Educational Development Division



An evidence base for curriculum review: a briefing

June 2010



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Introduction

- The university is undertaking a review of its curricula as part of the Strategic Plan. This process starts with a review of Post Graduate Taught provision, with a review of undergraduate provision to follow.
- In order to support the curriculum review, Educational Development Division offered as series of discussion sessions on the underlying evidence base during April and May 2010. Each session involved reading and discussion around three supporting academic papers or articles. This briefing pulls together the materials used to support each of these discussion sessions.
- The individual briefing notes used within the sessions are available at: http://www.liv.ac.uk/eddev/CPD/Evidence base for curriculum review.htm
- Details of the process involved in the curriculum review (including further support from the Centre for Lifelong Learning and from Teaching Quality Support Division) are available at: <u>https://www.liv.ac.uk/intranet/tqsd/curriculum-review/index.htm</u>

Educational Development Division Centre for Lifelong Learning June 2010

Distinctive graduate qualities

1. Introduction

The university has introduced the concept of the 'Liverpool Graduate' to characterise the intended distinctiveness of a student's experience of a subject or subjects here. Departments and faculties have been asked to consider what qualities or attributes their graduates will have that will make them distinctive and make their portfolio attractive to applicants; and then to incorporate these into their curricula.

The university is asking that distinctive graduate qualities be set at the subject/school level. At the same time, though, encouragement was earlier given for considering how our graduates would display an ethical understanding of global citizenship and an entrepreneurial awareness of global markets; that they would be familiar with notions of environmental sustainability, high tech communication and intellectual property. The way in which a department addresses research-led teaching is also likely to affect the profile qualities displayed by its graduates. In order to realise such graduate qualities, programmes will be expected to engage students actively in their learning, with opportunities, as appropriate, for experiences beyond standard campus provision.

It is further clear that many of our competitor institutions are adopting institutional stances towards graduate attributes. The Cambridge University Skills Portal, for instance, now details which skills are developed on a subject by subject basis. The University of Leeds promotes 'Leeds for Life', focusing on attributes and skills developed across the institution as a whole; with 'The Sheffield Graduate' similarly focused at the institutional level. Our approach, though, is now being clearly set at the departmental level, particularly with this requirement to address both graduate qualities and research-led teaching at this level.

2. Understanding graduate attributes

Barrie, S. (2006) 'Understanding what we mean by the generic attributes of graduates', *Higher Education* (2006) 51: 215–241. [Online, <u>http://www.ingentaconnect.com/content/klu/</u> high/2006/00000051/00000002/00006384]

Barrie (2006) refers to a 'generic graduate attribute' as the qualities, skills and understandings that go beyond disciplinary expertise or technical knowledge. But clearly, the subject studied will influence which sets of generic attributes are actually developed, so that it is reasonable also to focus more widely on the distinctive graduate attributes developed in a particular programme.

He argues that we need to be clear about the underlying concepts in order to identify which combination of skills, attributes and knowledge a graduate should possess. He further identifies a series of different conceptions of graduate attributes, focusing on seeing generic graduate attributes as 'basic precursory abilities students bring to university', 'additional general functional abilities and personal skills that can usefully complement discipline specific capacities', 'specialized variants of general skills that are essential in the application of discipline knowledge' or 'enabling abilities and aptitudes that lie at the heart of scholarly learning and knowledge'. His work suggests that departments will need to be explicit about their underlying notions of graduate attributes in order to frame a set of qualities that genuinely does enhance the student experience. Note further that the paper also reminds us of earlier research which suggested 'graduate attributes initiatives are only instituted where they are supported by an individual or group of people who believe such attributes to represent valuable graduate outcomes'.

