high in his awareness. He suggested that only a tiny minority of students go into ministerial work from St Andrew's, perhaps two or three out of 40 students. Thus he regarded employability skills to be an important feature of the module as well as critical thinking and report writing. He explained further:

Being able to engage with your own experience and having sensitivity to others' experiences comes particularly through using a practical theological hermeneutic model. It is an absolutely invaluable tool for employability because you are able to demonstrate that you're not just aware of critical issues but self-aware or very consciously aware of others, your own standpoint, their standpoint...and demonstrate that you can reflect that (which becomes part of the assessment process within the written work of the exam) - you sense that's a very strong graduate attribute. For those tiny minority of people who are going into clerical ministry within any of the churches, that practical theological hermeneutic is vitally important as a skill in attending to pastoral care issues, attending to ethical issues in terms of the preaching, if that's going to be part of their work, so it becomes intrinsic very much to who they are.

The development of these graduate attributes is something that Eric believes happens later on in the undergraduate process, because at level 1 there is so much work to be done in terms of laying basic foundations.

Eric considered, however, that it would be very useful to integrate this model along with others at an earlier stage, because he noted that at level 4 the format is very different for students and the lack of familiarity can add to their sense of anxiety about the learning objectives. As he explained:

The work that I've published in that area has simplified versions of questions that directly map to that image of a circle for each level progressively getting more complicated right through to honours level, and I think it's more an orientation, we are teaching so many different models within the theology degree and if you've only got them for joint honours for 50 per cent of the time, you're having to make choices as to where you emphasise.

With regard to categorising the type of research design the model has been based on, Eric felt that although there was a combination of research media, most discussion focused on papers in class. Part of the difficulty of encouraging practice outside of class, Eric thought, was that students found it difficult to find time to be together, especially if they were not taking the same modules. This was even more complicated with joint honours. Eric continued that:

Anything remotely like fieldwork for us is just completely out the question. Even something as simple as getting them down to Edinburgh to meet with folks at the Scottish Parliament may or may not be possible because of the timetabling, it's a huge constraint.

Enhancement of critical analysis skills was achieved primarily through the work in the tutorials, by giving students less to read but at a deeper level. A smaller amount of material was set so that they read it before engaging with it. Eric elaborated:

To model some of that in the type of prompting questions that I would be asking, I'm trying something a little bit different this year with the students doing a presentation.

He noted that this year he was using more tightly defined boundaries than before, having previously followed the model of other colleagues who left it quite open. This, he found, led to a mismatch between what staff expected of students and what the students delivered in terms of approach and depth of analysis. Thus he has become more directive about what is expected and what students should focus on:

I'm very clearly saying 'don't just introduce the materials to us, but pose very specific questions. The way in which you engage other students in the critical analysis of that material that you are presenting is going to be crucial to your mark instead of just sitting back and saying "oh yeah, I thought that was a good presentation".'

Students' presentations are going to be assessed and included as part of their overall grade.

To try to give students an idea of the expectations of them, Eric planned to model a presentation for them. He explained:

I am going to demonstrate what we want, so I'm actually going to do a presentation, what they have to do is pick an organisation, a Christian organisation or person that engages in political campaigning, and critically assess, on the basis of the material that they have been given in the class and other information they have, how that is actually performed. So in about week five I think, I'm going to give them a model presentation, pick my own example, work through it to the same timing with the same criteria so that they have a very clear model of what, in weeks 6-10, they are each going to be doing, and I think that's the only way, because I assumed that they would have a better understanding of what's involved in critical discussion in a seminar than they clearly have. So I think by my investing the energy to model it, I'm hoping that there's going to be a clear process.

Informal outcomes and lessons learned

Eric had the impression that students were generally enthusiastic about the modules, and were partly motivated to take practical theology modules in order to gain learning experiences that were different from the normal range of theology options. It was made clear to the students that although personal experiences and beliefs were being shared, particularly in the Pastoral Care module, they were not there to give therapy, so the boundaries had to be set and understood clearly.

To help achieve this, Eric modelled the process by sharing some of his own experiences. Although the experience of sharing could possibly unsettle students, he had not found this to be a major issue. As the students were in their fourth year of study together, they were likely to have formed acquaintances and friendships with members of the class prior to this, which may have eased the discomfort a little. Eric acknowledged that it might have been more difficult for joint honours students who may have lacked the same opportunities to get to know other students from the course, but he tried to be sensitive to this and found that there was a great deal of mutual respect among class members.

The presentations for the Pastoral Care module were not assessed, but Eric noted that this could be revised before the next iteration of the course. Students had to write one essay and take a three-hour, end-of-term exam, which was very directly mapped onto the learning objectives. In reflecting on this system, Eric commented:

I think the trick is framing the learning outcome so that you have different types where you know that they are going to be assessed in different ways. So one of the learning outcomes in the Pastoral Care module is to be able to reflect on our own experiences of caring and being cared for and, within Citizenship, reflect their own experiences of being citizens. You couldn't do that in an exam. You are not going to get a very valuable answer under those sorts of pressures. So that automatically becomes an essay and so it's appropriate for that, and I think some of the more information-based parts and making connections between different aspects of the module lend themselves ideally to the exam and the presentation. Again, I think if you've got the freedom to change some of the learning outcomes over a couple of years...so that you know which ones are going to steer into the assessment vehicles that are going to be there, all the better. I would hate to be stuck with just an exam or just a presentation. It needs to be mixed and I think assessing the presentations becomes more and more important, as long as we are very clear about what we are asking.

The only notable implementation problems were in relation to students' understanding of the objectives, as mentioned earlier. Eric felt that this was a particular problem for students who were more accustomed to theological training where, as he explained:

We start with the historical theological tradition, or you start with different materials, and you lay that foundation before...looking at the topic. One of the questions that they asked the first time that we did Citizenship was: 'when are we going to be doing some theology?' Now that was about week five before we actually got into some of the biblical and theological materials, because the model demands that you need to know what questions to ask.

Eric has brought the introduction of this material forward a couple of weeks to counter this problem. In addition, he continued by explaining that:

I'm also including in the introductory lectures much more specific explanation of why we are doing it this way. It will seem contrary to what I've just said, but I've made some of the mechanics less obvious, while in the introductory statement I'm going to explain clearly the journey that we are going to take.

He noted that he was taking this approach because:

the first time round, I think some of them were saying 'well, this is just a political science or a sociology module', but I would say that from the beginning they were actually doing theology because they were subconsciously (without articulating it) beginning to process some of those issues which I am intending to bring out later. They actually needed the reassurance or the validation of what was really theology at an earlier stage. So I've recognised that and brought that in.

Eric considered the main benefits for students to be very much in terms of, as he described:

...the validating of their own experience, own selection of materials and validating their own voice, not uncritically of course, but in that important sense of being able to not just discuss an opinion about an author but to add into that what their own reaction is.

He noted further that such a process is:

strange and difficult for them to do and I would hope, personally, for them that it would be a building experience and almost a personal formation process that they are going through along with the academic formation. Personally it triggers me back to a whole set of more research questions about if I've been presenting something to them that I've been researching, that is blindingly obvious until people listen to it, and it becomes apparent to me that it's not blindingly obvious at all, and when a student brings particular aspects of their own experience into it, as a practical theologian I then have to take that seriously, as not determining the research agenda, but saying, if what I'm doing can't connect with that young person's experience of bereavement or being a marginalised citizen for whatever reason, I've then got to go back as a researcher and say that's a point at the margins that I now must consider, so that throws me back into another route round the research side.

Were Eric to give advice to anyone else considering implementing a similar module design, he considered that the most important thing would be to be confident in whichever model of reflection they were going to undertake, because it is important to be able to transfer that confidence to students. As he illustrated:

If they are confident in that model and have assured themselves as to how it works, they can then bring that confidence and give the students the reassurance as they are working through this process.... I think they have to be very careful about the learning outcomes that they set so that it is very clear how they are assessing perhaps each movement within that hermeneutical cycle. We're not just interested in the end product. We are actually very interested for the students' benefit in how that part of the hermeneutical process should be assessed and finding ways of doing that.

Regarding his own plans to improve the modules next year, Eric noted that the key foci for each module would be as follows:

- in the Citizenship module, he aimed to improve the clarity of the expectations and demands of the module
- in the Pastoral Care module, he planned to make the presentation part of the assessment, since he suspected that the lack of assessment may have been demotivating for students and that it needed to be reviewed as a result.

Course evaluation

Students complete a detailed evaluation at the end of each module. Outcomes for the Pastoral Care module have been very positive. As Eric described:

Overwhelmingly, students were very, very positive about it. The first time I did the Citizenship module at St Andrew's it was much more spread and I think I've built a lot of those comments into the rerun. What I also do is I've instigated, and we've taken this up as a department, a mid-module evaluation, just a short snapshot. We do it on our virtual learning environment. It's about four or five questions, round about week five of 11 in a free-form response, so that if there's anything that the students are concerned about we can tweak it for that module, because otherwise the evaluation is only going to benefit the next cohort. So some of the things like recognising that the students are new to this whole method really did come out during that mid-module evaluation the first time round in Citizenship, so then I was able to make some address of that in the second half of that module first time round and hopefully we will see the benefit.

Eric felt that lecturing on these modules had enhanced his understanding of research-teaching linkages by seeing students engage with the material. He commented that:

Whether they realise it or not they are deeply engaged with them either through their marginalisation or their disassociation of it in terms of Citizenship through their own personal experiences. In terms of Pastoral Care, it would be about being carers, being cared for and that I think for me continuously re-emphasises that research when I'm doing it isn't just for half a dozen other people who are going to read that paper, it's got to be wider than that and I can't determine how many folks are going to read the paper, but what I can do is bring the effects of that back to the student group, who are hopefully going to apply some of those principles elsewhere. So it reinforces I think, for me, the vital importance of both research and teaching.

He also considered the terminology of research-teaching linkages to be of importance, because without a research background a teacher can only offer students information to be absorbed and the critical interaction about research that helps to guide students in their own research would be lost. Were he looking for more information on the theme, he described the following things that would be important to him in accessing information:

I think easy access to contemporary research on the education methodology, particularly for those of us who don't have an education degree. Someone who was sifting out some of the best articles, because we can then go directly to them and make some use of them without being educational specialists and because as university lecturers we're not taught how to teach, someone doing a bit of that filtering work for us would save a huge amount of time. It might encourage us to

get some of those raw materials and be influenced by them, and the constant examples of good practice and even the honest examples of bad practice, because I suspect most of us learn most when it goes wrong...of course universities do not always make a contribution to best practice, but perhaps that's a bit disingenuous because we have got there without making too many real mistakes. So making that much more obvious and, if people are willing, to talk about some of the real howlers, particularly for the benefit of lecturers who are new to the process, to actually risk and to safely risk and if it's senior professors who are willing to be honest that can make a big difference.

