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collaborate

debate

critique

network

share

iPED 2010

5th International Inquiring Pedagogies Conference

Proceedings

'Conceptualising Impact:
Exploring the effectiveness of practice
through pedagogic research'

Wednesday 15 - Thursday 16 September 2010
Coventry University, UK

Coventry University

iPED 2010
Conceptualising Impact:
Exploring the effectiveness of practice through pedagogic research

The conference archived website may be found at www.coventry.ac.uk/iped2010

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Welcome

We are delighted to welcome you to our fifth international iPED conference at Coventry University.

Our theme of *Conceptualising Impact: Exploring the effectiveness of practice through pedagogic research* has attracted contributions from across the world. Submissions were equally divided between the two broad sub-themes of *Exploring Pedagogic, Intellectual, Social, Cultural and Economic Impact* and *Academic Writing, Research Strategies and Collaboration for Evidencing Impact*. Alongside our keynote talks, the programme comprises an interesting mix of oral presentations, workshops, debates, and two sessions of PhD work-in-progress reports.

iPED 2010 brings together a diverse community of pedagogic researchers, academic developers, technical innovators and higher education managers. The iPED (Inquiring Pedagogies) Research Network is based at Coventry University. Where it undertakes research, development and consultancy in academic practice. Our conference committee comprises colleagues from iPED, the Centre for Academic Writing, Organisational Development and Learning, and Coventry University's Events Management team.

We are pleased that, despite the global economic challenges facing higher education, you have been able to participate this year. We have worked hard to keep costs to a minimum in order to maintain delegate fees at last year's rate and to provide subsidised places for research students as well as for colleagues from developing countries. For many of us, this will be an opportunity to renew acquaintances with colleagues from around the world, for others this will be your first time at iPED. We encourage both returnees and those new to the conference to network, to explore and to share mutual interests, and to be proactive in making this an enjoyable and worthwhile experience for all.

Once again we will award a conference Best Paper Prize. Last year this was awarded to Dr Aileen Cater-Steel and Dr Jacquie McDonald of the University of Southern Queensland, Australia, for their submission *Developing Research Supervisors: Breaking down internal barriers and drawing on resources from the Australasian academic community.*

Dr Lynn Clouder (l)
iPED 2009 Conference Host,
with Best Paper Award winner
Dr Aileen Cater-Steel (r)

Collaborate

Debate

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Welsh Education Research Network Symposium

Student Learning and Teaching Network Presenters

Images from iPED 2009

iPED has now completed the two major projects that were initiated in 2008. Firstly, the publication of our special issues of the International Journal of Web Based Communities:

- IJWBC, Volume 6 - Issue 3 - 2010, Special Issue on Learning Communities and Marketing Aspects
  www.inderscience.com/browse/index.php?journalID=50&year=2010&vol=6&issue=3
- IJWBC, Volume 6 - Issue 2 - 2010, Special Issue on Web Based Research Networks and Learning Communities, Guest Editors: iPED Research Network: Christine Broughan, Tony Carr, Virginia King, Philip Watland and Piet Kommers.

Secondly, the publication of our edited book, *Academic Futures: Inquiries into Higher Education and Pedagogy.* This has enabled us to bring considered examples of our conference interactions to a wider audience.

Academic Futures: Inquiries into Higher Education and Pedagogy: **Lead editor Virginia King (centre) with co-editors (l-r) Andrew Turner, Frances Deepwell, Lynn Clouder & Christine Broughan**

More information on these and other iPED activities can be found on our website. To be kept informed of future events, you may join the iPED "JISC email" list via www.coventry.ac.uk/iPED.

We hope you have an enjoyable and valuable few days with us. Please ask at the Registration Desk if you require help or information.

The iPED 2010 Conference Committee.

iPED 2009: Ian Frank (pictured far left), Future University-Hakodate, Japan, running his 'World Class Thinking' workshop which challenged the way that we think about our environment.

Workshop participants (left & right) consider the artefacts produced (centre).

iPED 2010 Peer Reviewer Panel

All submissions to the conference were subject to double-blind peer review.
We would like to thank all of our reviewers for their help and hard work.

The Conference Peer Reviewers:

- Erik Borg, Coventry University, United Kingdom
- Julian Brasington, Liverpool Hope University, United Kingdom
- Tony Carr, University of Cape Town, South Africa
- Professor Denise Chalmers, University of Western Australia, Australia
- Mark Childs, Coventry University, United Kingdom
- Heather Conboy, De Montfort University, United Kingdom
- Dr Mary Deane, Coventry University, United Kingdom
- Dr Frances Deepwell, Oxford Brookes University, United Kingdom
- Peter Every, Coventry University, United Kingdom
- Elizabeth Grant, University College London, United Kingdom
- Dr Magnus Gustafsson, Chalmers University of Technology, Göteborg, Sweden
- Dr Henk Huijser, University of Southern Queensland, Australia
- Dr Samina Malik, International Islamic University, Islamabad, Pakistan
- Dr Charlotte Mbali, University of KwaZulu-Natal, South Africa
- Professor Hilary Nesi, Coventry University, United Kingdom
- Dr Peter O'Neill, London Metropolitan University, United Kingdom
- Dr Rebecca O'Rourke, University of Leeds, United Kingdom
- Marina Orsini-Jones, Coventry University, United Kingdom
- Dr Lucy Rai, The Open University, United Kingdom
- Dr Shirley Reushle, University of Southern Queensland, Australia
- Dr Sonia Vasconcelos, Federal University of Rio de Janeiro (UFRJ), Brazil
- Dr Philip Watland, Olds College, Canada
- Professor Gina Wisker, University of Brighton, United Kingdom
- Jonathan Worley, St. Mary's University College Belfast, Northern Ireland

The Conference Committee:

- Dr Christine Broughan
- Dr Lynn Clouder
- Lisa Fisher
- Dr Lisa Ganobscik-Williams
- Mark Holton
- Virginia King
- Dr Sue Morón-García
- Louise Rowlands
- Dr Andrew Turner

Conference Theme Overview

iPED 2010, hosted by the iPED Research Network (www.coventry.ac.uk/iPED), offers delegates the opportunity to explore the theme of **'Impact'** as it affects, and is affected by, pedagogic research in higher education.

We note that the funding of higher education is increasingly dependent on effective demonstration of its benefits to society and the wider economy. While teaching and learning practices have changed radically over recent years, much pedagogic research is focussed on small exemplars of excellence. To gain wider recognition and inform practices, pedagogic research must build on the established literature and demonstrate its value, relevance and broader benefits. Meanwhile, the importance of students' cognitive, social and affective development is increasingly viewed in the context of expectations about the student experience and student satisfaction, creating both tensions and opportunities for pedagogic research.

- What are the pedagogic, intellectual, social, cultural and economic impacts of our research?
- How do we ensure that our research addresses these issues effectively

The conference encouraged submissions in (but not restricted to) the following areas:

1. Exploring Pedagogic, Intellectual, Social, Cultural and Economic Impact

- How do we know that our teaching is making a difference?
- What exemplars, case studies or other evidence can we muster and how?
- How can we demonstrate knowledge exchange with the wider society?
- In what ways can we best use technology to innovate our practice?
- How has technology changed the ways in which the participants interact in higher education?
- In what way does our practice contribute to our students' cultural capital?
- What impact has widening participation had on institutions, their staff and students?
- How have global economics impacted on higher education?
- How has the drive to develop employability capabilities in our students affected HE practices?
- What can we learn from the personal narratives of academic staff and students?
- How do we design sustainable courses that address the complex demands of students, government, employers and society?
- How has the changing academy impacted on disciplinary identity?
- Students as consumers –how do we respond, and how do we engage them?

2. Academic Writing, Research Strategies and Collaboration for Evidencing Impact

- If we must 'publish or perish', what strategies are most useful?
- How do we use academic writing to evidence the significance of our impact?
- What is the relationship between our institutions' policies, our practice and our pedagogic research?
- How do we generalise our pedagogic research to influence policy and practice?
- What can researchers across the global academy learn from one another about impact?
- How best can impact be evaluated for a given discipline or research area?
- What do our institutions, our students and our research partners understand by the term academic impact?
- In what ways can we use open access repositories, immersive technologies or multi-media to 'show case' our research?
- What community models can we use to support isolated pedagogic researchers?
- How do we develop the necessary skills in ourselves, our students or new colleagues?

Conference Programme (subject to change)

Wednesday 15 September 2010; Coventry University TechnoCentre, Puma Way, Coventry CV1 2TT

09:00 - 10:00	Registration and coffee

Plenary 10:00 - 11:00	**Room 1.3** **Introductions:** Virginia King, iPED Conference Coordinator **Opening Welcome**: Professor Ian Marshall, Pro-Vice-Chancellor for Research, Coventry University **Keynote:** **Dr Alis Oancea, University of Oxford** 'Education Research and the RAE: Findings from the review of the impacts of the RAE 2008 on education research' Chair: Professor Ian Marshall

11:00-11:30	Break

	Room 1.1 Presentations **Chair**: Andrew Turner	Room 1.2 Presentations **Chair:** Christine Broughan	Room 1.4 **Symposium** on **Activity Led Learning**	Room 1.8 Presentations **Chair:** Lisa Ganobscik-Williams
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	Wednesday 15 September 2010 – continued.			
13:00-14:00	Lunch, Exhibition, Networking			
Parallel Session 2 14:00-15:00	Room 1.1 Presentations **Chair**: Sue Morón-García	Room 1.2 Presentations **Chair**: Erik Borg	Room 1.4 Presentations **Chair**: Lynn Clouder	1.8 Presentations **Chair**: Erik Borg
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17:30	End of Day 1 – Networking and free time or join a guided walk of historic Coventry which starts at the registration desk and ends at St Mary's Guildhall			
19:00	**Drinks Reception St Mary's Guildhall, (all delegates) Bayley Lane, Coventry, CV1 5RN** *Hosted by Mark Holton, Head of Organisational Development and Learning*			
20:00-22:30	**Conference Dinner St Mary's Guildhall, (booking essential for day delegates and guests).**			
	Conference continues overleaf.			

Thursday 16 September; Coventry University TechnoCentre, Puma Way, Coventry CV1 2TT				
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09:00–09:30	Registration and coffee			
Plenary 09:30-10:30	**Room 1.3** **Keynote**: Professor Sir Robert Burgess, Vice-Chancellor, University of Leicester '**Exploring Assessment in Higher Education: from Policy to Practice**' **Chair:** Ian Dunn			
10:30 -11:00	Break			
Parallel Session 4 11:00-12:30	Room 1.1 Presentations **Chair**: Andrew Turner	Room 1.2 Presentations **Chair:** Sue Morón-García	Room 1.4 *PhD Work-in-Progress Reviews* **Facilitator**: Professor Lewis Elton with Christine Broughan	1.8 Presentations **Chair**: Lisa Ganobscik-Williams
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Thursday 16 September – *continues overleaf.*				

Thursday 16 September – *continued.*			
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15:00-15:30	Break		
Plenary 15:30-16:00	**Room 1.3** **Dr Lynn Clouder** Prize-giving, Conference Review and Future Plans		
16:00	iPED Conference ends		

Keynote Speakers

Dr Alis Oancea, University of Oxford

Alis Oancea is Research Fellow at Oxford University's Department of Education, and elected Executive Council member of the British Educational Research Association. She is member of the Peer Review College of the Economic and Social Research Council, as well as of the boards of reviewers of most major national and international bodies with an education portfolio. She has published extensively in the fields of research policy and governance – including research evaluation, post-compulsory education and training policy, and philosophy of research, including work on contemporary issues in knowledge management.