Note: see also Barrie S. and Prosser M. (Eds.) (2004). 'Generic Graduate Attributes: Citizens for an Unknown future'. Special Issue of *Higher Education Research & Development*, 23, 3. [Online, <u>http://www.informaworld.com/smpp/title~db=all~content=g758481827</u>]

3. Strategic thinking about graduate attributes

Gunn, V., Bell, S. and Kafmann, K. (2010) *Thinking strategically about employability and graduate attributes: universities and enhancing learning for beyond university*, Quality Assurance Agency for Higher Education (Scotland), Glasgow. [Online, <u>http://www.enhancementthemes.ac.uk/documents/G21C/</u> Employability 230210.pdf]

This practical discussion paper sets out a range of issues that should be addressed alongside consideration of graduate attributes. It offers different ways to set out a statement of graduate attributes, and considers how the curricula might be re-organised to ensure that students master these qualities. It outlines a wide range of experiences that might be built into provision, with associated contexts of the formal academic, work-related, or co-curricular. While the debate in this paper is framed in relation to employability, it is clear also that the character of the discipline concerned is also a key factor in shaping any statement of graduate attributes and how one might promote them.

4. Distinctive and attractive curricula?

Temple, P. (2006) 'Branding higher education: illusion or reality?', *Perspectives: Policy and Practice in Higher Education*, 10: 1, 15 — 19 [Online, <u>http://www.informaworld.com/smpp/</u> content~content=a741437551~db=all]

One of the purposes underlying the notion of the Liverpool Graduate is to ensure that our portfolio of programmes is both distinctive and attractive to students. There are obvious links here with the notion of branding – which involves articulating the distinctive features of a product to distinguish it from other products and thus make it more attractive to consumers. To point this out is not to suggest that the university is asking departments to brand their provision. Rather, the notion of 'branding' and this paper are introduced here in order to clarify the issues at stake.

Temple (2006), in fact, comes to the conclusion that branding higher education is an illusion. Education involves a significant contribution from students themselves, requires one to pursue potentially conflicting values at the same time, and staff almost inherently adopt different perspectives as a result of their own distinctive commitments and research (as Barrie above also argues). Temple rather suggests that developing distinctive and attractive educational provision in universities involves giving expression to a realisable strategic vision that encompasses the entire operation. Departments must work to ensure that they offer substantive forms of education, in ways that catalyse the commitments of staff. We need something other than curricula that merely have easily identifiable tag-lines for promotion to potential students.

5. Examples of institutional approaches to distinctive graduate attributes

The National Graduate Attributes Project: Integration and assessment of graduate attributes in curriculum (Australian)

http://www.itl.usyd.edu.au/projects/nationalgap/introduction.htm

Cambridge University

http://www.skills.cam.ac.uk/undergrads/courses.html

University of Leeds https://leedsforlife.leeds.ac.uk/Values.aspx

Queen Mary University of London http://www.esd.qmul.ac.uk/sande/projGA/

University of Sheffield

http://www.shef.ac.uk/sheffieldgraduate/

University of Sydney

http://www.itl.usyd.edu.au/GraduateAttributes/

Skills for learning and employability

1. Introduction

The recent Government framework paper *Higher Ambitions* states that 'all universities should be expected to demonstrate how their institution prepares its students for employment, including through training in modern workplace skills such as team working, business awareness, and communication skills'.

However, Liverpool is near the bottom of the Russell Group on measures of graduate prospects and the message from employers is that our students are often insufficiently prepared for employment. The curricula should enhance the employability of students, providing them with skills that are relevant to employers⁶ needs, as identified through consultation with employers. Such skills should be embedded throughout the curricula, but serious consideration should also be given to the provision of specific instruction on employability which might be combined with study skills in a specific credit bearing module in the first year of the undergraduate curricula.

At PGT level in particular, for some programmes this will mean the professional development of students and the opportunity for them to achieve high professional competence in the field of study.

Our curricula at undergraduate level should equip students with the skills to engage in critical enquiry and should promote an increasing independence in their learning. Most importantly, such skills should be embedded within the curricula generally and consideration should be given in every module to ways in which learning and research skills might be appropriately developed. In addition specific study skills module should normally be provided in the first year of undergraduate degrees. This would be credit bearing and form part of the 120 credits of the first year. At PGT level a similar module should be provided as part of the curricula where this is deemed appropriate, or provided as a "stand alone" module that carries credit, though the credit would not contribute to the final award. This should lead to PGT curricula that enable critical thinking and develop self-directed learning.