5.2 Social Sciences

Angus Bancroft, Department of Sociology, University of Edinburgh sociology, level 1

Background

Sociology at the University of Edinburgh is broadly based on research-led teaching. Lecturer Angus Bancroft described this as providing students with the cutting-edge research which staff are currently working on and basing their teaching around this, so that rather than being taught from textbooks, students are enabled to have access to the raw materials from year one. For example, they may be given part of an interview transcript to analyse and have to interpret the data. This means that they can actually, as Angus described:

see the process by which knowledge is produced, and ideas and findings are produced, rather than just presenting them with final products or saying that's what the answer is.

This, Angus explained, acts as a catalyst to fire their sociological imagination. Furthermore, students on honours courses can be actively involved in the process of producing research material.

Context

Angus teaches on an honours course entitled The Sociology of Intoxification and is writing a book on the subject. He highlighted the reciprocal nature of research-led teaching by pointing out that parts of his book had arisen directly from class discussions and tasks set for his students, describing these as:

sort of little research tasks, saying go away and do this and come back to class and tell us what you've got, and that's actually contributed to my own thinking about how to approach this topic.

Angus has also attempted to present scaled-down versions of this module to his first-year students, but with 300 students in the first-year class compared with 50 in the honours class, it is less of a cohesive working atmosphere. The research component spans the entire module by being built into each session. This was, as Angus explained:

actually a decision I took because I felt that the course really wasn't working, based on the sort of lecture and then discussion, and I think it's worked much better. I think it engaged the students much better and that made me feel a lot more happy about what was happening.

Reasons for developing the practice

The module design has been developed over the past year as a solution to the pedagogical problem of students not really being engaged in the way that Angus hoped. Although it did not begin as a direct attempt to enhance research-teaching linkages, Angus realised that 'this was a great way of linking the two very directly'.

Similarly, graduate attributes were not a driving force behind the design, but as Angus elaborated:

The ability to plan and analyse and think on your feet, and present your ideas in class, I think is important for graduates for employability. Then other ways are more sort of formally taught courses for undergraduates, which they do say that they find excruciatingly dull when they're being taught it, but when they get out there, they actually think it's quite useful. So I think that could be seen as sort of contributing to graduate skills and transferable skills, which is again sort of what I had in mind when presenting it.

In practice

Angus outlined the course as being:

about how intoxicants on the whole, cigarettes and all sorts of things, are constructed and categorised, and the way in which that is done affects how they are used, and that feeds back into how they are constructed and categorised, so there's a sort of circular reflexivity, which shapes both how drugs are used normally and also shapes drug problems in terms of what they are like and how they are dealt with and so on.

So it's sort of looking at what you might call socialised pharmacology...it's 11 sessions starting with looking at the cultures surrounding drug and alcohol use, looking at rituals, looking at drug problems, then going on to look at the political economy of all drugs and then later on to pharmaceuticals and medicalisation, and for each one what I'll do is I'll get the students to go and, for the first one, go and write about a drug ritual, which is connected to some kind of drug use, which can be anything. It could be the ritual of buying pints and rounds at the pub, or it could be the rituals involved in rolling a joint through cannabis, and then going back to class to discuss partly what they've got and what makes something a ritual, how things are ritualised...what that actually does and how that relates to the actual intoxicant effect. The ritual is part of the actual psychological effect of intoxication, but also to think about why they are choosing some activities as rituals and not others, and what these tasks do. They'll write them up and...[the essays] contribute to their assessments. So part of the assessment is based on that. That sort of gives them an incentive to do them. So they'll do that and a write-up and that generally works quite well.

Angus chose this format, which seemed to work well and which the external examiner commented favourably upon, because it was a move away from the standard essay format. As he described, it was:

something a bit unusual and it seemed to work well and I think without those homework tasks it wouldn't work really, because they need to get their hands on to them to sort of understand by doing really.

Students normally worked in groups of three or four and then brought everything together for a whole class discussion. However, despite the success of the format, there were some problematic aspects. Angus explained:

The main problem that I've come across from that perspective is that there's just not sufficient time to get everything together because there is so much material. We've got 40 or 50 students doing this thing, and they're all different and they all

produce really interesting material [but] there isn't time in a two-hour class to go through it all.

The potential scope of the practice may also have been negatively impacted upon by assessment methods, which included a 25 per cent short piece, due two-thirds of the way through the semester, and a 75 per cent long essay due at the end of the semester, with the homework tasks contributing towards the short piece only. In a bid to put more weight on the research aspect, Angus suggested that one alternative might be to have the whole course assessed via the long essay since the 1,500-word limit on the short piece may be constraining for students.

Levels of student awareness

Angus was unsure how much the students realised that much of the learning material was based on his own research, but considered this to be an interesting question. He reasoned that:

Some do, some don't...I tend not to set my work as reading because I feel that in a way, they get that during the lecture so there's no point in setting it for reading as well. I do tell them at the start, but I think a lot of them don't really make the connection, even if your reading is on the course, that you're that person that's writing the book as well, you know, because they sort of have this weird thing that you can't be that, you know, because people who write books...are totally different.... I think they very much view you as a lecturer, as a rule, and as a teacher, and I think they'll be aware that your ideas come from somewhere and that, yeah alright, you've done this research, but I don't think they really see it in the way that I see it as two very much linked aspects of my work.

So I think that's probably to do with the British education system in general. I get the sense, certainly from my American students, that they see this link much better and that's to do with how the American higher education, certainly in the more elite colleges, are, where there's a much closer relationship between staff and students, intellectually anyway, that students are seen more as intellectual participants. Whereas I think even at third year, they still haven't quite, some of them anyway, dropped that sort of high school mode of thinking here, which I think is a pity, because the whole of what I would like is to sort of see themselves as intellectually engaged in the enterprise, but that's just the nature of the beast I think.

Angus felt that this module, along with another couple in the Department, exemplified a research-teaching linkages design. However, he felt that this was an overall principle of the Department, and suggested that:

I think most people try this in some way and when they do it, from what students say, it seems to work...but people have different ways of doing it and different understandings of it.

In his case, he believed that knowledge construction best described the research activities that underpinned the module, given that, as he explained:

frequently when I start out, I'm not entirely sure I want to construct a particular topic and I've got the sort of bare bones outline, but frequently the direction is decided by what emerges from the last discussion. For instance, last week we were discussing categorisation of different drugs and I was going to focus on the

sort of legal classification, and one student pointed out that the common lay classification is natural or unnatural, artificial objects, which opened up a whole new line of approach really in terms of how I was talking about it, and that's kind of having a knock-on effect, certainly in the next few lectures.

Critical thinking is, as Angus put it:

a key skill that students learn, and part of that is denaturing the world around them to a certain extent in a sociological way, not accepting at face value what they have so it is, and part of my role is to kind of chivvy them along a bit to do that, so it's not exactly a socratic method, but I'll just say 'well why is something like that?', 'What about x and y for instance, Ritalin is a branded product but heroin is actually a brand but doesn't appear to us as a branded product', so a lot of my work is to some extent getting them to adapt that.

Angus felt that it was important to introduce students to this way of thinking as early as possible, and was common practice in sociology from level 1 onwards as it was the essence of sociology. He also considered the issue of progressive continuity across year levels to be an important issue, as he felt that it was unhelpful for students to experience one way of learning in the first couple of years, only to then be faced with a whole new way later on, though he appreciated the difficulties that can arise when teaching large class sizes. However, the aim in this module was, as Angus described:

for them to have an understanding of drugs and other intoxicants that goes far beyond the sort of commonsensical and challenges the legal, scientific, institutional kind of categorisation of drugs in society. What is a drug and what isn't, and also really to get their sociological imagination working so that they can apply that to other sorts of analogous areas of life.... So things like one part of the course is looking at the cultural perception of public problems, like who decides what becomes a public problem and what doesn't, so they can then hopefully apply some of the techniques in this course to other public problems like crime, obesity, public health etc, so that they can sort of apply the same critical framework to them as well.

Informal outcomes and lessons learned

Last year, Angus conducted a mid-semester evaluation because, as he explained:

I think there are three sorts of elements to evaluation. One is your sort of impressions as a teacher from how the students are reacting, what their contributions are, the sort of feel of the class, there's what they write in their assessments that they do, so that can all let you know if you are actually getting through to them...if they are actually writing stuff that, yeah, they are kind of adopting these ideas and they are really understanding them and using them, or whether they are just sort of going through the motions, and you can really tell that, you know. There's always some people who just don't get it and some people who do, but the sort of balance between those is one aspect and finally, there is the formal student evaluation of the course and they fill in a form at the end of every course evaluating it.

So there's three elements to it and last year I did a mid-semester evaluation, which, as I say, had been my choice, and I did that because it was totally new and again I wanted to see how, it's always a bit dangerous relying on your instincts, you might enjoy teaching something but that doesn't mean they are

enjoying it necessarily. So I did that and it was overwhelmingly positive, it was the most positive evaluation I have had for anything.

Angus expanded that he was particularly pleased about students liking that he was pushing them, and that they enjoyed the homework task, because it was something practical and concrete, rather than having them thinking simply in abstract terms. He also commented that they had appeared to enjoy the content of the course and being able to think about it in an alternative way. However, as he cautioned:

There was an issue for some there, which was that it was unbalanced in the direction of class discussion, and some of them certainly had said that they would have preferred having more of a lecture, which I think was an important point.

This may have been because Angus had initially failed to provide students with a theoretical framework, which may have resulted in some of them losing focus. In response to this issue, Angus decided to introduce clear objectives for each session so that students would be fully aware of what was expected of them. The research questions were set out at the start, but on reflection Angus is now considering the possibility of having students come up with their own research questions.