Alis has particular interest in issues of research assessment, research quality and impact, and peer review, in the national and international contexts. She has recently completed work on the impact of the 2008 Research Assessment Exercise on education departments in the four countries of the UK and has just started a funded project on interpretations of research impact and impact-related practices across the full range of disciplines. In addition, she co-authored the synoptic report of the UK Strategic Forum for Research in Education (2010) and contributed to the shaping of the Forum's activity. Recent publications include *Assessing Quality in Applied and Practice-Based Research in Education* (Routledge, 2010), and *Education for All: The future of education and training for 14-19 year olds* (Routledge, 2009).

Keynote: Education research and the RAE: findings from the review of the impacts of the RAE 2008 on education research

Wednesday 15 September 2010, 10:15 - 11:00, Room 1.3

Workshop: The RAE, the REF, and the future of research assessment in the UK

Wednesday 15 September 2010, 16:30-17:30, Room 1.3

The keynote talk and the follow-up workshop will draw on recent research on the impacts of the RAE 2008 on education research, including perceived impacts on education researchers' work and careers, on departments and research units, and on the field as a whole, and comments on REF expectations. It will consider the impacts of the RAE as perceived by different categories of staff and as evidenced by the available RAE-related data and analysis. It will look at perceived immediate impacts; likely future impacts; and relative impacts across different types of institutions and (sub)fields, and over time (including the specific impact of changes in the methodology adopted for RAE in 2008).

The talk will challenge current wisdom about the RAE on at least two counts. First, the picture emerging from the RAE 2008 study was not as evenly negative than that painted by some of the previous research on the topic (a fact which may have to do with changes in the RAE procedures and with the different kind of post-RAE 2008 settlement). Second, perceptions of the impact of the RAE among the respondents are more contextualized and mediated, thus less inclined towards direct attributions, than they had been made to seem in some of the existing literature.

During the follow-up workshop, colleagues at the conference will be invited to bring their diverse experiences of research assessment into a discussion of the future of research assessment in the UK and internationally, taking in the Research Excellence Framework, the revised procedures and criteria for the assessment of research in research council applications, the changing landscape of funding and commissioning bodies, and the emergence of transnational systems of research assessment.

Professor Sir Robert Burgess,

Vice-Chancellor, University of Leicester

Robert Burgess is Vice-Chancellor of the University of Leicester (a post he has held for ten years) and Chair of the Universities and Colleges Admissions Service (UCAS), the Higher Education Academy, the Research Information Network, the UUK/Guild HE Teacher Education Advisory Group and the Managing Information Across Partners HE Group. He is a member of the British Library Board and an Academician of the Academy of Learned Societies in the Social Sciences. He is currently chairing the UUK/Guild HE implementation group on the Higher Education Achievement Report and Degree Classifications on which he has produced three reports.

He has been President of the British Sociological Association, President of the Association for the Teaching of the Social Sciences, Founding Chair of the UK Council for Graduate Education and has been a member of the Council and Chair of the Postgraduate Training Board of the Economic and Social Research Council. He has also been Chair of the East Midlands Universities Association and Honorary Secretary of the Society for Research in Higher Education.

He was previously Senior Pro Vice Chancellor, Director of CEDAR (Centre for Educational Development, Appraisal and Research) and Professor of Sociology at the University of Warwick.

His main publications include: *Experiencing Comprehensive Education* (1983), *In the Field: An introduction to field research* (1984), *Education, Schools and Schooling* (1985), *Sociology, Education and Schools* (1986), *Schools at Work* (1988, with Rosemary Deem), *Implementing In-Service Education and Training* (1993, with John Connor, Sheila Galloway, Marlene Morrison and Malcolm Newton), *Research Methods* (1993), and *Reflections of the University of Leicester* (2010, with Joanne Wood), together with over twenty-four edited volumes on qualitative methods and education.

Keynote: Exploring Assessment in Higher Education: from Policy to Practice

Thursday 16 September 2010, 09:30-10:30, Room 1.3

This keynote presentation examines ways in which student achievements are recorded and ways in which new systems can be developed. Drawing on research and development work in assessment, the presentation will focus on the policy debate surrounding degree classification and discuss how this has been linked to the development of a Higher Education Achievement Report. The author draws directly on his experience of chairing national groups over the last eight years that have pioneered these developments. Finally, parallels are drawn with the development of the Learning Records Service and the potential to link the student record from school and college through university and on to lifelong learning – another development in which the author has been directly involved.

Extended Abstracts and Full Papers

17 Lewis Elton; "They do the things they ought not to do and do not do the things they ought to do"

Author Institution: UCL (University College London), the University of Surrey and the University of Gloucestershire, United Kingdom

Corresponding author: l.elton@pcps.ucl.ac.uk

Format: debate

Short biography of the author: Lewis Elton is Honorary Visiting Professor at UCL and the University of Gloucestershire, and Distinguished Visiting Fellow at the University of Surrey. He is a Fellow of the Academy of Social Sciences (AcSS), and he holds Doctorates honoris causa at the Universities of Kent, Gloucestershire and London (External). He received the first Times Higher Life Time Achievement Award (2005) and in the following year was presented with a Festschrift by his former students [P. Ashwin (ed) (2006) *Changing Higher Education: the Development of Learning and Teaching*, Routledge Education]. His current work is concerned with the scholarship of teaching and learning, collegial management, creativity, and academic writing.

Keywords & Précis: **learning; rights of students; collegiality**

The major needs for change in universities are:

1. to stress the importance of learning over teaching;

2. the rights of students to match those of teachers;

3. a better balance between the three main university functions – learning, research and community service.

What should not change is the traditional collegiality of the academic profession, which should however be extended to students.

This appropriate mixture of continuity and change has been expressed in the title, which is a quotation from the Book of Common Prayer of the Church of England.

Participants are warmly invited to join in this debate.

22 Ewa Maciejewski, Learner-led, Industry-supported, Technology-enriched Learning

Author Institution: University of Portsmouth, United Kingdom

Corresponding author: ewa.maciejewski@port.ac.uk

Format: oral

Programme Slot: Wednesday 15 September 2010, 11:30-13:00, Room 1.2

Short biography of the author: Ewa Maciejewski has been a Senior Lecturer in Architecture and Professional Practice at the University of Portsmouth since 2009. Prior to that, she worked as an architect in the UK, Hong Kong, Singapore, UAE and Switzerland. Her exposure to practice in an international context, as well as experience of a whole range of practice types, has stimulated her interest in defining and developing specialisms within the construction industry and in making education and practice relevant to each other.

Keywords & Précis: relevant e-content, knowledge exchange between education and practice, improving students' employability

The subject of this paper is the development of e-learning course content for undergraduate level architecture studies. It focuses on the delivery of the "Professional Practice" unit of the course. The paper will demonstrate how learner-led, industry-supported and technology-enriched learning can serve as useful context for the development of e-content, which can be of real benefit to students, particularly in times of economic downturn.

Abstract:

The subject of this paper is the development of e-learning course content for undergraduate level architecture studies. The paper specifically focuses on the delivery of the "Professional Practice" unit of the course.

The mission of the Professional Practice unit is to prepare students for their first job in practice. As such, it focuses on aspects of professionalism, practice set-up, contract law and project management. The unit also deals with interview preparation, and this paper illustrates how this aspect can be taught in an engaging and effective way.

Students were given lectures on the subject of curriculum vitae and portfolio preparation. They were then asked to prepare applications and to send them out to real architectural practices. The practices were subsequently invited to the School to conduct "mock-interviews". The gathering of thirty professional architects, alongside 150 BA3 architecture students, provided a "1st Life" social platform worthy of observation and analysis. The interviews facilitated a live bridge between education and practice, forcing both sides to engage in a social exchange of information, and thus to collaborate in a group-led learning process.

This event provided an excellent context for the development of e-learning material. A professional film crew was invited to record the general gathering as well as three individual interviews. As well as providing a record of the event, the film also generated feedback for students and it will serve as instructional teaching material for next year's student cohort.

The overwhelming success of the event, with an almost a 100% attendance rate, and a 60% average mark achieved, shows that there are benefits in bottom up (learner-led) as opposed to top-down (teacher-delivered) learning. By encompassing the industry (architectural practices), the event became particularly relevant to the students, who were about to go out to get jobs. The filming of the event created an additional incentive to "perform". The film became e-content material, of which the students could claim joint ownership.

In conclusion, how do we know that our teaching is making a difference? The simple answer could be, because our students succeed in getting jobs. In 2009, 80% of our architecture graduates found employment within six months of graduation, markedly outperforming the national average of 50% (Klettner 2009). Within the current economic climate, it is our obligation to support our students in their transition from school to practice. This transition can be improved further by involving the industry in our teaching and learning activities. Recording such activities ensures that knowledge exchange between practice and education can be broadcast beyond the walls of the university. Subject to obtaining funding, a research project will be set up for next year to investigate how Web 2.0

technologies, in the form of an open ID blog site with rich-media resources, can be used to promote a wider collaboration between practice and education, complementing our existing course structures.

Note: The author plans to screen parts of the film during the presentation.

References

Klettner, A. (2009) "Architecture Graduate Unemployment Reaches New High." *Architecture Journal* [online]. Available from <http://www.architectsjournal.co.uk/news/daily-news/architecture-graduate-unemployment-reaches-new-high/5210336.article> [02 November 2009]

23 Karen Gresty and Andrew Edwards-Jones; Making a Difference to Transition from Foundation Degrees into Final Year University Science Programmes

Author Institution: University of Plymouth, United Kingdom

Corresponding author: kgresty@plymouth.ac.uk

Format: oral

Programme Slot: Wednesday 15 September 2010, 11:30-13:00, Room 1.2

Short biography of the authors: Karen Gresty is a Senior Lecturer in Biological Aspects of Health and a National Teaching Fellow at the University of Plymouth, United Kingdom. Her current research interests are centred on research-informed teaching, as well as e-learning for bioscience and healthcare students. Andrew Edwards-Jones is a research assistant in the Faculty of Science and Technology, University of Plymouth. His research interests include mainstreaming undergraduate research and the enhancement of student employability through the development of key research skills.

Keywords & Précis: student transition, foundation degrees, e-journal

The need to facilitate the transfer of Foundation Degree students into final year University programmes has resulted in a variety of initiatives to smooth the transition. We examine the role an undergraduate e-journal can play in disseminating pedagogic resources to partner colleges, and in helping to support and demystify final year research.

Abstract:

The increase in students progressing from Foundation Degrees at partner colleges to undertake "top-up" honours programmes at university brings with it many challenges related to supporting learning development. Unpublished work from our own institution (Jacobs and Barrett 2008) highlights specific issues that such transfer and widening participation students may experience, notably the acquisition of critical research skills. Enhancing the undergraduate student learning experience by developing research and inquiry skills has become a key focus for pedagogic researchers over recent years (see Healey and Jenkins 2009). In order to achieve this, the potential value of new technologies and e-journals in particular has been advocated by Jenkins, Healey and Zetter (2007) and variously implemented (Tatalovic 2008). Hitherto, student e-journals have been utilized mainly as a means of celebrating student work rather than as pedagogic tools or educational resources to support teaching activities. However it appears they have a role to play by supporting academic writing skills and providing insight into the sort of work that is carried out in the final undergraduate year, especially during the independent research honours project. The current study was precipitated by requests from partner college tutors for additional information and resources, and by a need to enhance the level of support provided to potential and enrolled students.

This presentation explores qualitative and quantitative results obtained from an action research study at the University of Plymouth, considering the role and use of an undergraduate research e-journal. We assess "top-up" students' views on the challenges they encountered when transferring from Foundation courses to University final year, and ask whether they believed early access to examples of excellent student work from their chosen institution could help to support this process. We also assess partner college staff attitudes and thoughts about the usefulness of an e-journal in this context. The resource in question ("The Plymouth Student Scientist") can be freely accessed at: http://www.theplymouthstudentscientist.org.uk/

This e-journal is the main output of a HEFCE-funded project to support and develop research-informed teaching. We examine the wider role of pedagogic practice and how it can make a difference to students who transfer from Foundation degrees to final-year degree study.