2. Embedding employability into the curriculum

Yorke, M. and Knight, P.T. (2006) *Embedding employability into the curriculum*, Learning and Employability Series 1 No. 3, Higher Education Academy. [Online, <u>http://www.heacademy.ac.uk/assets/York/</u> <u>documents/ourwork/employability/id460 embedding employability into the curriculum 338.pdf</u>]

This is the third title in the Learning and Employability series edited by Professors Mantz Yorke and Peter Knight for the Higher Education Academy Enhancing Student Employability Co-ordination Team (ESECT). Other titles are available from the academy website. This Guide discusses a number of issues that need to be borne in mind when the desire is to embed (or embed more firmly) employability into a curriculum. The authors therefore regard it as of particular relevance to colleagues who are designing new curricula or are considering how existing curricula might be 'tuned' in order to accentuate the potential of their programmes to develop students' employability.

Yorke and Knight present their USEM model of employability skills – a combination of subject **U**nderstanding, a range of **S**kills (especially generic skills), self-**E**fficacy or belief in oneself and one's own capability and **M**etacognition. This is an attractive model because it encompasses attitudes and values as well as skills. The authors recognise that the complexity of employability and the variety that exists in curricula in UK higher education mean that no single, ideal, prescription for the embedding of employability can be provided. Embedding has to be undertaken with reference to the curricular context, and hence this Guide should be treated as offering a number of pertinent points which may be useful to those responsible for whole curricula – and, in particular, for curricular components – as they grapple with curricular challenges.

3. A Model of Employability Skills

Dacre Pool, L.& Sewell, P. (2007) 'The key to employability: developing a practical model of graduate employability', *Education and Training* Vol. 49 No.4, pp.277-89 [Online, <u>http://www.emeraldinsight.com/</u> Insight/viewPDF.jsp?contentType=Article&Filename=html/Output/Published/EmeraldFullTextArticle/ Pdf/0040490402.pdf]

This is a conceptual paper, presenting what the authors claim is a 'straightforward, practical model of employability that will allow the concept to be explained easily and that can be used as a framework for working with students to develop their employability'. The model is based on their own research, and the paper includes a useful introduction comparing the main models currently in use.

In addition to the 'self-efficacy' identified as a key component in the Yorke and Knight model, Dacre Pool and Sewell argue for the inclusion of 'emotional intelligence', '... the capacity for recognising our own feelings and those of others, for motivating ourselves, and for managing emotions well in ourselves and in our relationships' (Goleman 1998 p.317). They suggest some ways in which the development of the personal qualities and process skills subsumed under this concept can be developed within the curriculum.

4. Learning Literacies for a Digital Age

Helen Beetham, Lou McGill and Allison Littlejohn (2006) 'Thriving in the 21st century: learning literacies for the digital age' (LLiDA Project) [Online, <u>http://www.academy.gcal.ac.uk/llida/LLiDAReportJune2009.pdf</u>]

Considering the skills which students need to develop in order to succeed at university, academics may feel that their essential nature has not changed since their own undergraduate days. Still, there have been profound changes over a relatively short period in the contexts of learning, most obviously in the quantity of information available to students and the sources they have typically learned to use to access it prior to coming to university.

In this major study for the JISC, the authors use the phrase 'learning literacies' rather than 'digital literacies' to indicate continuities in what makes for effective learning and in how institutions should provide for it, while at the same time foregrounding a context in which what is required of learners is changing, perhaps fundamentally. They review the evidence of change in the contexts of learning, likely future scenarios, and current responses. They analyse frameworks of competence and capability that have been developed to help institutions understand and respond to the literacies agenda and describe findings from a study of current practice in literacies provision in UK FE and HE.

The findings and recommendations of this study are highly consonant with the views expressed in the University's curriculum review. Quite clearly learning skills – 'literacies' - cannot be bolted onto existing programmes of study. They emerge through authentic, well-designed tasks in meaningful contexts. Long-term, sustainable solutions to the problems faced by our students and staff in developing learning skills for the 21st century lie in flexible and innovative curriculum design processes which exploit digital technologies wherever appropriate.