In terms of time costs, developing the module design was not as labour-intensive as Angus had expected. As he highlighted:

It required some planning and forethought, because you have to think about where you want everyone to end up, but you know, it was much less work than rewriting the lectures would have been for instance. That would have been an enormous effort, so it's a lot less and it wasn't every year anyway, you are revising the course every year anyway to some extent. It wasn't that much more than standard provision.... It was a bit more, but planning a meeting, I don't know, about three or four days to think up the homework task and to rewrite the handbook, so...it wasn't massively over time-consuming'.

Moreover, there have been benefits for the Department in attracting a greater number of outside students, which has had positive financial implications. Angus highlighted the issue of the extent to which such practices are acknowledged and shared, which as he impressed:

would benefit all the courses, and to some extent I have done that informally, just talking to other lecturers here and in other departments about it and sort of sharing ideas, and that's been really useful...and I think it's helped all of us reflect what we are doing.

In terms of the students, the main benefits were considered to be transferable skills. Angus commented on this:

I guess, well this is a bit utopian, but ideally what I'd hope is what they are doing in this course and other ones that sort of involve this sort of thing is actually thinking about that across the board. So thinking 'oh yes, what skills did I get from the other courses' as well because obviously, frequently you know, they are going to be very instrumental about how they learn and get through...'what do I have to do for the essay?', whereas kind of after that they might start thinking, 'but what have I actually got from that [which] might say to an employer for instance...that might impress them and get me a job in this field and say in my case, you know, researching or working in the drugs field'.

As part of the module, students also had an opportunity to undertake a field trip on which they were able to meet with the director of a drugs education organisation called Crew 2000. Angus elaborated:

It doesn't involve a great deal, we just sort of go to the offices and the Director gives them a bit of a talk about the work involved and then they get to sort of look around the materials they have and what's involved, and students can also volunteer if they want to be involved in working for the organisation, and it's nice just to get out of the academy for a bit and see how things are on the ground, and some sense also of linking, I think, to Edinburgh as a community, and Scotland as well, in what drug issues are specifically here. So I think it's quite good fun and I guess things like that are useful again for most of them. My impression is they probably didn't know this thing existed and they hadn't even thought about it as a career path, and yet there are plenty of careers open in that field.

Angus added that students routinely took up these opportunities and would be keen to expand some of the field trips, perhaps formalising them. He also suggested finding other organisations to use for this purpose, but acknowledged the difficulties in persuading enough people who work in the field to come in and talk about what they do. He would have to think about how each party could most benefit from this.

Were someone else to consider trying to implement a similar practice, Angus suggested that they should firstly:

have faith in your students, don't be afraid of taking a leap, because my experience has been that as long as it is presented to them in the right way, in a sort of straightforward manner, and they understand what's expected of them, they will mostly embrace it, you know, quite enthusiastically.... They like being involved and they like, at the end of the day, most of them actually don't mind being pushed a bit as long as it's for a reason, so I guess that's the overarching one. The other thing is, I guess, not to tie yourself down too much either and to be prepared that it will go a long way away from whatever you've planned for it as well.

Angus considered that running the module this year had revolutionised his understanding of research-teaching linkages. As he described:

I finally understand what we mean by research-led teaching and I don't think I had, I think I had a sort of a half, partial understanding of it really or about its potential anyway. I can see its value now much better than just 'this is quite neat, because we do it anyway so why not tell the students about it and that's dandy', but this is much more, I think I've got a greater understanding about how it sort of works both ways in the benefits.

That said, Angus indicated that in sociology this is a part of what is simply understood as effective teaching practice, although he was unsure whether it would work in all disciplines. For example, as he noted:

if I was teaching surgery, I probably would want to teach them...what was what, so some of it is...sort of good teaching and I think it goes beyond that, because...it sort of relies on the idea of turning university education into a sort of collective endeavour in which the students are involved, or are a part of.... I think that is where it starts going beyond that.

With regard to the themes of research-teaching linkages, Angus said that the external examiner had commented quite a few times that one of the strengths of the module was the research involvement in teaching, in terms of the students' work, and the quality of the teaching and the Department. However, as he noted:

I was looking at the various rankings of university departments on various measures, and I don't think this was one...I think it could usefully be included in the surveys of teaching quality that they contribute towards these rankings, because I think that it's something that otherwise just gets lost...it could be acknowledged more widely.

Overall, the research format appeared to have been popular with students and enabled them to enhance their critical analysis, presentation skills and practical research skills, as well as widening their opportunities for participation in the wider research community. There have also been clear benefits for staff, but there were some time constraints and students were at times a little unclear about the objectives. Plans are underway to tackle these issues before the next iteration of the module.

Elaine Duncan, Department of Psychology, Glasgow Caledonian University (GCU), psychology, level 1

Background

Elaine Duncan teaches on the Psychology level 1 Introductory Skills for Psychologists module at GCU. She believes that it is important to be explicit to students at all levels about 'the attempts that psychologists make to understand certain phenomenon and not just disseminate knowledge'. While many foundation psychology courses rely on building knowledge from filtered information in textbooks, Elaine has adopted a more dynamic approach.

Context

The Introductory Skills for Psychologists module is taken by all BSc students (approximately 100) in either semester A or B. This module was specifically designed to cover skills that psychologists should have by the time they have finished their degree. Elaine noted that:

It's often assumed that by doing assignments, doing seminars and discussions and reading, that those skills will come almost by osmosis, but this Psychology Department took a decision to not assume that's the case, and to actually frontload the skills and talk about them specifically, so it's essay-writing skills, lab report-writing skills, statistical skills, research process, research methods, quantitative, qualitative methodology. They actually get to put into practice even hypothetically the collection of data or what you would do to get there. We cover ethical principles, critical analysis, all of research, not just carry it out so those links are the most explicit in year one in that particular module.

Although the intention is to build research skills and embed them in every module, there were some concerns about how well students understood that message and acted upon it. The emphasis on transferable skills was included in the module descriptors, but Elaine felt that it did not really carry over to all of the modules. There are, however, research skills and research modules all the way through from the first to the third years. In the fourth-year Forensics module, attempts are made to make explicit links between practice

and teaching by having visits to Barlinnie prison, where each student is able to see in practice what they are learning.

Reasons for developing the practice

Elaine joined the Department 14 years ago when it was only a third of its present size. The present module is a development of an earlier module called Skills and Principles, which was more discussion based and less structured, leading to students becoming bored. Since then, Elaine has dramatically revamped the module to its present form, and it has been awarded a commendation from the Enhancement-Led Institutional Review. The module was specifically designed with graduate attributes in mind.

In this module originally run by a member of staff and now by a hired assistant, a database of organisations is kept. Thus students who have an interest in, for example, autism can be placed in a specialist unit for a period to gain work experience in the relevant area. There are also plans to implement an employability module for first years. Another existing optional module called Work in Psychology allows students to get credit for analysing the work they do outside university. Elaine stressed that she did not see general transferable skills as being separate from the graduate attributes that postgraduate researchers need, since any job is likely to require skills of enquiry and critical analysis. As she explained:

To me, if you've got a raft of skills that are based on the application of knowledge and the critical research of that knowledge in practice...you just have a much more rounded graduate really. We're trying to make sure we achieve that, we're trying to make sure that we have graduates that don't exit not knowing what transferable skills are. We are trying to prepare graduates who exit who think they are employable and we're trying to get graduates who exit who can problem solve and not just disseminate research findings.

In practice

The Introductory Skills for Psychologists module builds skills that psychology students should acquire by the time of graduation, including critical analysis, teamwork and experience of the research process. Elaine felt that the process was based on a mixture of enquiry-based learning and knowledge construction, but that it involved various aspects and could not be neatly defined as one category or another.

Lectures have been abandoned in this module in favour of students being required to review and reflect on the study skills they have used in the past, and to look up recent research on the most effective study methods and discuss these with their peers. There is also a workshop on library skills and use of databases within the first two weeks of the module. This workshop is led by GCU's chief librarian. One of the exercises attached to this workshop is for students to choose a particular topic, find the latest research on it and report this back to their peers. As Elaine elaborated:

It's not a lecture/seminar scenario, it's a three-hour workshop and it's just the two members of staff, so we've worked closely together to understand what's underpinning the module, you know, that's this is not just a Friday afternoon or a Tuesday morning reflection of how I'm skilled or not, this module is about how to be the basis of a graduate in psychology and that has to have the whole research process underpinning that.

The class meets once a week for 12 weeks. While some activities are tutor-led, students mainly reflect on an individual basis or work in pairs. In one exercise, for example, the students are asked to form a large circle and then to debate a particular topic or issue without tutor input. Students are also able to structure their assignment through a series of mini-deadlines before the final submission date, and form support groups to talk about their research and findings over the previous five weeks of the course. With no lectures, the knowledge construction process is driven entirely by the students and only primed by the lecturer. Students have a prescribed textbook about research skills, but as Elaine described:

Everything is experiential, everything is about seeing where they come from, what they don't know, what they do know, what their strengths are, how they acquire more skills, and every single week it's very different and to miss a week, it's not easy to catch up because you can't find this stuff in a book.

While Elaine provides some references, the students provide many of their own, since research and enquiry actually underpin the module. In the main critical appraisal assignment, students choose a topic from a set of four and are asked to critically analyse it on various levels. During this process, students learn how published research is laid out, what an abstract is, and what is meant by methodology. As Elaine explained:

They are being exposed prior to having knowledge from me to technical terms that they have never seen before, so they have to go and find out what those are, so if they've never seen the word longitudinal before or they don't know what a pseudo-experimental design is, they are forced to read this article to bring the problems into class, so they are not told first and then go and read and I'll confirm. In previous discussions about this module, I've called it a shaky scaffold. They get just enough direction each week to go and find, but they are left with just enough to wobble about and to bring that into class, and to me that echoes the research process because you never quite get to know everything, it's never finalised, it's always reiterated, it's always experimental.

Students are also encouraged to set their own research questions once confident enough to do so. Elaine felt that this was difficult early in the process, but once students felt confident with their class members, and if the class size was small, it was possible. As she explained:

I think the right combination of things for that to occur, you have to have a small class that meet frequently, you have to have a fairly open and varied teaching method and style, and you have to have types of assignments or exercise which encourage student-led enquiry. If you don't have that and you work from books only to a structured lecture topic, then that experiential nature can't come through I don't think, and it also helps too that they don't have a one-hour lecture and a two-hour seminar, they don't have things split. It works best if there is a block of time so that you can set up a problem and mature it and let it breed.