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Jacobs, P. and Barrett, L. (2008) *"We don't belong": Problems of progression for foundation degree students.* Available online: <http://209.85.229.132/search?q=cache:STRPOIDE8zoJ:rhen.wikispaces.com/file/view/we%

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25 Billy Brick; Beyond Penpalling: Web 2.0 language learning

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Format: oral

Programme Slot: Thursday 16 September 2010, 11:00-12:30, Room 1.8

Short biography of the author: Billy Brick is Languages Centre Manager at Coventry University. His research interests include Computer Assisted Language Learning, visualizing corpora and digital repositories.

Keywords & Précis: **Web 2.0, language learning, Livemocha**

Web 2.0 has established itself in language teaching and learning. As part of this revolution there has been a proliferation of social networking sites which facilitate language learning by putting learners in contact with native speakers of their target language. This presentation reports on a project related to this phenomenon.

Abstract:

The use of technology in language teaching has grown enormously as access to computers and high-speed internet connections has become more common, and as Web 2.0 has established itself. As part of this phenomenon there has been a proliferation of social networking sites (SNSs) which aim to facilitate language learning by putting learners in contact with native speakers of their target language. SNSs have the potential to transform language learning by providing opportunities for synchronous and asynchronous interaction, and by offering speaking, writing, reading and listening activities at a time and place of learners' own choosing (see McBride 2009 for an evaluation on SNS affordances).

SNS technology can be utilized in two different ways, affording learners greater or lesser control over their own learning process.

On the one hand tutors can encourage learner interaction in an institutional VLE (virtual learning environment) incorporating videoconferencing software such as Skype. This approach allows tutors to maintain control over the membership of the group and to provide a structured learning environment, based on the principles of tandem learning. The effects of Skype-based tandem language learning have recently been investigated in a study by Mullen, Appel and Shanklin (2009).

Alternatively tutors can encourage students to register on a commercial site which allows them complete freedom to interact with any other site member in accordance with their learning needs. Most commercial language-learning SNSs offer some free content alongside a premium feature for which registration and a modest payment is required. The package often includes a peer review facility where students can provide feedback to learners of their own first language (L1), and some sites incorporate an award system, in the form of points (livemocha.com) or "berries" (busuu.com). This serves to motivate participants by rewarding them for their progress and for their peer review activities. Livemocha, as a platform for ethnographic research into relationship building and mediation, has recently been investigated by Harrison and Thomas (2009).

This presentation will report on the results of a research project which investigates the ways in which a commercial site with autonomous participants might be incorporated effectively into a formal university language-learning programme. Participants in the project were from various L1 backgrounds and were either taking, or had taken, courses in Polish, Portuguese, Spanish and English. The project followed their interactions in the Livemocha language-learning SNS, adopting a repeated measures design and eliciting multiple samples from the same learners over a three-month period. The data was collected from reflective learner diaries, and stimulated recall.

The research provides insights into the possible roles of the SNS, and aims to inform language tutors who are considering whether to graduate from an institutional virtual learning environment.

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26 Tina Bass; Does Lave and Wenger's Original Approach to Workplace Learning Still Have Currency Today?

Author Institution: Coventry University

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Format: oral

Programme Slot: Wednesday 15 September 2010, 11:30-13:00, Room 1.1

Short biography of the author: Tina Bass is a Senior Lecturer within Coventry University's School of Business, Environment and Society. Most of her teaching is at undergraduate level. She is currently studying for a Doctorate in Social Science with the University of Leicester (Centre for Labour Market Studies).

Keywords & Précis: workplace learning; situated learning; participation

A critical review of Lave and Wenger's 1991 text.

Abstract:

> *"If you hold a cat by the tail you learn things you cannot learn any other way."*
>
> (Mark Twain)

This discussion concentrates on the text and implications of one book by Lave and Wenger. Published in 1991, *Situated Learning: Legitimate peripheral participation* takes a strongly provocative position, emphatically rejecting one of the most widely understood models of learning, that of classical structural analysis, switching emphasis instead to extending learners' participation in expert performance. Also, this text does not reject but offers a subtle alternative to a "purely interactive" model of learning. The authors suggest that Participation Frameworks (a means for conceptualizing "learning as participation") *might* be structured but where structures exist they need to be flexible and deeply adaptive to learners' needs. They add that some frameworks, in some organizational settings, may already be more suited to allowing someone with expertise to teach others. As such, their interests lie in exploring "what kinds of social engagements provide the proper context for learning to take place" (1991: 14).

There are many criticisms that can be made of this text. For instance, case study examples are diverse but low-tech, leading some critics to challenge whether they can ever be applicable to a modern working environment. Fuller and Hodkinson et al. (2005) are generally supportive of the model but detail a number of limitations and criticisms arising from their experiences of researching in complex, modern organizations. Furthermore, their concept of Situated Learning in Communities of Practice is much broader than the original case studies suggest. The original concept might then be extended to consider the use of learning technology. Online networks of, for instance, project managers, might come together to discuss problems or successes, in a forum that might not interest other organizational members. Membership of online communities may occur unconventionally and may be self-selecting in ways that Lave and Wenger could not have envisaged. Within an online community of practice, teachers may become facilitators in a much less hierarchical teaching relationship than is seen in traditional settings. Indeed, many current innovations in education technology seem to rest upon a creeping acceptance of the reality of Communities of Practice and the necessity of facilitating them in modern organizations. Examples of this might include class blogs or wikis.

Whilst it can be argued that Lave and Wenger's book presented little that was new, what they had to say about learning was sufficiently radical and intelligently argued that it drew (and continues to draw) a huge amount of attention. They pulled together the threads of many theories whilst leaving several issues loosely hanging, such as the central importance of power relationships in the workplace alongside issues of gender, race and sexuality. Regardless of whether you are an enthusiast who acknowledges the strengths of their model or a critic who dwells on the weaknesses, it is impossible to deny that these authors have made a lasting impact upon knowledge and practice around workplace learning, particularly notions of Expert/Novice (Master/Apprentice). They have added to existing models and theories by confirming that learning must reflect what takes place in real life.

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28 Jackie Shanley and Jayne Dalley-Hewer; I'm Part of the Discussion Now: Students' perspectives on the development of Master's-level academic skills

Author Institution: Coventry University

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Format: oral

Programme Slot: Thursday 16 September 2010, 11:00-12:30, Room 1.1

Short biography of the authors: Jackie Shanley and Jayne Dalley-Hewer are Senior Lecturers in Physiotherapy at Coventry University. They both teach at undergraduate and postgraduate level and have a particular interest in supporting the academic development of postgraduate students.

Keywords & Précis: Master's level; academic literacy; discussion

The aim of this study was to contribute to the understanding of Master's level skills development. Semi-structured interviews were used to explore students' perceptions of changes in their abilities as they progressed through a master's programme. Discussions were highlighted as key factors which contributed to academic development.

Abstract:

The physiotherapy Master's team at Coventry University oversees a large number of Master's programmes and individual Master's modules. Many students comment on finding it difficult to understand what is expected of "Master's level" (M-level) academic work. The UK Quality Assurance Agency for Higher Education qualification descriptors for M-level have underpinned the development of our M-level marking criteria (QAA 2008). However, they do not assist students in understanding how they can develop these qualities, or become academically literate. McEwen et al (2005: 10) identified key themes that students felt contributed to the "postgraduateness" of a Master's programme, such as greater depth of engagement and different approaches to learning. Strategies to develop these attributes were not discussed. One of the key findings of the work of Mistry, White and Berard (2009: 145) was the dearth of literature on M-level teaching and learning. The aim of this study was to contribute to the understanding of the development of master's level skills, by exploring students' perceptions of changes that occurred in their abilities as they progressed through a Master's programme.

Semi-structured interviews were used to explore students' perceptions and experiences of M-level academic skills. A purposive sample of six students was recruited, each of whom had completed and passed at least one Master's module, had expressed difficulty in understanding what was expected of "Master's level" academic work, and had demonstrated a clear change in their ability during the course of the Master's programme, by self-report and grade improvement. Ethical approval was granted by Coventry University ethics committee and consent was given by all participants. Interviews were recorded and transcribed and the transcripts were returned to the students to check for accuracy and clarification. Confidentiality was maintained throughout the study. Collaborative analysis was completed by two researchers.

Students reported that their initial expectations included learning "the right answers" and increasing their breadth and depth of knowledge. Their evolved understanding of M-level skills was that it was even more in-depth than they had expected, and that it demanded that they synthesize their own answers. Their new understanding of critical appraisal was that it was the *process* of developing their own answers. It also involved much more reading than any of them expected, with a different set of reading skills. There was high consensus on the process by which they acquired this new understanding: through discussions with other students, with tutors, in groups and one to one, and for one student, with work colleagues. The emphasis that students placed on the value of discussion in their development of academic literacy highlights its importance as a learning strategy for use in M-level teaching and justifies further pedagogic exploration.

A strong sense emerged of students developing their own judgement; judging what to read, what was worthwhile, how it could be applied in practice. This gave them confidence to find their own voice, have their own opinions and to become, as one participant said, "part of the discussion".

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30 Geof Hill; Making Use of Pedagogic Models as Reflective Catalysts for Investigating Pedagogic Practice

Author Institution: Queensland University of Technology, Australia

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Format: oral

Programme Slot: Wednesday 15 September 2010, 14:00-15:00, Room 1.4

Short biography of the author: Geof Hill is the Managing Director of The Investigative Practitioner. He supports practitioners in their investigations of professional practice. In this capacity he has an ongoing contract with Queensland University of Technology, Australia, to assist university academic research supervisors in the appraisal of their supervision practices. He has also worked with other clients to progress their reflection on work-based practices into practice-based research and supported them as they present their propositions for doctoral research degrees.

Keywords & Précis: model; professional development: practice based research

The notion of pedagogy for anyone in the teaching profession is innocuous. The term itself is steeped in history but the details of the practice can be elusive. What does it mean for an academic to be embracing pedagogy? The problem is not limited to academics: most teachers baulk at the introduction of a pedagogic agenda and resist attempts at reflection on classroom teaching practice, wherever that classroom might be constituted. This paper explores the application of a pedagogic model (Education Queensland 2001) which was developed in the context of primary and secondary teaching and was part of a schooling agenda to improve pedagogy. As a teacher educator I introduced the model to classroom teachers (Hill 2002), using an Appreciative Inquiry (Cooperrider and Srivastva 1987) model, at the same time applying the model to my own pedagogy as an academic. Despite being devised as a model for classroom teachers, I found through my own practitioner investigation that the model was useful for exploring my own pedagogy as a university academic (Hill 2007, 2008).

Full Paper:

Making use of pedagogic models as reflective catalysts for investigating pedagogic practice

Introduction and context

I work both as an academic employed by a university and as an education consultant, providing post-certification in-service education for school teachers. In July 2002 I was commissioned by the Education Department in my home state in Australia to work with groups of early childhood, primary, middle school and high school teachers, helping them to raise their pedagogic awareness. The programme had been introduced into Queensland schools on an assumption that many teachers lacked appropriate pedagogy; however, in my implementation of this professional development initiative, I adopted an approach that rested on the assumption that the teachers with whom I was working were likely already to be using the nominated pedagogies, but were unfamiliar with the range of descriptors for these pedagogies (Hill 2002). The approach can be likened to an Appreciative Inquiry (Cooperrider and Srivastva 1987) approach, and contrasts with the deficit model that seemed to underpin the initiating body.