Reference: Goleman, D. (1998), Working with Emotional Intelligence, Bloomsbury, London,

5. Examples of institutional approaches to skills for learning and employability

The University of Manchester <u>http://www.staffnet.manchester.ac.uk/employabilitytoolkit/</u> Sheffield Hallam University (e3i CETL) http://employability.shu.ac.uk/ The University of Central Lancashire (Ceth CETL) http://www.uclan.ac.uk/ahss/ceth/index.php The Open University http://www.open.ac.uk/skillsforstudy/ The University of Canberra http://www.canberra.edu.au/studyskills/learning The University of Melbourne http://www.services.unimelb.edu.au/asu/ Imperial College http://www.imperial.ac.uk/ice/ University College London http://www.ucl.ac.uk/careers/recruiters/services/Skills%20Development.htm

Varied and inclusive learning, teaching and assessment

1. Introduction

Since the 1990's the Higher Education student body has become increasingly diverse, partly as a result of initiatives such as widening participation, the Prime *Minister's Initiative* for International Education. It is now includes large numbers of 'non-traditional' students: mature, disabled, students with non-standard qualifications, and international students, in addition to the more traditional 18 year-old school leaver.

De Vita (2003) notes that an '*increasingly diverse student population brings with it new and demanding challenges, as extant pedagogical models strain to deal with attitudes, needs and expectations that have, heretofore, never been encountered.' At the same time legal duties placed on institutions around disability, race, gender, and age, require that all students are able to achieve their full potential. An inclusive curriculum is one which is, as far as possible, barrier free enabling all students to access it and benefit from the same learning experience. "Inclusion does not mean, however, that there should be any lowering of academic standards. Instead, there should be a change of emphasis in the way that we work with students." (Gravestock, 2009) An adaptation of teaching, learning, curriculum and assessment methods is therefore indicated.*

The university as part of its curriculum review is specifically asking programmes to ensure that they offer an appropriate range of learning and teaching techniques and range of assessment methods. As we limit the options on our programmes, it is particularly important that varied learning, teaching and assessment methods are employed within each module. Assessment is an area where particular attention has been focused, as this is an area where students have indicated a need for change. This briefing note introduces three resources that help to provide an evidence base for different approaches to inclusive learning, teaching and assessment focusing in greater detail on approaches that enable a diverse range of students to achieve their potential (see below for full details of the related session).

2. Universal design for learning

Rose, D, Harbour, W., Johnston, C, Daley, S. and Arbanell, L. (2006) Universal design for learning in postsecondary education, *Journal of Postsecondary Education and Disability* 19, 135-151 [Online, http://eric.ed.gov/ERICWebPortal/custom/portlets/recordDetails/detailmini.jsp? _nfpb=true&_&ERICExtSearch_SearchValue_0=EJ844630&ERICExtSearch_SearchType_0=no&accn_0=EJ844630]

Universal design is a well established idea in relation to buildings or environments: can they be easily used by the widest possible range of users? This leads to a similar question: can we design programmes of higher education that are suited to the widest possible range of learners? This paper argues that while the idea itself of universal design can be transferred to education, the principles and techniques involved must shift. It goes on to focus on three key principles: multiple means of representation, multiple means of expression, and multiple means of engagement. Applying these principles can allow us to accommodate the varied ways that students perceive information, express what they know and engage with their learning.

3. Making your Curriculum Inclusive

Turner, E. (2006) Equality and diversity: making your curriculum inclusive, Educational Development Unit, University of Salford, Salford. [Online, http://www.edu.salford.ac.uk/docs/ed-<u>discussion-sept06.doc]</u>

This paper focuses on the curriculum and the experiences of a diverse student body in higher education. It

presents key areas for consideration in ensuring that the curriculum becomes genuinely inclusive with particular reference to disability, race & ethnicity and internationalisation. The paper is not looking to suggest that some groups need support at the expense of others, but that varied and inclusive practice is good for all students.