A lot of emphasis is put on finding up-to-date research, although the historical context is also emphasised. The importance of working with recent research was largely behind the idea of promoting familiarity with databases rather than simply with books, which date much faster. When appropriate, Elaine mentions her own research in the context of the discussions and also that of her third and fourth-year students, to give first years an idea of the kinds of research they might be involved in later and the difficulties encountered

by those students. In one session, third and fourth-year students take over a seminar, where they guide the first years on how to produce a hypothetical research proposal.

Elaine attempts to make it clear that the Department is very much based around research-led teaching. Publications and posters done by staff and PhD students at conferences are displayed throughout the Department's corridors. In one class exercise during the Introductory Skills for Psychologists module, students are directed towards these posters and asked to report back to peers about them. This is also beneficial in terms of priming students' awareness of which staff are involved in each research area well ahead of their honours dissertation.

This design is highly unusual for a first-year psychology module in terms of being delivered in a complete three-hour block of time, rather than lecture/seminar based, and also in that the assessment is 100 per cent coursework. As it is a skills development module, Elaine explicitly points out to students that everyone is on a continuum of skills development. The assessments include a critical appraisal of a piece of research, and a group presentation about a psychologist from a cognitive, psychodynamic or occupational approach.

Informal outcomes and lessons learned

Elaine felt that the benefits were reciprocal for staff and students, since some students were able to bring their own practical experiences from work settings to bear on a theory in class. For example, experience of working in a care setting may give some students an applied perspective on a particular treatment/model in a particular setting. However, the practice was quite labour-intensive for staff because, as Elaine noted, 'you're hot-housing with a group of students the whole time for a whole 12 weeks, no one else takes over from you and you're with them for three hours'. She also felt that the module would only really be applicable to small class sizes, as having a large class split into several groups would necessitate a considerable staff resource.

Students were expected to participate in the research process, although Elaine noted that some seemed to learn vicariously. There was a poor response to electronic evaluation forms, and feedback from students indicated a mixed response. Some noted that the module lacked direction, which may have been the result of such a radical shift from traditional structured lectures. Responses also differed across tutorial groups, suggesting that a more dynamic teaching style was required in such a module design to fully engage students. However, other students appeared to enjoy the experience very much. Elaine felt that the benefits outweighed the drawbacks, although she cautioned that it may not be appropriate for all types of knowledge acquisition. To implement this module design on a large scale would, in her opinion, require staff training workshops, particularly for those who preferred more traditional lectures. However, the changing technology and assessment flexibility in the institution widened the scope for such endeavours.

Elaine advised that other teaching staff interested in offering a similar module should try to use as many teaching scenarios/techniques as possible. For example, as she illustrated:

Do not make it book-based or just discussion-based. Make it very varied as possible, use as much media as possible, so newspaper, print, electronic, young and old, and be prepared to change in that scenario because it's not as strict as the lecture seminar. Here you are with people for three hours more or less and it's

a fairly loose concept, although you may have an exercise you are meant to do that day, be prepared to be flexible, be prepared to change on the hoof. If you've got a class who don't feel like discussing, the dynamics are poor that particular day, they're tired, they've just had a class test somewhere else, they've had a late night the night before because it's a special student night out, you have to be on the ball ready to be aware of what's happening there, to change the method you are using from something like sit down and read to go out and collect info and still get the same principle, still get the same lesson taught at the end of the day, but you have to be prepared to change midstream before that kind of thing will work I think.

For the future, Elaine hoped to involve more e-learning between classes as an added vehicle of communication about the research process. She also noted that this type of module works best, in her opinion, when there is a balanced gender and age mix. Introductory Skills for Psychologists offers first-year students a very unusual learning experience which is integral to the research process, enabling them to develop transferable research skills that will enhance their graduate attributes. While students may not always have seen the advantages of this process, the gradual building of skills and input to the research knowledge of staff suggests that it is likely to provide reciprocal benefits which may become more apparent to students in subsequent years.

Vivian Leacock, Department of Public Policy, University of Glasgow public policy, level 2

Background

Vivian Leacock is the level 2 coordinator for public policy at the University of Glasgow. Her background is in research management and practice, and as such she believes research to be an integral part of teaching. She explained:

I always make very strong links between what I do in my teaching and examples that I've drawn from being a manager in research, commissioning research and managing research as well as a researcher in the field, so when I came here two years ago I had strongly, probably more research in mind than I had teaching in mind, and I had a longer experience of doing research than teaching. I had taught when I was a PhD student and I hadn't taught for a long time so for me, research was very much at the forefront, and I would have seen that as all sorts of activities that help us understand more about our discipline and helps us understand more about social and economical issues, because that's the area that I'm working in and obviously using social scientific methods. I have those generic skills of being a social scientist and knowing how to apply those different methods, qualitative and quantitative and so on...so for me, research is very much linked to the field of discipline that you are linked to, but also it's about applying specific social science methods as well.

Vivian felt that she had benefited from having strong links with the Learning and Teaching Centre (LTC), and that the research-teaching linkages theme had emerged strongly in the LTC's teaching and guidance by promoting reflection on research teaching in light of academic and educational theory and literature. She has been particularly interested in how academics use work they do outside of their teaching forum as examples of real-world practice. She explained that teaching is:

very much about real-life examples. It's applied but also very theoretical as well and it's about using real-life examples of policy-making and initiatives that allow the students to grapple with the subject area. So I see it very much as they go hand in hand and it goes both ways, you know, research informs teaching and teaching informs research. I guess the skills that you have for teaching as well can be applied to research and vice versa.

Context

The level 2 Public Policy module spans two semesters. The first half is a theoretical exploration of ideologies from the new right to Marxism to feminism. Students are introduced to aspects of the theoretical side of public policy and encouraged to see how different ideologies play a role in shaping public policy. In the second semester, different lecturers introduce students to specific examples of policy-making, as Vivian illustrated:

It could be, for example, how welfare is funded and the increasing role of the private sector, the public sector and the voluntary sector in funding welfare.... Other examples are private health, private schooling and so on. So they start to get introduced to some real-life examples where they can connect up the ideologies they have learned in the first semester.

Reasons for developing the practice

Prior to Vivian's appointment, case studies had been introduced, but were not as refined in that they were less aligned with the curriculum and assessment methods.

Vivian explained that:

They were kind of sitting at the end but we weren't quite sure what we were doing with them, but I've tried to make sure that they are integrated with every aspect of that whole course and that the students can take those live examples to help them when they are writing essays, or help them when they are trying to think of concrete examples when they are trying to illustrate their argument in the exam, whatever, that kind of thing.

An underlying learning outcome of the whole course was to encourage the development of broadly transferable skills. The aims of level 2 Public Policy were to introduce students to the concepts involved in policy delivery and to provide them with hands-on abilities and a range of transferable skills. Traditional kinds of academic skills and competences (analysis and oral and written communication) were considered to be part of the objective, but also critical analysis and how to interpret text. Vivian hoped to inculcate these types of skills, but also wider skills such as presentation and teamworking skills, incorporating assertiveness skills, and confidence about conveying arguments and critiques of other authors' and academics' work. As Vivian illustrated:

I'm always trying to encourage them to build up their confidence, of course it takes a lot of reading and writing before you get to that stage to feel confident to be critical of others' works, but I am always trying to encourage them that it's quite acceptable if you have developed the balance for coherent arguments, that it's very acceptable to be critiquing others' work.

In practice

In the second semester, the module moves on to the case study section. Students are provided with six to eight concrete examples of recent research in a relevant subject area

in light of the material presented in the first semester. For the case study examples, each lecturer takes an area with relevant questions and PhD students also showcase their work, which allows them to start develop their lecturing skills as well.

As Vivian explained:

Often PhD students may be exposed to a lot of tutoring but less so lecturing. So we take, as I say, six or seven lecturers and take a topic area, say for example private health, or the one that I do is on equality and the criminal justice system, because I deal with the area of criminal justice and criminology. I have being doing recent work on gender equality and criminal justice, so I used that as a concrete example of research that I have recently conducted with other colleagues, and brought that in, and brought some of the theories and qualities I learned about the first semester in ideologies, bring that to a real-life example of how is the criminal justice system in Scotland dealing with new equality legislation and the gender equality duty, for example.

So what you are doing is, you are trying to marry up the different aspects from the theoretical work that they are doing in learning, and also to introduce to them a concrete example of a short study that's taken place and make suggestions about how that study has impacted on policy and policy development and the implications for policy.... I do the criminal justice aspect and it's quite qualitative. Other examples, we have a PhD student who is doing research on breastfeeding and recent breastfeeding policy and legislation and the uptake of breastfeeding in Scotland and she did that. She delivered that as an example.

This enables simultaneous benefits to be reaped from the research process by undergraduate and postgraduate students as well as the lecturing staff. Students are made fully aware that the case studies are based on the research of staff or PhD students. It allows PhD students and staff to introduce their work, enabling them to marry up their research and teaching. Students are also made aware that the case study may be a work in progress in some cases, and that the conclusions are tentative. In this way they can get a feel for what it would be like to introduce their research to the public domain. The relevance of the material to particular issues is discussed, so that a balance is achieved between theory, policy and practice. In addition, students are able to gain a clear insight into the live research activities in the Department, as Vivian elaborated:

I think from evaluation feedback from students, I think it was last year, that students felt as well that...there was so much going on in the Department and they were really quite excited by what was going on. So I think it can make it seem much more real and it can give it this applied aspect as well. But it can also allow students to see what lecturers do in relation to their wider area and their contribution to the field, to their discipline, but also to the policy debates in general....I think coming previously from an academic environment and then the last six years, I've worked in government as well, that I see the argument for the side of it that's really quite pragmatic and also wants to get to the nub of current policy debates. And I think there is nothing better than those kinds of live, current, contemporary issues that the students can engage with instead of it being quite abstract in terms of being textbook only.

After being presented with the case studies, students return from the Easter break and are asked what they have learned from them. They then develop some posters over two

weeks using the tutorial slot to research the topic. In the penultimate session of the year, they then return to give a presentation to the lecturers and tutors, at which point they have a chance to add their interpretation of the case studies. This can be a challenging aspect for them, but helps to enhance a range of transferable skills. Vivian explained that for some students:

It could be a really steep learning curve, they've got a couple of weeks to really start gathering their thoughts on the topic of, say, gender equality and criminal justice.... What we try to do, encouraging them to do...these posters is that they are developing obviously a knowledge about the area, but we also try to help them to develop their group working skills to produce some sort of outcome, output at the end of it, plus also allowing them to develop their presentation skills...their oral presentation skills.