The Pedagogical Framework

The particular pedagogy agenda arose out of the School Reform Longitudinal Survey (SRLS), undertaken by Education Queensland in 1998. It replicated and used instruments from the University of Wisconsin's Centre on the Organization of Restructuring of Schools (CORS) (Newmann and Wehlage 1993; Newmann and Associates 1996) which had focused on how changes in school organizational capacity enabled changes in *authentic* pedagogy leading to improvements in student

outcomes. SRLS identified twenty *productive* pedagogies that it believed would improve the quality of curriculum, organizing these around a model of four groups of pedagogies:

- Recognition of Difference – recognising and including multiple ways of knowing;
- Connectedness – Linking learning to a wider world;
- Intellectual Quality – Making the learner experience more intellectual demands;
- Supportive Classroom Environment – Expecting students to be responsible for their own learning and expecting high standards.
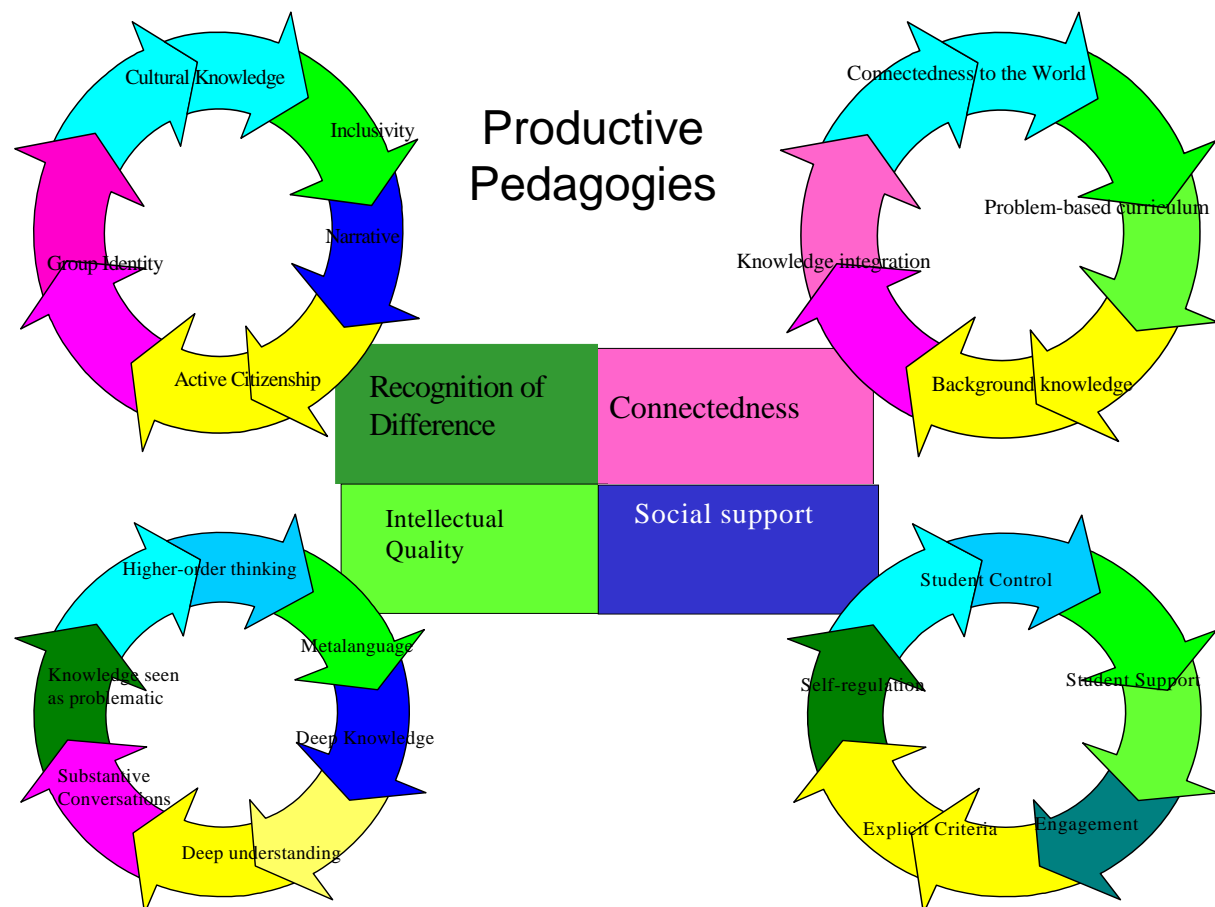
I represented this model in terms of a map

Diagram 1: Productive Pedagogy Model adapted from the School Reform Longitudinal Survey (QSRLS) (Education Queensland 2001)

The specifically named pedagogies included:

Recognition of difference

- Cultural Knowledge
- Inclusivity
- Narrative
- Active Citizenship
- Group Identify

Connectedness

- Connectedness to the World
- Problem-Based Curriculum
- Background Knowledge
- Knowledge Integration

Intellectual Quality

- Higher Order Thinking
- Metalanguage
- Deep Knowledge
- Deep Understanding
- Substantive Conversations
- Knowledge seen as problematic

Social Support

- Student Control
- Student Support
- Engagement
- Explicit (quality performance) criteria
- Self-regulation

Each of the nominated pedagogies was also defined in the context of the initiative document. For example:

Explicit quality performance criteria are frequent, detailed and specific statements about what it is students are to do in order to achieve. This may involve overall statements regarding tasks or assignments, or about performance at different stages in a lesson.

There may, on the other hand, be an absence of written or spoken reference to requirements, benchmarks, or levels of acceptable performance expected of students. In this situation the performance criteria are implicit. This may be a deliberate strategy for students to discover or construct their own outcomes, rather than indicating neglect to articulate the criteria.

Queensland School Reform Longitudinal Study (QSRLS) commissioned by Education Queensland (2001)

Background knowledge is valued when lessons provide explicit links with student's prior experience. This may include community knowledge, local knowledge, personal experience, media and popular culture sources.

A student's background knowledge may be derived from personal experience of their community and local area, from their linguistic and cultural heritage, and/or from the media and popular culture.

Queensland School Reform Longitudinal Study (QSRLS) commissioned by Education Queensland (2001)

Substantive conversation is evident when there is considerable student-teacher and student-student interaction about the ideas of a substantive topic; the interaction is reciprocal, and it promotes coherent shared understanding.

A substantive conversation has

- Intellectual substance**.** The talk is about the subject matter and the discussion encourages critical reasoning such as making distinctions, applying ideas, forming generalisations and raising questions. There is an emphasis on clear definitions of the terms being used.

- Dialogue**.** There is an emphasis on sharing of ideas and interaction between participants.

- Logical extension and Synthesis. The dialogue builds on the ideas of all the participants such that there is an improved collective understanding of the issue.

- A sustained exchange. There is a series of linked exchanges and discussion rather than simple question and answer or question and comment.

<div align="right">Queensland School Reform Longitudinal Study (QSRLS) commissioned by Education Queensland (2001)</div>

Practice Based Research

Soon after working with these teachers, in my academic capacity I began working with the research and research training area of a university and was responsible for assisting university academics to raise their awareness of research supervision as pedagogy. This type of agenda had quite a long provenance in the higher education literature (Connell 1985; Parry and Hayden 1994; Manathunga 2002; Pearson and Brew 2002).

Given that I was also supervising research students myself, I explored the application of specific pedagogies to my practices as a research supervisor. Firstly I examined the pedagogy of making explicit the quality performance criteria for a research thesis (Hill 2007). This had been a personal agenda and had been prompted by a different project acting as an examiner for multiple cohorts of Master's research students submitting action research projects. They had asked for assessment criteria, which I provided, and later as I moved into examination of doctoral theses, these criteria, with the addition of criteria related to the contributions to knowledge, proved a useful resource for being able to provide specific feedback to my research students, in a way that illuminated what an examiner might be looking for in a doctoral thesis. There were, indeed there still are, uncertainties about what constitutes a worthwhile or passable thesis.

My agenda on providing explicit quality performance criteria was followed by an investigation into applying the notion of Background Knowledge to the context of research supervision (Hill 2008). On this agenda I argued that students come to a research degree with a large amount of background knowledge and it is important to explore this with them, both by affirming the knowledge that they already possess, and by adjusting what may be inconsistent views about research. This was particularly the case with students undertaking practice-based research where they often had an extensive knowledge of their professional practice and lacked only the academic knowledge about how to present what they knew in terms of university scholarship.

I am currently exploring the application of Substantive Conversations to the nature of the meetings I have with my current research student. Given that she is a student embarking on a research degree candidature, our early conversations were aimed at eliciting her background knowledge. As she became more engaged with her research topic, and passed the important milestone of providing a research proposal, our conversations began to resemble those of peers discussing issues of scholarship. The early conversations were characterized by her questions and my answers, as she came to grips with the notion of undertaking doctoral research. Later our conversations were more of a dialogue, often prompted by her own exploration of an issue that she was intellectually struggling with. Although at her point in her candidature she was not as aware of the overall thesis that she was developing, it was clear to me that these conversations could also be categorized or synthesized into the structure of an overall thesis. Sometimes our discussions were clearly around the issue of the literature which informed her practice and at other times the discussions were more related to her nominated methodology of using stories as her data. I expect that, with the imminent collection of data, a third type of conversation will emerge as we engage in discussion about what her data means and how this leads her to reach a range of conclusions.

Application to the pedagogy agenda

It may be argued that the academic practice of research supervision is a very limited one for most academics, thus begging the question as to whether this Productive Pedagogy framework, which in my opinion has clear and relevant application to research supervision, would have application to the broader academic pedagogic agenda. My own research, limited by the scope of my employment at my own university, itself limited to research training and research supervision training, has not explored that factor. However, given that prior to my current appointment I held lecturing positions throughout my academic career, my belief is that the model that I used to assist early childhood, primary, middle and high school teachers, also has application in a higher education setting. The most recent of these lecturing appointments, a fractional appointment as a lecturer in the QUT Graduate School of Management, ran concurrently with my work as a consultant in the Queensland Education system. In this lecturing position I implemented just the single pedagogy of making explicit the performance criteria for the particular subject I was teaching. The difference that this appeared to

make for the students I was teaching was that they seemed to engage more with the lecture material and they achieved higher at the various assessment tasks than the students in the cohort of the previous semester, before I had made this explicit addition to my lecturing.

A model of professional development

Although the extent of my work at the university has prevented introducing this Productive Pedagogy (PP) framework to other university lecturers, with the exception of introducing it as a resource for research supervision, my experience of introducing the pedagogic framework to classroom teachers can be applied. In this experience I used four reflective sets, each of which addressed one aspect of the PP framework.

> **A.** Recognition of Difference
>
> **B.** Connectedness
>
> **C.** Intellectual Quality
>
> **D.** Supportive Classroom Environment.

In each set, teachers met in groups of six for 90-minute sessions separated by a two-week break. In the first of these sessions, for any given aspect of the PP framework, the participants:

- Were introduced to the specific aspect of the PP framework (Recognition of Difference, Connectedness, Intellectual Quality or Supportive Classroom Environment).

- Explored the set of pedagogies in that aspect of the framework, examining their own understanding of the terms used to describe the PP and how these compared with the definitions of the PP given in the framework.

- Observed a video of an actor being a teacher in a classroom situation and critiqued the movie star/classroom teacher to develop the skills of using the framework as a critical framework. They identified what the actor/teacher was doing that could be labelled Productive Pedagogies and suggested ways in which, if they were taking the same class, they could improve on the teaching through the introduction of specific teaching strategies. This helped to develop a critical framework for looking at their own teaching or another teacher's teaching, without having to spend time developing protocols for talking about a real teacher's work.