4. Inclusive Assessment in Higher Education

Waterfield, J. and West, B. (eds) (2006) Inclusive Assessment in Higher Education: A resource for change, SPACE Project (Staff-Student Partnership for Assessment Change and Evaluation), University of Plymouth, Plymouth. [Online, <u>http://www.plymouth.ac.uk/pages/view.asp?page=10494</u>]

This section introduces a conceptual approach to meeting the needs of a diverse student population, beginning with a focus on disabled students, but subsequently widening out to consider assessment suited to the entire student body. A contingent approach involves offering special to students with disabilities, such as using their own room for examination. An alternative approach enables one to offer different forms of assessment where a student is not able to perform the mainstream assessment task. An inclusive approach involves offering a choice across a range of assessment modes for all students, enabling one to assess the same learning outcomes in different ways.

The university presently indicates that it is allowed to offer a choice of different types of assessment within a module only if the learning outcomes of the module can be shown to be demonstrable by all the proposed assessment options. Where options for assessment within a module are available these must be approved as part of the approval process for the module (University of Liverpool, 2008, Section 3.6). References/further reading:

De Vita, G (2003) Rethinking the Internationalisation Agenda in UK Higher Education. *Journal of Further & Higher Education*, Vol.27 (4)

Gibbs, G. & Simpson, C.(2004) Conditions under which assessment supports students' learning. *Learning and Teaching in Higher Education*. Issue 1, 2004-5, 3-31

University of Liverpool (2008) *Code of practice on assessment*, Teaching Quality Support Division, University of Liverpool, Liverpool.

Inclusive practice e-bulletin series. 7 compilations of resources for various aspects of inclusive practice. <u>http://tinyurl.com/inclusion-e-bulletins</u> Topics include: Inclusive Curriculum practice; Inclusive technology; Student engagement; Inclusive research communities.

Internationalisation

1. Introduction

The university has committed itself to further internationalisation of its curricula. The underlying notion of 'an internationalised curriculum' used in the curriculum review is framed in broad terms. For international students, an internationalised curriculum is one that is relevant to them, and applicable to their experience and background. For UK students an internationalised curriculum is one that enables them to understand and appreciate their learning experience in an international and global context.

More widely, internationalisation is taken to mean 'The process of integrating an international, intercultural or global dimension into the purpose, functions or delivery of post-secondary education' (J. Knight, 2004 p11). Both home and international students typically stand to gain from programmes that pay attention to the global context or that include perspectives from a range of cultures, although clearly there will be variation in the extent to which this is possible across different subjects.

This briefing note introduces three studies that help to provide an evidence base for effective and appropriate practice in relation to internationalised curricula (see below for full details of the related session).

2. The staff and student experience of internationalisation

Hyland, F., Trahar, S. Anderson, J. and Dickens, A. (2008) *A changing world: the internationalisation experiences of staff and students (home and international) in UK Higher Education*, Higher Education Academy, Bristol and Southampton. [Online, <u>http://escalate.ac.uk/downloads/5248.pdf</u>]

The first discussion paper offers a practical introduction to the international dimension of teaching and learning in higher education. It is important to note that many different elements make up a curriculum, going beyond learning outcomes, statements around the syllabus and reading lists. The teaching methods employed, for instance, will affect the extent to which international students find that the programme is accessible or not. This paper suggests that when seeking to internationalise curricula it is important to pay attention to the experiences of the staff and students involved.

3. Curricula that involve interaction between home and international students

Leask, B. (2009) Using formal and informal curricula to improve interactions between home and international students, *Journal of Studies in International Education* 13, 205-21. [Online, <u>http://jsi.sagepub.com/</u> cgi/reprint/13/2/205]

One key way to set curricula in a global context for UK students is to ensure that they are exposed to a range of interactions with international students. This also plays an important element in making curricula more accessible to international students. The second paper thus explores different ways in which this might happen, as the interactions that curricula open up between different students may help to ensure all students are exposed to the global context or to a range of cultures. This does also mean that internationalising the curriculum and internationalising the student intake go hand in hand, and that one might look to draw students from a range of different countries.