And again it's interesting, I hadn't really quite thought about this. How we present it is that posters are one of the key mechanisms through which people present their research at conferences and...I always introduce it as that. Oral communication and oral presentation are really key skills that people need to develop. You would be asked to do these types of things when you are working, so this is a good exercise and you don't always have to be summatively assessed.

It's good to do these types of formative assessments because that's what we do, we actually don't summatively assess them in the sense of giving them marks or, you know, for doing these posters, but we give them a prize for the best poster and that was well received last year. But we use it as an opportunity to allow them to develop their skills working together in teams and producing this piece of work that succinctly in five minutes tells us a story. So they are developing a range of skills and not just going through their essay-writing skills, but they are developing a different set of skills.

On average over the past two years, the class has comprised 65 level 2 students in six tutorial groups, resulting in approximately 10 students in each group. After Easter, the lecture slots are used to allow students to use these five sessions to develop their posters. The three tutors circulate the tutorial groups offering advice and assistance to students in developing their posters. Vivian attends the first session to give the students hints, and returns at the final session to check on their progress.

Students are kept in their tutorial groups, since they are likely to have built up a relationship with their peers in the course of the year. Given that this is the final piece of teamwork they do in their various tutorial groups, Vivian said that she considered it beneficial to keep them in the same groups. She felt that this familiarity would help them to use their imaginations in creating the posters.

Although Vivian acknowledged that the quality of the posters could vary dramatically from year to year, she thought it was a process with which students engaged well. Students construct the posters manually by cutting out articles from newspapers and images from magazines to try to construct a story linking with what the lecturer has introduced them to and with their wider reading. However, Vivian noted that there was some debate about whether they should be summatively assessed on this work. She explained:

Originally we assessed levels 1 and 2 in four questions in the end-of-year exam, but when you get to honours you've only got three questions in each module

and we have changed that in the last year. We've made level 1 and level 2 also just three questions. It's three questions in three hours and that's part of gearing them up to what an honours paper looks like. We've found that works fairly well and we've also found that with our external examiner as well, who said that [it] was a good move to make it much more streamlined, because what we were doing was, we were asking students to write much more questions in three hours and their fourth question was always fairly short, not of great quality and they were not managing to, like, I think they ran out of time and they didn't quite engage with the fourth question. So it's improving the quality of answers in the exams by allowing them to do the three questions, but the reason I mention that is because the fourth question was a question on these posters, but we've dropped [it].

The fourth question was a generic question about the use of evidence in policy-making and students were asked to draw on their case studies, but historically this question was not answered well. There was a feeling that students failed to see how to translate this work into the exam. The result was that the marks for this question had pulled the overall grade down in previous years. The move towards formative assessment appeared to take the pressure off students somewhat and allowed them to develop a range of skills which they may not have had previous exposure to, such as presentation skills. Vivian explained how this could have a positive impact on the students' long-term learning:

I teach honours modules as well and the honours module that I run in particular is the criminal justice one...I ask students to do a very short 10-minute presentation in the interactive sessions week on week and I've been impressed by the quality of presentations...they are building up their confidence bit by bit and I think introducing that to them in second year has helped the ones in third year. They seem to be quite confident when they stand up and they're speaking, so I think there's a real opportunity and they know me now from second year as well. I'm the sort of linking factor, they've stood up and they've stood up in front of me before and they know how to approach me on these issues, and then hopefully I carry that a little bit over when we go into third and fourth year as well.

As coordinator, Vivian is tasked with trying to maintain continuity over the student experience with different lecturers and tutors. She communicates her expectations via email to staff, and while she appreciates that there are different teaching styles she has tried to encourage staff to stick to standardised criteria based on being clear about how and why research has been conducted, what the purpose was and how it might lead to influence in policy or be relevant to current policy debates.

Although students have tended to raise critical questions, Vivian indicated that this stopped short of a critique of what the lecturer had done in terms of their research, that is what methods they had used. She considered that to be too ambitious in the second year, particularly given that students had not yet been introduced to research methods. They had the opportunity to undertake a research methods course in honours years, but were less familiar with terms such as quantitative or qualitative analysis at the earlier stages. However, Vivian claimed that students asked challenging types of questions about the relevance of certain pieces of work or how they might impact on policy. So in that sense, she considered that students had started to develop critical thinking and analysis.

She explained:

When I worked in government, I also worked in the area of lifelong learning and further education and policy research, so that the themes of employability are familiar to me, especially in the sense of encouraging people to develop hard skills as well as softer skills, and all those kinds of being people-orientated and managing to work in teams and developing leadership skills, and all this sort of thing. And I would say that we do certainly try to encourage them to develop softer skills as well about what it means to have good interpersonal relationships and communication with people, as well as with more sort of traditional graduate attributes in the sense of, as I was saying earlier, good written and oral communication and critical thinking and interpretive skills, and then obviously as they progress in their academic career, methodological skills as well.

Vivien felt that while level 3 and 4 students were able to start acquiring some of the methodological skills required by postgraduate researchers, more generic skills could be gained at the earlier stages. As she highlighted:

I had been reading some of the educational literature about what kinds of skills good lecturers and researchers should have, and they include a lot of good management skills, working in teams skills, organisational, time management, all these kinds of things that you probably more associate with corporations, corporate skills.... A lot of the skills that I've developed in government have been really invaluable to working here, that I wouldn't have had just as a postgraduate student. I needed to go out and understand what it also meant to work in big organisations, like this is a huge organisation, but what happens often in this type of environment is that often...there's less emphasis on teamworking, I think it's fair to say without being overly critical, the types of environment I've come from put real emphasis on teamworking and cooperating with teams, and understanding when to come and go and compromise in situations and so on, and I think a lot of work as a lecturer and a researcher involves a lot of working alone and being comfortable with working alone, but also, you are always working as part of a team because you're part of this research team. I'm part of a teaching programme which is a team, been previously part of other research, so I think that for me would be also something to inculcate, good communication skills, good teamworking skills with your postgraduate community as well, but...that has to come from encouraging students to share as well.

Vivien also felt that it was important to give students practical knowledge of areas such as budget handling, since this is an important aspect of real-world research. Having PhD students presenting case studies benefited them by giving them lecturing experience, and also benefited the undergraduates by enabling them to see the process of development and transition between progressive stages in their student experience. At this stage, Vivian felt that since students were presented with the case study and then went off to come up with their own interpretations, the research process would fall predominantly within the category of knowledge construction, with some students taking a historical approach of how the policy was developed while others might just present different policies.

Informal outcomes and lessons learned

The expectation was for students to engage in the process as part of a team and work together to come up with a solution. Vivian felt that these expectations have very much been met. She noted staff comments that the standard of the presentations had risen over the past couple of years compared to when the practice was first implemented, and that the students were really engaged and enthusiastic. Staff in the Department were 'also very accommodating and keen to make a go of it'.

There was little in the way of additional time costs, and any costs were definitely outweighed by the benefits of the students' learning experience. Module evaluations with students and staff on the university's virtual learning environment, Moodle, suggested that both were enthusiastic about the module and found it beneficial. Vivian has considered the possibility that the model could be expanded to other years, including the first year, although she acknowledged the potential difficulties with such a large group. However, she noted that she had borrowed the model for some fourth-year modules.

With regard to her own understanding of research-teaching linkages, Vivian considered that the experience, as she said:

helped me to introduce the research message earlier in the teaching process and students' experience. We have a very large postgraduate community that get involved so that the students see what's happening behind the scenes. Research used to be seen as a separate thing, but now it's being introduced earlier so that the students can see what the business of the Department and the University is. It's made me think though about another important aspect, that is, teaching students about budgeting, which is an important skill in research. You need to be able to bring money in. Having to do this in my role working in government provided me with good practice to work in an academic environment and is probably how I got offered this position. To be a researcher you need to have the theoretical skills, know how to do the methodology and also deal with the business side of things. Students should be taught about being able to manage budgets and apply for funding, [which] is an important aspect of research that students are not made aware of, but would benefit from even if it was not at the undergraduate stage.

This module was based on a research design and has provided multifaceted benefits in terms of enhancing students' generic graduate attributes at the early undergraduate stage, lecturing skills at postgraduate level, and lecturing staff's research development. The design was directly influenced by knowledge of the research-teaching linkages literature as well as practical experience on the part of the coordinator of how the research world operates in a wider context than the university environment. This has enabled students to experience research at different levels and in different contexts within the framework of progressive continuity over their undergraduate and postgraduate experience.

6 Discussion

From the spoken questions and concerns of those we interviewed, and also from the literature on the topic, the project team established the following headings to explore interviewees' evidence:

- academics' perceptions of the project's context
- academics' views on enhancing graduate attributes
- academic conceptions of the research-teaching nexus
- student learning cultures and individual approaches.

6.1 Academics' perceptions of the project's context

Contrary to the literature, those we interviewed were mainly unconcerned about the policy background and broader context of this project. However, concerns were expressed more generally in two main areas: alienation in terms of competing priorities in the arts, humanities and social sciences, and funding requirements.

FAQ: How can we cope with more learning and teaching imperatives? We're only just keeping up with the ones that have already been imposed, not to mention the changes occurring within our disciplines.

Academics in the disciplines covered by this project have to juggle a mix of competing priorities and attendant paradoxes. The implementation of imperatives to improve students' experience of and engagement with their study has been a continuous theme in the arts, humanities and social sciences for over a decade, as it has for all university subject areas.

Shifting priorities encapsulated in the linguistic somersaults performed by moves from 'generic skills' to 'graduate attributes', from 'graduateness' to 'employability' and, more particularly, from 'disciplinarity' to 'interdisciplinarity' have provided academics in the arts, humanities and social sciences much with which to contend. This is particularly well identified if one examines the themes provided by the Quality Enhancement Framework. Thus institutions have been asked to enhance the first-year experience, retention, widening access, work-related learning, assessment and student engagement. Levels of engagement with these imperatives may be variable, but none of them have been completely ignored by representatives in the arts, humanities and social sciences. Hence it is possible to see how a cyclical thematic process of focused enhancement might lead to 'imperative fatigue'.