Over the two weeks between sessions, the participants observed their own classroom teaching from the perspective of the aspect of the PP framework they had studied. They noted teaching strategies that were, in their opinion, in line with the specific PP that had been studied, as well as problems they had encountered in endeavouring to implement this collection of Productive Pedagogies into their teaching.

In the second session of a reflective set the participants:

- Discussed their experiences of implementing PP into their teaching.

- Generated lists of teaching strategies that they have found helpful in implementing the PPs.

- Used the set of PPs that they had studied over the past two weeks to critique my draft programme for the subsequent set of Productive Pedagogies. This established a hierarchy of critical reflection. They had firstly critiqued an actor, then they had critiqued my work (the work of another teacher) and finally (I was hopeful) they would be willing to critique their own teaching.

It is important to note that this framework was not introduced as a total description of pedagogy, and several teachers in the process of critiquing my work, critiqued the framework and suggested that there were other pedagogies, such as time management and safety focus, that they felt were also productive. This recognition of additional pedagogies I saw as an important element in the growth of their ability to reflect on their classroom practice from the perspective of a pedagogic framework.

An interesting outcome, though not directly linked to the productive pedagogies, was that having chosen mainstream videos, which had not been prepared with productive pedagogies in mind, each of them provided suitable video clips of classroom teaching with a range of examples of productive pedagogies. This is perhaps more due to the fact that the scenes being shown were intended to

demonstrate good teaching, and thus automatically demonstrated many of the productive pedagogies.

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34 John Mair, Andrew Noakes and Andrée Woodcock; Two Cultures Two Countries... one learning object joins them

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Format: oral

Programme Slot: Wednesday 15 September 2010, 11:30-13:00, Room 1.2

Short biography of the authors: The authors are members of Coventry School of Art and Design: John Mair is a Senior Lecturer in Journalism, Andrew Noakes, Senior Lecturer in Automotive Journalism and Andrée Woodcock is Professor of Educational Ergonomics and Design.

Keywords & Précis: automotive journalism; graphic design; China; pedagogy

The paper will explore the collaborative work undertaken in a two-week visit in April 2010 to Zheijang University of Mass Communications (ZUMC), China. We took 24 students from Coventry University who are studying graphic design and automotive journalism. This case study considers the nature of collaborative working and learning of student groups which mix disciplines and nationalities in the production of blogs, newsletters, video and posters/books which look at the automotive industry and relationships with transport.

Abstract:

This paper presents a case study of the exchange visit to Zheijang University of Mass Communications, Hangzhou, China, over ten teaching days in April 2010. 24 undergraduate and postgraduate students from Coventry University from the departments of graphic design and journalism in the School of Art and Design took part in the exchange, accompanied by five members of staff. The students formed a class with 25 Chinese students drawn from similar disciplines, accompanied by their translators.

The aims of the visit were: to increase cultural awareness and understanding; provide students with first-hand experience of working in a different culture, with different disciplines, and in different ways; and to understand different teaching and learning styles.

These aims were achieved through the careful planning of a number of activities in which students were required to work in small teams consisting of both English and Chinese journalists and graphic designers. All teams took part in all tasks, which included the creation of a daily bi-lingual newsletter The Buzz, an online newsletter/blog (cutoday.wordpress.com), concepts for promotional material to support the internationalization programme, a two-page magazine spread based on experiences in China, and videos. All students contributed to each of these outputs. The final outcomes have formed the basis of three exhibitions – in ZUMC itself, in Coventry's Lanchester Gallery and at the Alan Berry Atrium Gallery at Coventry University.

Although all students participated in all projects, this paper will concentrate on the experiences and activities of the journalism students in leading on the creation of the newsletters, pieces for the UK press, and the online newsletter. In our previous paper, presented at iPED 2009, the authors illustrated through the use of the Hexagon Spindle model of educational ergonomics (Woodcock, Woolner and Benedyk 2009) showing how learning can be situated across both informal and formal learning environments.

In this paper, through worked examples from the journalism outputs, we show how new knowledge can be expressed through learning outcomes which develop through a carefully organized teaching plan. By setting clear goals and tight deadlines students were able to achieve both a high quality and quantity of work, in an educational environment whose infrastructure was not always supportive of European studio design practice (for example, in terms of work routines, availability of materials, software and print facilities).

Students were also guided in planning their tasks and the roles that they would undertake, and facilitated in reflecting on their learning activities and experiences through simple paper-based record systems (Webb and Perry, forthcoming). This material provided valuable insights into how the group was working and managed, and where tensions arose (e.g. through misunderstandings and communication difficulties). It is noteworthy that these occurred between disciplines, rather than between cultures.

The exchange extended not just to the classroom but to extra curricular activities where students mixed in karaoke sessions, meals out, sightseeing including a long weekend in Shanghai (including for some a once in a lifetime trip to the Shanghai Grand Prix) and visits to automotive dealers. Such experiences gave rise to lasting friendships between the students, enriched cultural understanding and provided content for most of the journalism outputs.

In conclusion, although this has been our sixth exchange visit to ZUMC, it has been the most ambitious. It has once again demonstrated that the European student-based practice and methods of teaching can be transferred to a more traditional Chinese university. Students were found to share a common design and journalism skill set, and when working in groups can adjust to, compensate for, and exploit cultural similarities and differences. The proof of the experimental pudding was on the walls for all to see.

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35 Val Cox; Do Students See the Advantages of Online Marking and Feedback?

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Format: oral

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Short biography of the author: Valerie is Head of Department of the Biomolecular and Sport Sciences Subject group at Coventry University.

Keywords & Précis: Grademark; feedback; student perceptions

Electronic systems for giving feedback may provide advantages for staff in saving time (Barker et al. 2008). They may also bring benefits to students in decreased administrative tasks (Dalgarno et al. 2007, Barker et al. 2008), improved legibility of comments (Bridge and Appleyard 2005; Barker et al. 2008, Dalgarno et al. 2007), and increased quality of feedback (Yohan and Zimmerman 2004, Jones and Behrens 2003). However, it is not clear from the literature if students agree that electronic systems bring all these benefits.

In this study, Grademark® was used to electronically mark case studies for 75 students from a final year Exercise Physiology module. Overall, few students saw disadvantages in the system and 91% of students wanted to see it used more widely. They thought improved legibility and the fact that comments could not be lost were the most important benefits. Only 50% of students thought an increase in extent of feedback comments was an important advantage.

Full Paper:

Do Students See the Advantages of Online Marking and Feedback?

Introduction

A number of different systems are available to allow academic staff to provide comments and marks for student work electronically, to replace more traditional handwritten comments on printed scripts. These include using the editing features in Microsoft Word® (Dalgarno et al. 2007, Yohon and Zimmerman 2004), Penmarked (Plimmer and Mason 2006) and Grademark.

Grademark® is a system built into Turnitin® anti-plagiarism software (Turnitin 2010) that allows online marking with the following functions:

- Comments on scripts: The tutor can annotate the work with comments (similar to the use of comments in reviewing Word documents). Comments can be saved on a clipboard and then pasted – this allows long comments to be put into multiple scripts easily;

- Rubric scorecard: The tutor can use a "rubric" scorecard. This allows a range of possible marks for each section of the work to be defined. The tutor clicks on the relevant box and the system highlights the box and adds up the marks automatically;

- General comments: There is also the option of giving "general comments" on the work overall.

Students can view the feedback online or print it out.

Much of the published material available on the use of electronic systems focuses on advantages to staff and the institution. The Grademark website claims that it is "time saving" compared to paper marking, although they give no data to back this up (Turnitin 2010). Some studies have cited reduced staff time as a benefit (Barker et al. 2008), but others stress that, particularly during adoption of a process, significant staff time may be involved. (Barker et al. 2008, Bridge and Appleyard 2005). Decreased administration load in terms of electronic hand-in and return, as opposed to paper systems, is also stressed as an advantage by some authors (Dalgarno et al. 2007).

It may be that institutions wish to implement or extend electronic marking systems to reap such savings in academic and administrative staff time. However, in the UK, students' satisfaction is becoming an increasingly important metric for university league tables. It is therefore important that we consider student perceptions of new technology and their preferences. With suggestions in the media that children typically spend 6 hours a day online (BBC 2009) it is often assumed that providing teaching and learning online will result in better engagement.

The decreased administrative steps are claimed to be an advantage for students as well as staff. A few studies have specifically shown that distance-learning students particularly like paperless systems, which is perhaps to be expected as it is easier than sending and receiving work in the post. For example, in a study by Dalgarno et al. (2007) 90% of overseas distance-learning students preferred a paperless system. A number of studies have also shown preferences for various paperless systems among home students too (Dalgarno et al. 2007, Barker et al. 2008). Where a completely paperless system is used, with no hard copy submitted, there may also be a cost advantage to the students as they do not have to print their work (Dalgarno et al. 2007). Some papers also mention the fact that students cannot lose the comments as an advantage (Barker et al. 2008) but others point out the problems of providing long-term electronic storage of the material for students, in terms of both storage capacity and data protection (Jones and Behrens 2003). If using paperless systems genuinely delivers feedback more quickly to students as is sometimes claimed (Turnitin 2010, Palmer 2005, Yohon and Zimmerman 2004), then this may be an advantage to them as well.

The quality of feedback is also often claimed to be better in electronic systems. Use of cut-and-paste routines and the increased space available for comments both allow more extensive and consistent feedback (Dalgarno et al. 2007). The ability to delete incorrect or inappropriate comments during the marking and moderation process has also been suggested as an advantage (Price and Petre 1997). There are claims that electronic systems allow "enhanced critique" of the work (Yohan and Zimmerman 2004: 221) and an increased "wealth of feedback" (Jones and Behrens 2003: ??).

A key issue to consider is whether students do actually like and engage well with electronic feedback. Advantages to students mentioned in the literature include the fact that students appreciate better legibility of comments (Bridge and Appleyard 2005, Barker et al. 2008); in one study 85% of campus-based and 90% of distance-learning students did prefer typed comments (Dalgarno et al. 2007). Legibility has been perceived to be worse in handwritten feedback both because of handwriting styles and because of the limited space available to write comments (Price and Petre 1997). None of the studies appear to have asked the students if the quality of the feedback via electronic systems is better, or if they are more likely to read this feedback.

There are, of course, potential disadvantages to electronic marking systems and a number of studies have identified possible problems. For example, failure of IT systems can be a major issue (Bridge and Appleyard 2005, Barker et al. 2008). Even when IT systems are functioning normally there can be specific technical issues associated with online submission and marking. Most systems, including Grademark, have a limit on file size, which has caused problems for students when uploading material with figures and pictures (Bridge and Appleyard 2005).

In summary, it is important that we understand student attitudes to electronic feedback before committing to an increase in the use of this technology. There is some evidence that students may prefer electronic feedback but it is not clear if they see the advantages suggested in the literature. The purpose of this study was to ascertain whether a number of the proposed advantages were actually seen as advantages by the students.

Methodology

In the 2009–10 academic year electronic marking using Grademark was used in an Exercise Physiology module, taken by 79 students from three related courses. The assignment was a 2,000-word case study and data analysis exercise; this was submitted by 75 students. None of the students had previous experience of using Grademark, but all had used Turnitin for plagiarism detection previously, were fully familiar with the electronic submission process, and already routinely submitted all assignments through this medium. In this way it was hoped that there would not be any effect on the students' attitudes from unfamiliarity with the submission process. All students also handed in a hard copy of their work as usual.

The University experienced a number of campus-wide technical problems with Blackboard and Turnitin during the period of the study. This meant that the work was returned two weeks later than

originally planned, as the tutor could not gain access to mark the scripts. Some students also experienced problems uploading work due to problems with system registration. For a minority of students, incorrect marks were released by the system. These incidents caused considerable problems for some students and for the assessor.