4. Critical perspectives on curricula for a global and multicultural world

Morey, A.I. (2000) Changing higher education curricula for a global and multicultural world, *Higher Education in Europe* 25, 25-39. [Online, http://www.informaworld.com/smpp/

content~content=a713669237~db=all]

The final paper offers a framework for developing curricula that prepare students for a culturally diverse, globally interdependent world. It explores three levels at which change might occur (p30), considering exclusive curricula that prioritise mainstream perspectives, inclusive curricula that incorporate alternative perspectives, and transformed curricula that present ideas through non-dominant perspectives. As such the paper takes us leads us to a more critical perspective on proceedings, encouraging student engagement and focusing on issues of equity.

Research-led teaching

1. Introduction

'The University considers research-led teaching to be a defining characteristic of its approach to education' (QAA Institutional Audit, University of Liverpool, March 2009)

It makes sense for a research-intensive university with a large student body to ensure that its teaching and learning is led by research. And the university's strategic plan envisages an intellectual environment in which teaching and learning is driven by research excellence. But the notion 'research-led teaching' remains one that is open to a range of interpretations. Indeed, the report from our recent QAA Institutional Audit points out that 'many courses focused on staff employing what could be characterised as a somewhat passive 'research-led' approach through curriculum content conveyed by experts' (para 28), noting that only in certain areas of the university were students engaged and developed as active researchers.

This briefing note introduces three studies that help to provide an evidence base for different approaches to research-led teaching, focusing in greater detail on approaches that engage students (see below for full details of the related session).

2. Models of teaching-research relationships

Griffiths, R. (2004) 'Knowledge production and the research-teaching nexus: the case of the built environment disciplines', *Studies in Higher Education*, 29: 6, 709 – 726. [Online, http:// dx.doi.org/10.1080/0307507042000287212]

There are a number of models of the teaching-research nexus. Griffiths (2004) argues essentially for four different models:

The curriculum is delivered by research-active staff and linked to their research

We have established strengths in relation to this first model, with many programmes in which the curriculum is designed and delivered by research active staff, and linked to their research interests. But research suggests, also, that students are aware their access to staff is more limited where tutors are busy with research. It will thus be important with growing student numbers to consider how to continue to offer such curricula without increasing the demands on research-active staff.

The curriculum includes courses on research methods

The second of these models focuses on the processes involved in the production of knowledge. Courses on research methods are also standard fare, although considerable space is often required to incorporate them into the curriculum.

Students engage in research

The model of the research-teaching nexus that is based on students engaging in research or aspects of the research process offers particularly good promise for student learning, hence the above QAA comment. Such activity clearly goes beyond the final year project or dissertation. The table below outlines a range of ways in which students can become involved in research across their entire programme.

Learning based on a process of re-	Problem-based learning, project work, group inquiries, small-scale in-
search or inquiry	vestigations, case studies.
Learning based on an aspect of the research process	Discussion of research papers, participation in ethics committees, field work, laboratory work, data collection and analysis, peer editing, peer review, engagement with research seminars, presentations, student con- ferences, student journals.

Table: Learning based around students engaging in research or aspects of the research process

Teaching is informed by pedagogic research

Teaching can be informed by systematic inquiry into the teaching and learning process. Certainly, if we are to integrate teaching and research by involving students as active researchers, then we need an evidence base on which to proceed. While one would not normally rely only on this particular approach to linking teaching and research, successful developments are often characterised by all of four models, as when active researchers take an informed approach to working with students in actively producing their own knowledge.