A push to raise the levels of productivity in terms of 'knowledge generation' has been a theme for even longer. Funding of 'research' and its impact on how universities have developed in the last three decades is important in any debate about enhancing student learning environments. The networks of disciplines that comprise the arts, humanities and social sciences have to prioritise specialist knowledge generation to sustain the dynamism of the subjects, at the same time as managing the dialogic relationship between one subject area and others. Yet, at the same time as scholars are charged with looking outside their discipline silos for inspiration, they have witnessed a 'reaffirmation

of the subject as the academic and organisational identity', represented through RAE, HEA and QAA terms (Bridges, 2000; Canning, 2005).

Effectively, while interdisciplinarity seems a way forward for the continued vitality of the arts, humanities and social sciences (and the consequent student interest that accompanies it), firmer boundaries between the subjects are being drawn. To understand the scholarly context of this project, it is necessary to grasp that academics work within already paradoxical environments in which approaches to learning, teaching and enhancement policies are additional competitors alongside limited time and space frames (programme structures) and productivity targets (particularly the RAE requirements). This was clearly articulated by one of our interviewees:

We've just had a consistency review and we've just done the RAE, and everybody is making ESRC and AHRC [Economic and Social Research Council, and Arts and Humanities Research Council] applications, so on a day-to-day basis, however much more one would like to do...it's very difficult in any particular instance to kind of move yourself into the position of how is this manageable with the time that I have? What would this mean in terms of assessment and outcomes?

In such a work context it seems inevitable that prioritising anything can be difficult, and it is hardly surprising that some scholars experience non-discipline-based imperatives as a recipe for alienation. Nonetheless, one point we could infer from project participants was that associating graduate attributes more closely with research-teaching linkages and then, where possible, connecting to wider institutional initiatives in teaching and learning, allowed for a more coherent conceptualisation of enhancement around which priorities could be organised. For instance, some examples of research-teaching linkages practice were being delivered as final-year honours options, but it is worth considering that a good deal of the designs could also be usefully applied to levels 1 and 2, as in the following case study.

Aileen Kennedy, University of Strathclyde, education, level 4

In this interview, Aileen outlined a level 4 course which focused on exposing students to research practitioners and enabling students to critique what was presented and how it was presented. This was achieved through practitioner-delivered lectures which students reflected on, but also through a more practical element involving a group research project supported by academics.

Aileen implied that there were opportunities for developing a range of graduate attributes, particularly:

- understanding the provisionality of knowledge
- developing research questions
- analysing and critiquing information
- having the confidence to critique the work of those considered authorities
- participating appropriately in interactive group work.

Though this design applied to a level 4 course, Aileen explained that:

I think so much of it [developing graduate attributes] is about attitudes, and in some ways what we are doing in level 4 is actually challenging attitudes that we,

as an institution, have instilled in our students [in levels 1 and 2] that the curriculum is there and it's set and you just implement it, rather than, what is it? Why is it?... A lot of that we actually do to them...we undo when we get here [to honours]. So I think, looking at attitudes and dispositions towards research and enquiry as a part of any professional discipline could easily be implemented at all stages for undergraduates.

In essence, Aileen has pointed the way forward to curriculum redesign for the first year experience, thus linking this Enhancement Theme of Research-Teaching Linkages with another one, the First-Year Experience.

6.1.1 The elephants in the classroom: funding requirements and government involvement

FAQ: But isn't this whole debate just about justifying ourselves to our paymasters at the same time as accepting their views about skills?

A significant factor in such alienation is the relationship between money and academic perceptions of autonomy. For the purposes of this project, this relationship can be broken down into three main areas: (i) funding priorities in the UK, (ii) funding council reform in Scotland, and (iii) the employability and skills agenda.

Funding priorities in the UK

...the reason why so much time is spent attempting to justify the link between research and teaching in academic work is primarily that UK government policy and funding of higher education has driven, and continues to drive, a wedge between the dual activities of research and teaching both across and within institutions. (Lucas, 2007, p 18).

Lisa Lucas (Graduate School of Education, University of Bristol) was not the only educationalist to point out that research-teaching linkages have been thrust into the limelight because of higher education research funding policy. The difficulties of maintaining a funding system based on providing for a small number of universities, when by 2004 there were 169 establishments with higher education institution status eligible to apply for research funding, seem obvious (Kogan, 2004). Funding priorities are an issue. The dual nature of funding for the HE sector in the UK skews institutional, departmental and individual concerns (Taylor, 2007). The question is: is knowing this a good enough reason to avoid discussing how to enhance our students' learning, or do we use it to blur the bigger issue of our professional responsibilities as discipline specialists?

Funding council reform in Scotland

Since the unification of the further education and higher education sector funding councils in Scotland, there have been growing debates about the distribution of funds and the costs of teaching (Gallacher, 2006). Arguably, those of us in research-intensive universities are being asked to justify the costs of our teaching. But is this also an opportunity to explore different ways of working that will enable proactive responses to the latest funding crises?

Employability and the skills agenda

It is clear from the educational literature that scholars in the arts, humanities and social sciences do not uncritically accept the skills agendas currently being explored. Four main challenges to employability approaches have been expressed to date.

- Intellectual anxieties about being able to say how skills development occurs in these subjects without oversimplifying a complex set of intersecting processes and ending up favouring practices that are based on a series of conceptual mistakes (Gunn, 2008; Harpham, 2005; Hager and Holland, 2006). It is also clear that, in an Australian context at least, it is actually difficult to quantify the skills acquired by students in the humanities, especially when contrasted with explicitly vocational academic programmes (Bullen et al, 2004).
- Ethical concerns that by focusing on an ever-increasing range of expectations for undergraduates we may be establishing an onerous and unrealistic burden on individuals undertaking degrees (Hinchcliff, 2006).
- Ideological unease about a perceptible shift in the worth of knowledge, as identified in policy discourse, from knowledge development being a 'social good' to its being seen in economic terms (Bullen, et al 2004; Lucas, 2007; Parker, 2001). Where this worry is articulated, it tends to have an underlying question of: is the linking of graduate attributes to research-teaching approaches just a further shift towards some sort of commercial-type justification for these subjects? On a local Scottish level, this translates as a fear of the role of universities being determined only with regard to their ability to fulfil the Scottish Government's skills agenda (with its attendant focus on knowledge as a generic underpinning to skills) rather than focusing on disciplinary development.
- Queries relating to accurate self-perceptions of an academic's ability to provide the sort of environments and relevant feedback that are likely to foster the range of skills identified.

Of interest to note here is that these anxieties did not feature highly in our interviewees' responses. Indeed, as the following case study suggests, despite a clear sense of the need for cautious approaches to employability in the published literature, the academic staff we interviewed had accepted the importance of skills development within the disciplinary context.

Angus Bancroft, University of Edinburgh, sociology, level 1

This interview looked at Angus's level 1 and honours-level teaching. Angus noted that in level 1, students were exposed to raw data (such as interview transcripts) and encouraged to analyse the evidence rather than being given the final products as a finished task. He also commented that in his honours class, discussions and tasks undertaken by the class have explicitly contributed to research he has published.

Angus noted that redesigning his teaching methods came from a realisation of a pedagogical problem rather than an explicit desire to raise awareness of research-teaching linkages. He also recognised that, though not deliberate, the redesign was more aligned with the graduate attributes emphasised within employability approaches.

The project team believes that, ideally, anxieties about the nature of employability and graduate attributes need to be addressed if and when wholesale curricular review is undertaken, particularly at institutional level. This is because such anxieties relate to the nature of higher education, where institutional mission is focused within that, and the academic support which may need to be provided to enable enhancement.

6.2 Academics' views on enhancing graduate attributes

FAQ: Can graduate attributes really be enhanced through revision of the curriculum?

Our interviewees clearly believed that the answer to this question was 'yes'. The yes was not, however, unqualified. The qualifications were dependent on:

- a perception that the development of transferable skills was relevant from the early stages of an undergraduate degree and continued throughout a programme; some interviewees saw the types of skills required for postgraduate research as being inseparable from general transferable employability skills and needing to run throughout the curriculum
- an alternative view that generic skills development was more appropriate to levels 1 and 2, and more specific subject-based research skills were only really gained at the later undergraduate and postgraduate stages.

Unsurprisingly, given the complexity of undergraduate subject and personal development, our interviewees did not focus on the mechanisms of developing graduate attributes. They tended to hold an inferential assumption that such development occurred within the context of an undergraduate programme, and that this was at least in part directly attributable to the curriculum. As in the educational literature, there was general agreement that enhancing the environments in which our students study assists in developing what they are capable of doing once they have left the university (Smith and Bath, 2006).

Figure 2 is a representation of the graduate attributes stated by each interviewee. These attributes were mapped to observe commonality and difference of emphasis among the interviewees. By implication (from the focus of their responses), it was clear that the academics we interviewed favoured certain attributes more than others, and in figure 2 these are represented in increasingly dark orange. The most regularly implied graduate attributes were: ability to recognise and cope with the provisionality of knowledge; the construction of ideas in dialogue with another; being informed by current debates in the discipline (including ones not yet in print); and analysing raw data. Visually, the darker the orange background of the diagram, the more often the attributes were expressed as being of importance.