Turnitin has limits on the size of document that can be uploaded. Because the work included some graphs and data analysis, a number of the students found that their files were too big and they had to upload a text-only version. For these the tutor had to locate and refer to the hard copy when marking, which took additional time.

Once all the work was marked online and released, students were given a hard copy of a sheet that showed them the most common comments given on the work and explained how to access their individual marks and comments. The lecturer also showed them a Powerpoint slide showing them how to access their grades.

Two weeks after the release of the coursework students were issued with a bespoke questionnaire. This explained that the literature suggested a number of possible advantages for electronic marking and asked them to grade each of the statements below as important advantage, slight advantage, slight disadvantage or important disadvantage.

- Comments easier to read than tutor handwriting

- More extensive comments (as tutor can cut and paste)

- More consistent comments (as tutor doesn't get "bored" writing same comment)

- You don't have to physically go to the AHO [Assignment Handling Office] to get your work back

- Students can't lose the comments as they are always available online

- Students are more likely to look in detail at electronic comments

- Tutor can easily produce a summary of the "Top 10 Comments" etc. to give feedback to the whole class

Students were then asked to indicate if they agreed strongly, agreed, disagreed or disagreed strongly with the following 2 statements:

- I have looked at the comments on my case study in detail

- I would like to see electronic marking used more widely in the future

Students were invited to make any further comments they wished at the end of the questionnaire.

Note that, because of the considerable technical problems encountered with the online marking (see above), students were specifically asked to answer these questions as if there had not been any technical problems.

Questionnaires were anonymous and were issued in a taught session on the module two weeks after return of work. Although all 75 students who submitted the work attended the session only 39 (52%) chose to complete the questionnaires.

Findings

The summary questions at the end of the questionnaire asked students if they had looked in detail at their feedback online: 97% had done so (Figure 1). However, when we asked if students were more likely to look at electronic comments only 84% agreed this was the case (Figure 2) and only 45% thought this was an important advantage (Figure 2).

For most of the statements on the questionnaire, over 90% of students agreed that these were advantages. The proportion of students who thought these were important advantages was 69% for legibility and 65% for having the work always online in case they lost their scripts (Figure 2). Of students who thought the advantage was important, the next largest percentages were for having summary comments for the whole class (53%) and for having more extensive comments (51%) (Figure 2).
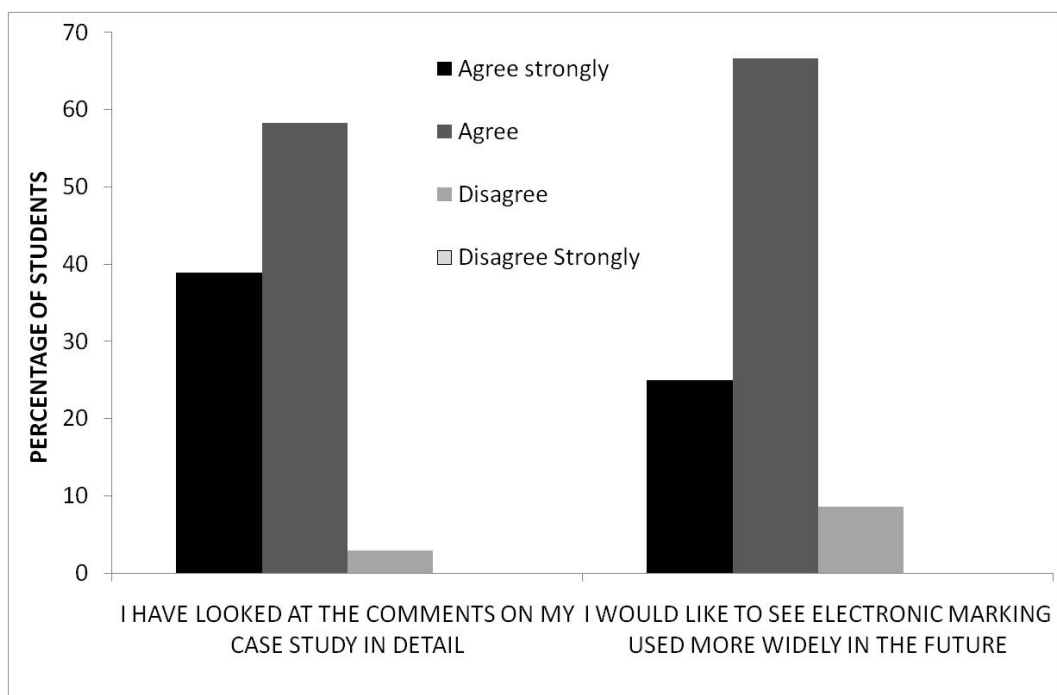
Figure 1 – Student agreement with summary statements

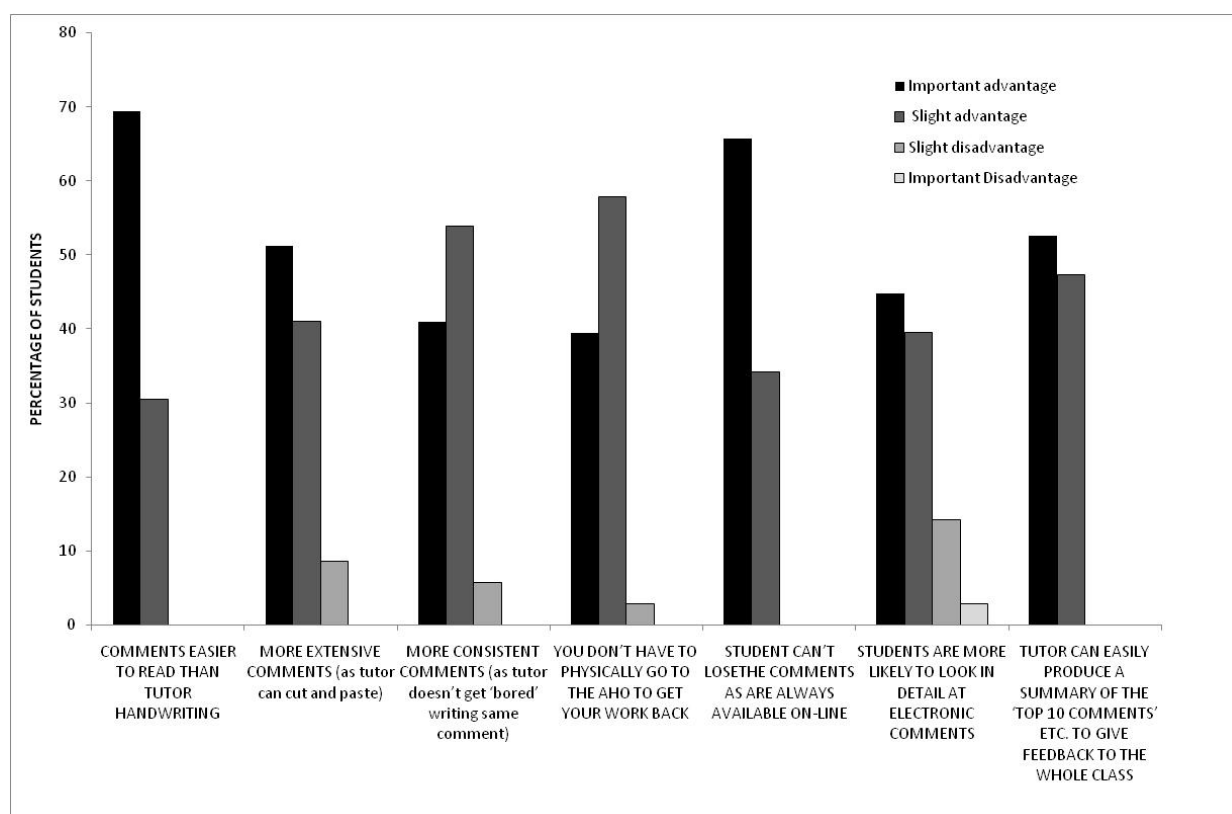Note that none of the students Disagreed Strongly with either statement

Figure 2 – Student opinions of the advantages/ disadvantages of electronic marking

Very few students reported disadvantages of online marking, although about 15% thought people might be less likely to read comments online in detail (Figure 2).

Only 5 qualitative comments were made by students, including:

- prefer hardcopy to look at
- more info on where to find mark is needed
- more detail needed on rubric so could see how mark decided
- I do like to receive a marked hand written copy, but writing easier to read online. I may be inclined to scroll through electronic doc rather than take time to read

91% of students agreed that they would like to see more use of electronic marking, although only about 25% were very strongly in favour. This certainly suggests most students did like the system.

Discussion

In common with previous studies (Bridge and Appleyard 2005, Barker et al. 2008) we found that technical problems can occur and cause significant disruption. In this study, students were asked not to take this into account in their responses, but if the system is to be used widely these problems will have to be overcome. By using an existing electronic hand-in system we removed the problem encountered in some previous studies where students did not like the system because of unfamiliarity with the process (Palmer 2005, Yohon and Zimmerman 2004)

One driver for switching to electronic marking may be a general perception that students are now more used to engaging with various electronic media and will therefore be more likely to read online comments in depth than those written on a hard copy script The data above (Figs 1 and 2) does seem to suggest that this is the case, although only 45% of students agreed strongly with this statement. We need to exercise some caution in interpreting these results since these were final-year students and the piece of coursework was worth 50% of a module. It may be that at earlier stages of the course and/or for items of coursework that carried fewer marks students may not engage well in looking at feedback. Further work will be needed to conclude whether electronic systems do increase students' reading of, and perhaps more importantly acting on, feedback comments.

Our data shows that what student valued most was being able to read comments more easily than handwriting (Figure 2) which is in line with other work (Bridge and Appleyard 2005, Barker et al. 2008, Dalgarno et al. 2007). This suggests that legibility may be an important issue for students and that staff may need to be made more aware of this.

The increase in extent of comments possible with electronic systems is often cited as a potential advantage (Dalgarno et al. 2007, Price and Petre 1997, Yohan and Zimmerman 2004, Jones and Behrens 2004) and it has been found previously that students thought this was important (Jones and Behrens 2004). However, this was rated as an important advantage by only 50% of our students (Figure 2). This suggests that there is still some way to go in educating students on the importance of feedback.

Conclusion

In conclusion, there is evidence that most students did prefer the electronic marking system and therefore that wider introduction of this would probably be popular with students. However, students do not always see the same key benefits of the system, in terms of feedback quality, as the staff.

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36 Charlotte Mbali; The Perils of Impact Studies for Computer-based Innovations: A case-study of supervising the M.Ed theses of two Engineering lecturers

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Format: oral

Programme Slot: Wednesday 15 September 2010, 14:00-15:00, Room 1.1

Short biography of the author: Charlotte Mbali has worked many years in higher education both in the UK and in South Africa. For the past 17 years, she has been working in a Centre for Higher Education on pedagogical courses for lecturers and supervising Master's and PhD theses by those lecturers, including many in technical disciplines from the local University of Technology.

Keywords & Précis: computer-based innovations; positivist research; Engineering education

Engineering lecturers who choose to do educational research are zone-crossing, from a zone where positivist investigation, in quest of technical improvement, predominates, to the messy zone of human learning where so many inexcludible variables impact on the process that it is hard to design clear-cut research projects.

This paper is a study of the research trajectories of two engineering lecturers from the same South African technikon who undertook Master's-level study in higher education in the last eight years. Both decided to introduce a learning intervention on computers into their teaching and investigate the impact on students.

Full Paper:

The Perils of Impact Studies for Computer-based Innovations: A case-study of supervising the M.Ed theses of two Engineering lecturers

Engineering lecturers who choose to do educational research are zone-crossing, from a zone where positivist investigation, in quest of technical improvement, predominates, to the messy zone of human learning where so many inexcludible variables impact on the process that it is hard to design clear-cut research projects.