3. Linking teaching and research in disciplines and departments

Alan Jenkins, A., Healey, M. and Zetter, R. (2007 *Linking teaching and research in disciplines and departments*, Higher Education Academy, York. [Online, <u>http://www.heacademy.ac.uk/assets/York/</u> <u>documents/ourwork/research/LinkingTeachingAndResearch_April07.pdf</u>]

The curriculum review requires each Level 2 school (or, where necessary, Department) to determine the most appropriate model for them to deliver research-led teaching, and to embed and evidence this within its revised UG and PGT curricula. This paper looks at the underlying rationale for developing research-led teaching at discipline and departmental level. The paper reviews the research evidence for such a focus. It argues that the intellectual development of students should be developed by departments focusing on the links between research and teaching, that teaching-research links need to be constructed, and that there are important disciplinary variations in teaching-research relations that need to be valued. The paper further suggests that academic departments are central to developing the links between research in the discipline and student learning.

4. Developing students as researchers

Healy, M. and Jenkins, A. (2009) 'Developing students as researchers', *ESCalate news* Issue 14, Escalate, (first published in UC Magazine, October 2008). [Online, <u>http://escalate.ac.uk/6166]</u>

The final paper for the evidence-base session focuses on one particular model of linking teaching and research, namely engaging students as researchers. The authors argue that all undergraduate students should experience both learning through research and learning about research. One of the keenest challenges that higher education faces at present is to motivate students in their work, with this approach offering good scope to engage students as they pursue research and enquiry that catalyses their own interests. Further examples and evidence that relate to this introductory article are also provided by the more extended work: Healey and Jenkins (2009*).

References/further reading:

Healy, M. and Jenkins, A. (2009*) Developing undergraduate research and inquiry, Higher Education Academy, York. [Online, <u>http://www.heacademy.ac.uk/assets/import%20assets%20here/documents/ourwork/</u>research/DevelopingUndergraduateResearchandInquiry.pdf]

Video on Research-led Teaching - (17/06/09). Dr Peter Kahn (Educational Developer), Educational Development Division, University of Liverpool

http://www.liv.ac.uk/eddev/CPD/Past_CPD_Events.htm

Some relevant local resources are also available from the last two learning and teaching conferences: http://www.liv.ac.uk/eddev/l_t_conference/past_conferences/l_t_conference_09/resources.htm http://www.liv.ac.uk/eddev/l_t_conference/past_conferences/l_t_conference_08/L% 26T_Resources_2008.htm

Technology-enhanced learning

1. Introduction

The prevalence of technology-enhanced learning is clearly increasing across the sector at present, given wider shifts in society and technology. In addition to building on our partnership with Laureate, the university is encouraging departments to identify opportunities for expanding their online teaching provision. This is likely to involve blended modes of teaching and learning that involve a range of technology. This briefing note introduces three papers that will form the basis for a session that looks at some of the underlying evidence base for this shift (see below for details of the session).

2. Learning for a generation that communicates using technology

Sims, R. (2008) 'Rethinking (e)learning: a manifesto for connected generations', *Distance Education* 29(2) 153–164 [Online, <u>http://pdfserve.informaworld.com/529391_915529901_794796293.pdf</u>]

Technology, and the internet in particular, is increasingly becoming an established feature of the environment for learners. The paper argues that while it is possible to focus on ways in which technology might enable learning to become more efficient, effective and engaging, it is also essential to consider ways in which technology helps to establish a basis for collaborative, contextual and connected learning. The challenge is to find ways to ensure that technology enables students and teachers to interact with each other in a dynamic fashion, to allow individual learners to address issues relevant to their own context, and to connect learners and teachers across different learning spaces.

3. Technology-enhanced assessment

Nicol, D. (2007) REAP: Re-engineering Assessment Practices in Scottish Higher Education, Scottish Funding Council [Online, <u>http://www.jisc.ac.uk/media/documents/programmes/elearningsfc/sfcbookletreap.pdf</u>] This paper outlines the results of a major initiative across Scottish higher education, involving the use of new models of assessment practice supported by technology in large cohort first-year classes. The approaches employed include tutor, peer and self-assessment, as well as formal and informal feedback. Ideas from the project have been taken up quite widely across higher education, with significant efficiency gains for staff in some cases and good student reception.

4. An example of local practice at the university

The third paper employed within the session will be taken from an evaluation that is presently underway with the Liverpool Law School.

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