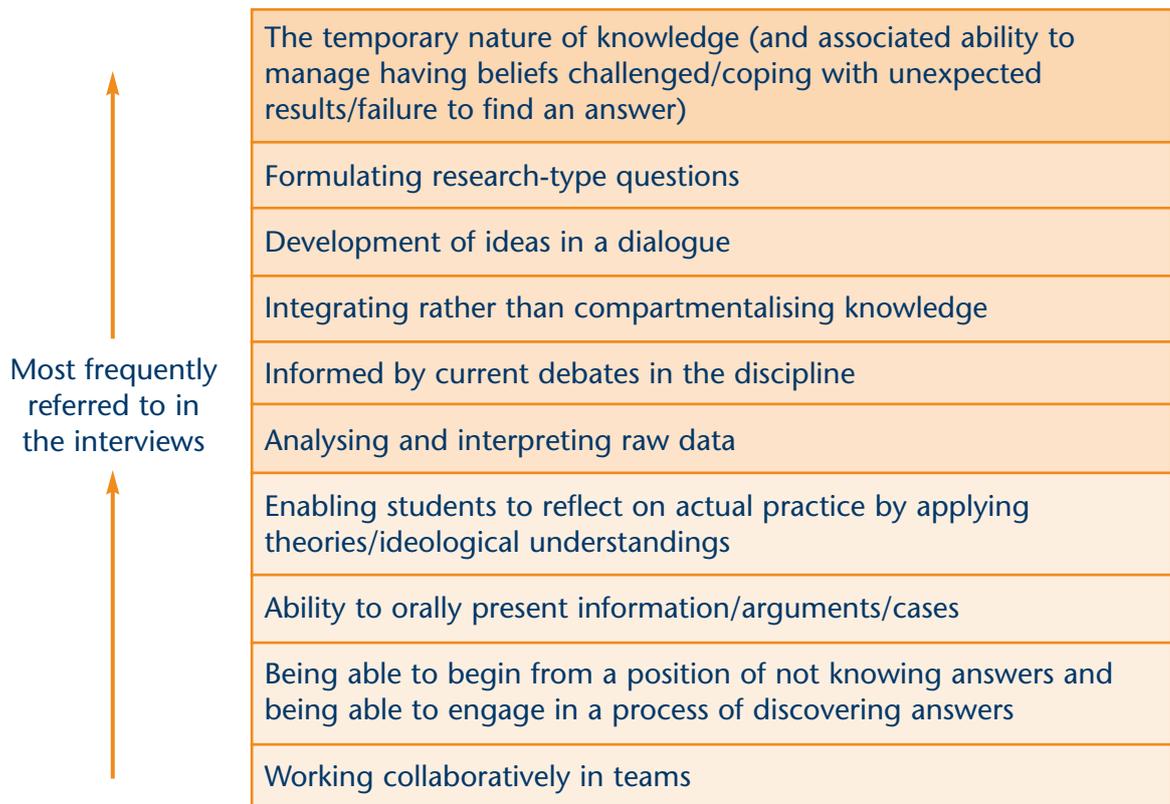


Figure 2: graduate attributes focused on by interviewees

These attributes mapped well with the majority of those defined by the Enhancement Theme Steering Committee, as exemplified by the following case study.

Karin Bowie, University of Glasgow, Scottish history, level 1

Karin's teaching of a level 1 Scottish history course involves engaging the students in a research-type process. This comprises an overarching stress on the existence of multiple arguments within history (rather than dependence on a textbook) and an assignment in which students are required firstly to identify possible essay questions within a theme (without a focused reading list to direct them), attend a tutorial where they refine the question in dialogue with the tutor (who also helps to identify appropriate references and sources), and then go on to answer the question independently. This design was fundamentally linked to staff's recognition of the need to expose students to the most up-to-date subject matter in the area.

It is worth noting that student evaluations expressed discomfort with this process, and Karin emphasised the importance of the opportunity to attend a dialogue-based tutorial. Enhancements designed around a research-process model might not be popular, as they require more engagement by students.

Attribute development occurs here through exposure to:

- uncertainty around the format of a question and resources to both construct and answer the question, followed by relief and less self-doubt in the face of unfamiliar tasks in the future, instilling confidence to act
- construction of knowledge and answers via dialogue
- independent critical analysis in writing (appropriate to level 1).

The taxonomy suggested by the Australian educationalist Simon Barrie is particularly useful in conceptualising our interviewees' approaches (Barrie, 2006, and 2007). His understanding, generated from a phenomenographical interpretation of 15 interviews, suggested an identifiable hierarchy of conceptions of graduate attributes among academic staff.

- **Precursor** conceptions focused on remedial approaches (often linked to assumptions about what **should** have occurred at school).
- **Complementary** conceptions focused on development approaches done through learning centres rather than within the discipline (often linked to compartmentalising generic skills as separate to the disciplinary syllabus/curriculum) - 'supplementary sets of useful skills to complement subject material', 'add-ons'.
- **Translating** conceptions, where attributes are designed around how students apply abstract knowledge to a practical 'real world', which involves translating what is learned in the university to subsequent contexts. This results in disciplines embedding generic skills within their programmes. Academics in the disciplines take responsibility for these skills, translating generic skills into discipline-specific skills and integrating them through one of three approaches - adding lectures (content); undertaking problem/practice simulations (process); encouraging engagement.
- **Enabling** conceptions where generic attributes lie at the heart of the learning environment.

From the evidence of our interviews, translating and enabling a range of attributes to be developed within a research-led environment is at the heart of what these academics do.

6.3 Academic conceptions of the research-teaching nexus

FAQ: Are there any functional frameworks/typologies in which we can place our understandings of the links between research and teaching in order to make decisions about how to improve the educational experience of our students?

A quick answer to this question is a most definite 'yes'. The basic typology commonly referred to currently is identified in the introduction to this report (Healey, 2005). However, for more in-depth approaches see also the following:

Faculty, school, discipline, departmental teaching cultures

- Jenkins, A, Breen, R and Linsey, R, (with Brew, A) (2003) *Reshaping Teaching in Higher Education*, Kogan Page
- Brew, A (2006) *Research and Teaching: Beyond the Divide*, Palgrave
- Jenkins, A, Healey, M and Zetter, R (2007) *Linking teaching and research in disciplines and departments*, HEA
- Healey, M (2005) *Linking Research and Teaching: Exploring Disciplinary Spaces and the Role of Inquiry-based Learning*, in Barnett, R (ed), *Reshaping the University: New Relationships between Research, Scholarship and Teaching*, Society for Research in Higher Education (SRHE) and Open University Press, pp 67-78

Individual conceptions of the research-teaching nexus

- Griffiths, R (2004) Knowledge production and the research-teaching nexus: the case of the built environment disciplines. *Studies in Higher Education*, 29(6), p 709-726.

Perhaps, as a caveat to the use of 'types of approaches' outlined in the educational literature, it is worth observing a process that takes a typological explanation/description of practice and places it within a classification hierarchy. It is clear, for example, that in some of the literature there is a shift from neutral description of a range of activities and the discipline-oriented learning and teaching environments they represent (as one would anticipate in a typology), to a classification reinterpretation that places a value judgement on what is 'better' practice.⁶ This is particularly pertinent to those discussions that separate traditional approaches from enquiry-based learning. However, our interviewees were unconvinced by such classifications.

FAQ: The frameworks outlined in the literature look useful at least pragmatically, but they don't really express the whole picture of what we do, do they?

There was general agreement among our interviewees that it was difficult to categorise teaching activities into specific typologies or classifications. Indeed, there seemed to be a consensus that the design of their courses encompassed several aspects of research-teaching activities as outlined in the literature. Some raised the difference between lectures being more content-based while seminars provided a platform for knowledge construction but knowledge construction on the whole was mentioned most often as being the more prominent category of activities.

6.3.1 Research-teaching link as content or process or both?

When first asked the question, 'how does your research link with your teaching?', an obvious immediate response tends to be that research outputs feed into the curriculum as up-to-date content. Arguably, it is research interests that are represented in the modules, they determine the themes covered, the content, and in many cases the interpretations focused upon. Having said this it is clear that academics view this as a two way process in which new ways of seeing an issue were directly related to students' inexperience of the conventions of the discipline: as their lack of experience allows them to 'think outside the box' of conventional scholarship.

Academics' engagement enables them to sift and evaluate materials for students, while at the same time the relative lack of socialisation in particular disciplinary tropes allows students to challenge their lecturer's understanding of the subject.

One can, perhaps, hypothesise the following three points from the above quote.

- 1 Research-oriented academics can use their deep understanding of a discipline to assist students in accessing materials within a time-limited degree programme.
- 2 Disciplinary development occurs in relationship with novices because the incomplete nature of their acceptance of disciplinary norms enables challenges to 'received wisdom'. Disciplines are thus dependent on novices as much as experts. Indeed, from another perspective, students are the subversives on which critical

⁶ A useful antidote to this reinterpretation of approaches to linking research and teaching can be found in the work of Trowler and Wareham (2007).

reinterpretation is dependent, because they are not quite so reliant on established disciplinary paradigms.

- 3 Even those academics in the arts, humanities and social sciences who focus their teaching approach on 'research as subject content' accept that dialogue with students is integral to and enhancing of their discipline (this is certainly suggested by Robertson, 2007).

The research-teaching nexus here is clear. Arts, humanities and social sciences disciplines can no more develop without classroom interactions than they can without scholars producing published outputs. For some commentators in the humanities at least, such mutuality is fundamental to the network of disciplines covered by the term humanities (Parker, 2001, p 23).

It is not limited to the humanities, however. For one of our social sciences interviewees engagement with content coverage needs occurred as well as the developing of an authentic research process experience. Content and process went hand in hand, because by establishing research questions that students then explored through experiments supported by staff and postgraduates, a mutually beneficial environment was established. Thus, this particular academic located areas of up-to-date content and also set up an environment in which undergraduates, postgraduates and staff all worked together.

Additionally, the case studies showed ways of implementing learning activities and environments which took this philosophical underpinning to the disciplines in question and articulated it practically. As shown by the following case study, the notion of the lecturer as transmitter of content is more a stereotype or caricature than an accurate representation of who arts, humanities and social sciences academics are and what they try to do.

Elaine Duncan, Glasgow Caledonian University, Psychology, level 1

This interview focused on Elaine's teaching of the Introductory Skills for Psychologists module at GCU. This module has taken the unusual step of abolishing lectures altogether. They have been replaced by research-based three-hour workshops, which start by guiding students through the initial steps of research in terms of literature searches and library skills.

Students work in groups and are given tasks with a series of mini-deadlines. There is a strong emphasis on helping students to interact with the most recent research, and they are encouraged towards the end of the module to start posing their own research questions. Students are also given advice on the research process by third and fourth-year students during the workshops.

Ideally, being involved in teaching challenges arts, humanities and social sciences scholars at all levels of development to shift from their self-focus to the focus of others. This process encourages academics to reconsider their discipline from more than one angle and extends to both curricular content and research interest. It shifts the academic focus, requiring scholars to move between the boundaries of writing for knowledge construction/production to discussing with others how their knowledge is constructed.

6.3.2 Research-teaching linkages as representative of the global nature of the disciplines

From the perspective of disciplinary cultures, it is clear that research-led teaching has a global nature, and the disciplines represented here have international positions. One of the academics we interviewed used this global context specifically to enable students to interact with discipline specialists around the world, as shown in the following case study.

James Davila, University of St Andrews, theology honours

This interview focused on James's teaching of an honours module on the Dead Sea Scrolls. For this module, students produced a seminar essay which was discussed in bi-weekly seminars before their essay abstracts were posted onto a weblog. Another seminar discussion followed this, and a summary of the discussion was also posted on the blog afterwards.