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The Impact Research

Lecturer A's study was on mastery learning of calculation skills for quantity surveying.

Lecturer B used group work on spreadsheet exercises based on thermodynamics.

Both were trying to improve the calculation skills of their students in the professional courses, fearing that students are getting by with calculation skills below the standards needed for engineering practice. Lecturer B was also trying to get the students to gain a deeper level of understanding of the subject terminology.

In the initial seminars about research methodology in education, each of these lecturers framed a positivist project:

Lecturer A "Would the mastery system (a computer-based system he had designed) improve key competences in calculation?"

Lecturer B "Would introducing spreadsheet exercises on computers improve the final marks of the students?"

Methodology

These lecturers were the only ones in the seminar group aiming straight for a positivist project. Most lecturers in these education research seminars fight shy of the "hard" methods of positivism because

they prefer the "softer" interpretivist methods of interviews or focus groups being more confident in analyzing language or text-based data and not wanting to grapple with statistics. Conversely, these two engineering lecturers are more confident with numbers and struggle with too much verbiage. To typify their styles of thinking, one could say that these two men were confidently convergent – they had a clear focus for their project and tended to shut out diversions, in contrast to some of their peers (mostly female!) who could see so many different possibilities and interesting complications in their projects that they, as divergent thinkers, were in danger of spreading the inquiry too widely.

However, as these two convergent thinkers progressed further into the Master's-level taught courses on education, their ideas filled out. Lecturer A realized, from doing a course on assessment, how the notion of idiographic assessment connects with mastery learning as each student measures his own progress. Lecturer B became interested in group learning because he realized that if students discussed the application of formulae in spreadsheets this might better internalize terminology.

Both studies required an experimental group and a control group. But in an education setting, the ethical procedure for allocating the "treatment" (i.e. the intervention) to groups is questionable. Is it right to expose just half of a class to its likely benefits or to its risks? A common solution to this problem for educational researchers is to do the research longitudinally, to compare the year which did the intervention (i.e. the experimental group) with previous years which did not (the control groups). Thus Lecturer A compared the cohort class marks of those who did the mastery e-project with the previous year's cohort which did not. Lecturer B compared the students' marks in the spreadsheet semester with the marks of the 5 previous cohorts in the same part of the curriculum.

There are some assumptions underlying such adoption of a longitudinal structure:

1) The groups were sufficiently similar in size and composition;

2) The assessment methods were the same or sufficiently equivalent each year;

3) The marking and scoring were the same;

4) The teaching of the rest of the curriculum was similar (if this contributed to the marks that were being used as measures);

5) There were no other overlooked differences between the years such as different circumstances in the institutional environment.

To satisfy criterion 1 both claimed that the entrance requirements to their courses had remained the same, resulting in similar groups. But it is still possible for some overlooked variable, such as different gender ratios, to make a difference. On criteria 2-4 above, they claimed that assessment methods and marking were the same across the relevant years, and the staff team was stable so that the different cohorts would have been exposed to the same teaching, with the exception of the experiment that was the focus of research. Criterion 5 applies sharply to the particular institution in question, which has had a turbulent history of student riots in recent years, which frequently disrupt the beginning of the academic year.

Lecturers doing such impact research in education cannot set up an experiment in the way a laboratory scientist can, with quantities that satisfy statistical requirements. Lecturers doing research into their own classes are stuck with the class sizes they have. Thus Lecturer A, on criterion 1 above, was confronted with the problem of size. When he conceived his project, in 2002, he did not anticipate that his classes would get smaller. Once underway, he found that the control group in 2003 was 16 students and the experimental group in 2004 was only 8. But by the time he was faced with this, he was far into the project. He had first piloted his pre- and post-tests in 2002, had worked with the control group in 2003, done literature reading 2002–3, got the project through the arduous ethics permission processes. What was to be done? I advised him to add other methods to his research, move away from the exclusively positivist inquiry, and plan to use interviews to discover other factors that may be impacting on the students' learning. In the earlier seminars, because of his dominant convergent thinking, he was not to be convinced of the merits of testing methods of research other than the control-experimental group impact study. But faced with the reality of a dwindling experimental group, he quickly realized that this might save his research. He then became fearful that he would not be able to persuade enough students to be interviewed. "You must bribe them individually to come to an interview by offering them a pizza supper," I suggested. Too much was at stake for him to let this group slip away from the experiment this year. The results are reported later on in this paper.

Meanwhile, three years later, in supervising Lecturer B, I was by now prepared for the perils of exclusive reliance on one experiment. He was advised to read the thesis of Lecturer A. We then discussed thoroughly the need to plan some redundancy into his experiment. His first plan involved simply the experiment (spreadsheets exercises) as measured by the class assessment (which consisted of in-term tests and then a final examination). I pointed out that, even with larger class numbers, he might still face the problems similar to Lecturer A's if one of the class tests was cancelled. So, in hatching a scheme for redundancy in assessment, we concluded that, with his interest in terminology-learning, he should devise some extra quizzes based on terminology. He could do these in lecture time, and then even if class tests were disrupted, he would have quiz results to compare with the spreadsheet experiment. Following the example of Lecturer A, he also decided he would put some interviews into his research design. As he had an interest both in learning styles (having attended a workshop by Felder) and in study habits (because of another course he attended at our Centre), he added a survey to his research design, to discover more about factors that might affect his student's learning.

Results

The process of both researches was stunningly different from what I think these lecturers had expected. They had entered into the research process expecting to gain clear results from impact research: using Classical Test Theory (CTT), it was only a matter of a well-designed procedure, defining the control and experimental groups, applying the assessment and the statistics – and out would roll some valid results!

In contrast to this, Lecturer A, when faced with numbers too small to apply CTT techniques, had to look at the performance of each group (the control and experimental) in the various test questions. The 2003 control group (n=16) had done the pre-test, and then been taught for two weeks by classroom-based discussion, and then did the post-test. The 2004 group (n=8) did the same pre-test, then embarked on the mastery e-learning of the same part of the curriculum for 6 months, and then did the post-test. The results in the 2003 control group showed that eight students improved (by the post-tests), four did not and four did worse. In the experimental group, the class average improved by 10%. The test questions, categorized according to Bloom's taxonomy (Bloom 1956), showed that the experimental group made greater gains in the lower levels, *remember* and *understand*, neither group made significant gain in the *apply* category, the control group made more gain in *analyse*, while the experimental group were better at *create*. Utilizing Regression Analysis, the researcher calculated that a student scoring 60% in the 2003 cohort pre-test would have gained (via the discussion intervention) some 4 points by the post-tests, whereas the student at 60% in the experimental 2004 group would have gained 69% by the post-test – a gain of 4% over the 2003 control group. But discussion of these results is peppered with warnings that the low sample sizes mean that these statistical findings are not conclusive. So the researcher was forced to turn to qualitative methods.

His experiment was in danger of failing completely, as he reported:

> … the intervention was voluntary and provided preparation for the post-test. The students were shown the open computer lab and were introduced to the system. The author expected the group to enthusiastically take part in the mastery programme without too much prompting, to gain access from home or from the open labs at D.I.T. and to proceed with the mastery programme in their own time. WebCT reported that there was no usage at all and that the group had simply ignored the system. The author encouraged the group by once more explaining the benefits of the mastery programme, but months slipped by with the minimum of participation from the students.

> Due to lack of intrinsic motivation and other inhibiting factors, lectures were rescheduled so that the mastery programme could be done once a week in class time. The new lecture and mastery schedule was negotiated with the students. When the given day arrived, most of them simply did not turn up. They appeared to consider that they were not missing any important lecture and took the morning off.

By this time both the Master's student (their lecturer) and his supervisor (myself) were becoming desperate. We've got to find out *why* they are baulking at the experiment, we decided – we've got to get hold of them and interview them. What the interviews revealed were the other factors that impacted on his students besides the experiment. To summarize his interview findings briefly:

1.	Students did not access the e-programme outside the lecture time because of time pressure. Three of them worked part-time in quantity surveying and one female student had heavy family duties.

2.	With regard to internet access, their only option was the facility at D.I.T., but these facilities were not always free when the students were free. One female student complained that it was dangerous for her to stay after hours because of crime in the vicinity of the campus (a justifiable fear). Furthermore, security procedures for access to the computer labs were so strict that sometimes access was denied just because the security officer at the door had not been properly briefed on who should have access at that time.

3.	A whole list of problems emerged with computer literacy, from keyboard and mouse usage, to browser literacy, to know-how with WebCT (the software used for the mastery programme).

4.	There were problems with the lab itself, including computer and network speed, defective equipment, noise and crowds of other students, and poor management.

5.	Students complained that they preferred to work with paper-based questions where they could see the questions, variables and the diagrams at same time. They could not do this with the cluttered screens of WebCT and did not realize (or were not taught?) how to remove the unnecessary toolbars. One student asked for a paper print-out of the questions so that she could work at home, thereby obviating the whole purpose of the experiment which was an e-based system. An advantage of the e-based system is that it can measure speed of calculation and feed back to students so that they can improve on their timing (an important skill for practising quantity surveyors), but this "advantage" was negated by the slow speed of the computers and poor management of the labs.

Lecturer A was thus surprised to discover that his initial interpretation of the students' non-participation – that they are unmotivated – was also too simplistic. As educators of educators, we teach that motivation is not just a given feature of students (something that cannot be changed) but something that can be changed and it is part of an educator's job to work on student motivation. So it is also very much part of an educational researcher's task to try to discover reasons for students appearing to be motivated or unmotivated. When Lecturer A was nudged out of his convergent thinking by interviews, to his astonishment he discovered a host of very real social and economic reasons why students were unable to participate as expected in the experiment he had spent three years constructing.

Lecturer B was also faced with a lot of practical problems in implementing his spreadsheets programme, listing them under the headings of accessibility of the computer labs, internet access, viruses, theft (of memory sticks), unplanned interruptions, changes to the institutional timetables, and institutional server problems. Although this lecturer had previously facilitated the departmental computer course in the smaller computer lab including spreadsheet skills, he still did not anticipate the range and severity of the problems the students experienced in the larger computer labs. Nor did he anticipate the difficulty students would have in grasping how to do the spreadsheets exercise. Some had not even obtained/retained the spreadsheet skills from the departmental course. So a constructivist group-work spreadsheet exercise was too demanding for students who had been used to the traditional lecture-style presentation of material. This researcher was using multiple methods of collecting data – the spreadsheets exercises, the concept test, the study habits survey, and the interview. Because he is more comfortable with numbers than with words, what he put most effort into at the data analysis stage was running the results through statistical analysis. He had no problem with sample size (n>80), but was disappointed to find no significant results for the impact study of the spreadsheets intervention (compared to 5 years of previous cohorts as control groups), no significant variables in the survey with its bio-data and study habits, except one unsurprising finding that those who take more time on task (study time) get better results. The concept test was eagerly received by the students who treated it as a useful revision exercise. It also yielded some information about which textbooks students used or did not use, and use of library notes. The interviews yielded some frank comments by interviewees as to the difficulty of this intervention:

"I'm just wondering if maybe the whole computer thing in the beginning of the semester was such a good idea…"

"initially… most of the class was quite baffled what to do… maybe more direction could be given…"

They also commented on the lecturer's style which is intended to provoke the students into thinking rather than just giving them answers pat, and for this reason he tends to answer a student question by throwing a question back to the students. But one interviewee admitted "it's a bit too difficult for more of the students" while another Black student raised the matter of race, commenting that it is easier to consult a lecturer who is the same colour as us (Lecturer B is white).