Students had an opportunity after the final seminar to rewrite their essays before being assessed on them. The blog was accessible to the international academic research community, to encourage sharing of material and to provide students with a platform that enhanced their opportunities to have their research published. Students only submitted the finalised abstract for inclusion on the blog, but had opportunities beforehand to receive feedback on their essays.

This case study is another example of how the theme of research-teaching linkages ties to another higher education imperative, internationalisation. In this module, James Davila was exposing students to the international aspect of study.

6.4 Student learning cultures and individual approaches

Despite our conviction that we are very important in the lives of our students, student culture has a much larger impact on students than a few puny professors. (Roberts, 2002, p 11)

The intersection between student learning cultures, students' individual approaches, the research-teaching nexus and the individual institutional context must be carefully explored. Academics in the humanities and social sciences tend to describe the research-teaching nexus in complex and variable terms, focusing on both the tangible and intangible aspects of any such relationship (compared to those in other discipline areas). This was seen in the interviews for this project, case studies available from HEA Subject Centres and in the research of Mary Henkel on academic identities among scholars in English universities (Henkel, 2004).

Nonetheless, research studies indicating the lack of student awareness of the research occurring within the environment in which they study are numerous enough to warrant concern (Jenkins et al, 1998; Zamorski, 2002; Brew, 2006; Wuetherick, 2007). If the complex relationships we express about the links of research to the learning environment are as important as we believe, we need to find more effective ways of engaging students explicitly in those relationships.

There is, however, more to this than purely what **we** do. It is clear, for instance, that the intrinsic motivation of some students influences how they view their lecturers' research (Breen and Lindsay, 1999). Those with an intrinsic interest in their subjects tend towards a more positive perception of their teachers' research than those with a predominantly

extrinsic motivation for being at university (Henkel, 2004). If we ignore this in our discussions, we may adapt our learning environments and still discover that levels of actual engagement relate to broader issues of students' awareness of their context and desires while undergraduates. Hence it is perhaps interesting that Aileen Kennedy commented that despite a module redesign aimed at encouraging fuller engagement with the subject, some students still engaged instrumentally with the whole process, suggesting that the perceived immediate needs of some undergraduates determine how they engage and how they see the research environment.

Nevertheless, some of the practices we encountered during this project clearly suggested that changing the process of the course to map onto the process of the research potentially encourages more intrinsic engagement. This may be particularly true of practical theology, for example, where students may start out with abstract engagement in theological debate and end in situations of practice. The following case study is perhaps of relevance in this context.

Eric Stoddard, University of St Andrews, theology honours

This interview focused on Eric's teaching of two honours modules in practical theology: Citizenship, and Theology, Spirituality and Pastoral Care. The Citizenship module uses a research model of personal reflection and exploration of students' own experiences of being a citizen within the context of practical theology, through seminar discussions.

In contrast to traditional models in which the starting premise is theory, with the research component following on, this course follows a model where the starting premise is the students' personal experience and the experiences of others. The emphasis on personal reflection is particularly prevalent in the Theology, Spirituality and Pastoral Care module, where students recount their own experiences of being carers or being cared for in order to explore their own theological reflection. The method is based on a theological cycle of reflection, with the learning outcomes mapped onto exact points in the cycle.

In addition, the education literature suggests that the quality of peer interactions within undergraduate programmes also has a significant impact on students' intellectual and social skills development (Smith and Bath, 2006) as well as their motivation (Waite and Davis, 2006). This is an important factor, particularly if we are really attempting to articulate the relationships between research environments, teaching and the acquisition of research-type graduate attributes, particularly those which encapsulate 'an understanding of the need for a high level of ethical, social, cultural, environmental and wider professional conduct' (Enhancement Theme Steering Committee definition of graduate attributes). This understanding, after all, requires a mix of intellectual and social skills development. How we integrate effective peer interactions into disciplinary models that might currently be oriented towards a more dialogic or even solo intellectual activity than a communal one is a critical question for some of us in the arts, humanities and social sciences.

If one were to draw all this discussion together, perhaps the point to be made is that learning in research-led higher education cannot easily be broken down into practical 'units' or 'fragments' of experience without losing some of the unifying philosophical foundations of the disciplines represented, and the interconnectedness that these philosophical foundations have with the institutions which house them. Effectively, favouring what has elsewhere been referred to as a functional approach to the

research-teaching nexus is problematic (Simons and Elen, 2007). The same can be said of any emphasis on pragmatic approaches to graduate attributes. After all, as Hager and Holland commented:

The contemporary focus on graduate attributes in higher education is really part of a bigger, as yet unresolved, debate about the purpose of university education and how to develop well-educated persons who are both employable and capable of contributing to civil society. (Hager and Holland, 2006, p 4)

If at the heart of this Enhancement Theme project there is truly a question about the nature of the disciplines, university education and civil society, it would be foolhardy to depend on unrepresentative classifications from which to make sustainable decisions.

7 Conclusions and recommendations

7.1 Conclusions

This project attempted to focus on 'on the ground' academics as teachers within the disciplines of the arts, humanities and social sciences. What we discovered was that none of our interviewees were perturbed by the notion of research-led teaching or graduate attributes. Within the period of the interviews they became increasingly able to articulate:

- how the learning environments they designed were enhanced by research content and processes
- how the research graduate attributes they valued matched the ones identified by the Enhancement Theme
- that their practices included a range of aspects which required a more nuanced analysis than is provided by the classifications developed to explore the research-teaching nexus or graduate attributes (which suggests that these classifications could be more problematised before being used to generate design changes)
- that more rigorous evaluation of the processes would be useful
- just how well they were able to overcome the competing priorities that were a part of the day-to-day experience within their disciplines.

Much of the current research into the research-teaching nexus and graduate attributes focuses purely on the university context, and our interviewees' responses were no different. However, while disciplines may be housed in higher education institutions, those who identify with them go far beyond the boundaries of the crumbling silos of university departments. The 'highbrow' activities of discipline academics are just one aspect of a discipline's existence. 'Lowbrow' or popular interpretations and non-academic scholars also play a role, as do graduates who leave the formal discipline upon gaining employment, but continue activities related to it as part of hobbies and pastimes.

To fully do justice to the research-teaching nexus in the arts, humanities and social sciences, it would be as well to explore how demand for and interaction with these subjects is continually generated by more general culture. Arts, humanities and social science disciplines involve implicit collaborative partnerships which go beyond the production of original research by individual authors within universities. Though academics may favour their **own** sort of research product and processes this is not the whole story of the conceptions of research within the broader disciplines they represent.

Indeed, this relationship with public cultures may be the most unifying aspect of the arts, humanities and social sciences, especially in light of the debates concerning both the justification of their study and the influence they might or might not have on graduate attributes.⁷

⁷ For further discussion of the benefits of humanities research in particular, see Bigelow (1998).

7.2 Recommendations

The following recommendations were drawn up from the project team's experience of discussing the case studies at dissemination events. They therefore reflect not just the conclusions we drew from the interviews we undertook and the literature we used, but also participants' responses to the materials we presented.

Institutional level

- Explicitly link and, where possible, integrate the variety of learning and teaching imperatives to help staff manage 'imperative fatigue'.

Institutional and disciplinary bodies

- Reward and recognise 'champions' at the same time as offering heads of departments development aimed at supporting transfer of capabilities from champions to other staff members (for sustainability).

Institutional-level academic staff development

- Encourage debate about practice among academics from different disciplines.

Departmental level

- Use programme review to identify and map attributes across the curriculum. Without this, experiences can be lost across the levels of study and it might be difficult to identify criteria for progression.
- Recognise the need to redesign assessment processes in the light of changes to programme/course design. For advice on redesigning assessment processes, the REAP project website www.reap.ac.uk is useful.
- Use postgraduates in connection with their research (not just as base-level teaching assistants). If this approach is taken, it is necessary to offer the postgraduates a thorough induction. Institutional learning and teaching centres can normally offer assistance in induction design.
- Encourage debate between staff and students, from level 1, about the value of the research environment and activities occurring within the department. Consider, for example, that the learning environment is suffused with research content, approaches and culture from level 1. Students at different curricular levels could be invited to attend research seminars delivered by their staff as well as being involved in other research-focused activities undertaken by active researchers in the discipline. Also, survey courses can be designed where staff interests are explicitly represented through different sections of the survey and linked to seminars which students can opt to attend. The seminars would be led by particular members of staff researching in the chosen topic. This allows for level 1 and 2 students to have access to explicit research culture.
- Redesign evaluations to value research-teaching linkage aspects of the students' experiences. Evaluation processes are a potential vehicle for engaging with students in the discussion about awareness of, and engagement with, research processes and practice.

Departmental and disciplinary bodies

- Recognise the real and perceived benefits of research-teaching linkages in an undergraduate environment which also needs to grapple with notions of employability.
- Raise staff's confidence in their activities as having value outside the academic world. Currently, the way in which research outputs are measured and valued within the university sector can result in academics only focusing on research as an inter-university responsibility. Professional and disciplinary bodies could do more to raise the profile of knowledge transfer, especially recognising that the culture of research informs public interest in the subjects.

Individual practitioner level

- Formally recognise students' input to research (through footnotes, acknowledgements, or where appropriate, as named authors) and let them know this has been done. It is perhaps an oversimplification to perceive student input to our research as minimal. Our teaching environments are places where we clarify, if not construct, some of our ideas, and some students are active (if informal) participants in this with us.
- Subject networks through the Higher Education Academy offer some useful case studies. These are useful resources to start with.
- Students need reassurance and fast feedback when faced with unfamiliar activities, especially ones that have a bearing on the grades they might receive. When designing research-type activities, try to establish criteria upfront for what it is hoped students might achieve, and schedule time for rapid feedback. Advice on how to design and give feedback can be found at: www.reap.ac.uk
- Where possible and/or appropriate, make links with other academics involved in learning and teaching imperatives (particularly those implementing employability strategies or enhancement projects such as the 'first year experience' and curriculum redesign), so that good practice can be cascaded as part of an integrated approach to enhancing learning.

8 References and further resources

This publication is the first stage of work under the Research-Teaching Linkages Enhancement Theme for the arts, humanities and social sciences. Future work, more case studies and links to other useful resources are available through the project's website at: <http://rtlinks.psy.gla.ac.uk>

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Websites

HEA Subject Centre for Sociology, Anthropology, Politics (C-SAP)
Sharing ideas and research in social sciences learning and teaching
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