So what Lecturer B discovered was:

- Multiple practical problems get in the way of a clear-cut impact study in e-learning

- More attention needs to be given to the pedagogical presentation of the experiment, in this case more teaching and demonstration of the procedures before letting the students loose on the problem in groups

- The students are so habituated to passive learning that they find teaching methods based on more constructivist learning (either the spreadsheets intervention, or the discussion approach to questions in lectures) challenging. They also find it problematic to approach a white lecturer for help.

Conclusion

The research trajectories of these two number-loving convergent-thinking engineering lecturers reveal the perils of doing impact research using Classical Test theory. Education is not laboratory science: it is too messy and there is too much in the learning environment that has to be taken into account, even if the experiment is in a computer "laboratory". One implication of this is that it is a mistake to push such research students too soon into research projects (in the interests of swift progress to graduation, which has financial benefits to the institution). Such researchers as these need to be helped to widen their thinking about students and the learning environment, through the taught courses, so that they can plan their research to take these into account. Maybe the instincts of the majority of education research Master's students are correct – the most valuable information comes from actually asking the students to tell us about their learning experience.

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37 Lisa Payne; Computing Students: Identities, motivation and expectations

Author Institution: Coventry University, United Kingdom

Corresponding author: l.payne@coventry.ac.uk

Format: PhD Work in Progress report

Programme Slot: Thursday 16 September 2010, 11:00-12:30, Room 1.4

Short biography of the author: Lisa Payne has taught computing for many years. For much of that time she has undertaken a range of teaching and academic management roles and been involved with initiatives to improve student progression rates. Recent research work has included consideration of computing students' attitudes, the use of Web 2.0 in teaching, and the introduction of sustainability to computing students.

Keywords & Précis: identity; motivation; expectation; engagement; Computing

At many UK HE institutions, computing students do not perform well. One of the problems is that the course does not meet their expectation. The planned research will look at student views, at the "image" of computing and its formation, and the identities which students aspire to acquire.

Abstract:

This presentation describes a PhD research programme, which will begin shortly, investigating the motivation and expectations of HE computing students in the UK.

For many years it has been recognized that students in computer science at Coventry University do not perform as well as might be wished. This pattern of poor performance of some computing students is not unique to Coventry. Work by Roddan (2002), Black (2003), Boyle et al. (2002) and Connolly et al. (2006) describes investigations at other UK HE institutions, while a national survey was conducted in 2003 (Livesey et al. 2003). Numerous initiatives have been launched to improve the situation, and there are signs of improvement, but the problem is persistent.

Harvey and Drew (2006) identified a number of factors that are key to ensuring progression, which includes motivation, expectation and satisfaction. Yorke and Longden (2004) note that students who drift into HE without a clear rationale are less likely to progress: engagement and motivation are very closely related attributes. My own investigations (Payne 2008) suggest that almost all computing students at Coventry are extrinsically motivated but only the more successful students are also intrinsically motivated by their subject. It is well recognized that a learner is much more likely to be successful if they have a real personal interest in the subject (Connelly et al. 2006).

One of the issues which failing or withdrawing students routinely mention is that the course does not meet their expectation. It seems that many students are expecting their degree to be similar to their ICT A-level: they seem to expect a Computing degree to focus on how to use existing software applications. They are therefore taken aback when they are faced with the task of, say, designing a system or writing a software application. Such technical areas require a level of precision, analysis and logical thinking which some students neither possess nor expect to require. This mismatch has been recognized across the UK, for example in the recent formation of a loose campaigning collaboration, "Computing at School", which includes school teachers, university lecturers and the British Computer Society.

The planned research will look at student views, from the time they apply for a computing degree through to graduation. It will look at the "image" of computing and how this is formed, a factor raised by McChesney and Alexander (2007), and the identities which students aspire to acquire.

A key aim of this work is to derive some form of applicant advice tool, so school pupils can decide if a computing course would suit them. This is, of course, an attempt to provide guidance about motivation. Many studies have attempted to pre-judge applicants' aptitude, particularly their aptitude for computer programming.

Observations suggest that disengaged students are the least willing or able to engage with research investigations. There appears to be a mismatch between their thinking and awareness and the techniques which research typically uses: interviews, questionnaires and focus groups. This study will attempt to elicit views from all students, including the disaffected, through the use of communication media which students routinely employ, such as Web 2.0 tools like Facebook and twitter.

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39 Laura Dison and Stella Granville; Using a Socio-cognitive Approach for Analysing the Development of Comparison Writing on an Academic Literacy Course

Author Institution: University of the Witwatersrand, South Africa

Corresponding author: laura.dison@telkomsa.net

Format: oral

Short biography of lead author: Laura Dison is a Teaching and Learning Advisor in the School of Education at Wits University. She recently completed her PhD on factors that promote or inhibit success of students in a first-year university course. She currently works with Education lecturers to design teacher education courses in a range of disciplines. Her research interests include identifying the academic potential of entry-level students for coping with the academic demands they will face in Higher Education, and creating frameworks for understanding the relationship between writing and higher order thinking.

Keywords & Précis: student learning and writing; meta-cognition; taxonomies; scaffolding; academic literacy

This paper explores the development of academic writing in relation to higher order thinking of twelve students enrolled in an academic literacy course at the University of the Witwatersrand, South Africa. The study applies a socio-cognitive approach for analysing students' capacity to develop comparison and discursive writing by analysing the levels at which different students write.

Abstract:

This paper explores the development of academic writing in relation to higher order thinking of twelve students enrolled in an academic literacy course at the University of the Witwatersrand. I became interested in students from educationally disadvantaged backgrounds who were perceived to be impacting negatively on student throughput and success rates by university administrators and planners. Having co-designed learning materials with subject specialists for use in academic support or academic literacy course tutorials, I spent time researching the "uptake" of these materials and methods, as well as their impact on student writing and learning. I wished to explore student progress on a course in which educational strategies and assessment practices were highly scaffolded and in which students' identities and voices were recognized, affirmed and had contributed to shaping the curriculum. I wished to develop an integrative model for understanding student learning, in particular, how students were engaging with academic literacy on the course. This approach would contribute to the need to document and track students on "special paths" more systematically.

In my view, the current university analysis of throughput rates does not take into account broader contextual and educational circumstances of students selected for university via alternative admissions tests. My study of student writing in the academic literacy course teases out both intrinsic and extrinsic factors that promote or inhibit learning. In this way, a differentiated, multi-dimensional picture of students emerges that allows course developers to adapt existing materials and methods for new academic literacy purposes such as "New literacies for teachers" which was implemented in 2010. This study applies a socio-cognitive approach for analysing students' capacity to develop comparison and discursive writing by analysing the levels at which different students write. A key question is how students engage with the pedagogy and assessment of the academic literacy course in order to advance their academic thinking and writing. In particular, the SOLO taxonomy (Biggs and Collis 1982) has been adapted as a tool for analysing student responses to the comparison tasks and for assessing student engagement with the course pedagogy and feedback practices. It uses a meta-cognitive hierarchical model (Perkins 1992, Brockbank and McGill 1998) for gauging how students reflect on their writing development in response to the meta-level questions integrated into the course material. For its theoretical framework, the study draws on socio-cultural understandings of student cognition and learning and local and international research in the field of higher education. The paper seeks to understand how students make writing progress in a course in which educational strategies and assessment practices are highly scaffolded.

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Note: Stella Granville, in an associated paper, discusses the pedagogy and support for literacy development on the academic literacy course.

40 Stella Granville and Laura Dison; Initiates into the Academy: Preparing first year students for academic literacy at a South African university

Author Institution: School of Education, University of the Witwatersrand, South Africa

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Format: oral

Short biography of lead author: Stella Granville teaches in the Department of Applied English Language Studies at the Wits School of Education in Johannesburg. Her work focuses on both initial and advanced academic literacies, as well as critical literacy and teacher education.

Keywords & Précis: literacy development; second language; disadvantaged backgrounds; first year

This paper describes how we support students' literacy development in an academic literacy course for first-year students. Most have English as a second language and come from educationally disadvantaged backgrounds. When entering the university, they require additional support in order to cope with the institutional demands of reading and writing.

Abstract:

This paper describes how we support students' literacy development in an academic literacy course for first-year students who are studying to be teachers at the University of the Witwatersrand in Johannesburg. Most of our students have English as a second language and come from educationally disadvantaged backgrounds. When entering the University, they require additional support in reading and writing if they are to cope with the demands of first-year courses in the Humanities.

The course was developed by the Department of Applied English Language Studies over a number of years. Initially, in the early 1990s, it was largely a grammar-based course. Later the influence of Applied Linguistics research could be seen in some of the materials. For example, these consisted of both exercises and readings on cohesion and coherence, writing and reading processes etc.

Subsequently, in response to developments in the New Literacy Studies (Barton 1994), the course took on a "literacies as social practice" approach. In progressing students from what Gee (1996) calls a "life world language" to an "academic social language", we took cognizance of students' existing literacies as a starting point. Working with Gee's distinction mentioned above, we designed three phases of writing experience for the first six months of the course. These included autobiographical writing, followed by a comparison essay and finally an argument essay which required a range of more rigorous "academic skills". For the first phase students wrote short essays entitled "My Pathway to University". This involved reading the autobiographical narratives of South African writers which were used as models. In the second phase students wrote a comparison essay in which they were required to compare experiences at school and university. The focus of this phase was on academic reading and writing and students were introduced to a research article on the experiences of first-year students at the University of Zimbabwe. The third and final phase involved students in understanding the nature of academic argument. Readings were provided on current and controversial issues topics such as polygamy, AIDS and street workers.

In each of the three phases, students worked with skills such as paragraphing, cohesion, categorizing, comparison, text structuring, referencing, synthesizing etc. All of these were recycled and revisited over the six months of the course.

Our intention was to work developmentally and to take the students through the three transitions described above: from autobiography to comparison to argument. We believe the course allowed for the incorporation of Lea and Street's (1998) three-level distinction between "skills, socialization and academic literacies" Thus, our purpose was to create a course that was "discipline specific" – an English language course for ESL students that would provide empowerment and support as well as some transfer to other Humanities disciplines and thus "make a difference".

Recently, in response to both structural and political changes at the University, and the fact that the Department of Applied English Language Studies began to work more directly in teacher education, the course has been redesigned and adapted for first-year student teachers at the Wits School of

Education. The current focus is on "New literacies for teachers" which embodies academic literacies as well as school and digital literacies.

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Note: Dr Laura Dison, in an associated paper, describes her research on the thinking and learning processes in the same course.

42 Bernadette McCabe; Tablet PCs as a Catalyst to Pedagogical Innovation: A case study in microbiology

Author Institution: University of Southern Queensland, Australia

Corresponding author: mccabe@usq.edu.au

Format: oral

Programme Slot: Thursday 16 September 2010, 11:00-12:30, Room 1.1

Short biography of the author: Dr Bernadette McCabe is a Senior Lecturer in the Department of Biological and Physical Sciences, Faculty of Sciences at the University of Southern Queensland, Australia. Her research interests include microbial biotechnology in renewable energy, and learning and teaching relating to nursing science and the biosciences.

Keywords & Précis: **technology adoption; dynamic concept maps/flowcharts; student-centred approaches; reflective practice**

This paper documents the role that Tablet PC technology has played in adopting novel teaching approaches in concept map and flow chart exercises, and reports on the progressive evolution of practice that has occurred with the integration of such technology within the discipline of microbiology.

Abstract:

Technology has the ability to act as a catalyst for redesigning traditional teaching practice. Tablet PC technology combined with screen casts of the annotated work is particularly useful in addressing student learning styles, especially when learners require both visual and auditory mechanisms in order to process information (Radosevich and Kahn 2006). Integrating this type of technology into the educator's pedagogy can enhance the learning environment positively and there have been a number of examples in various disciplines where a more dynamic, student-centred learning atmosphere has been promoted (Loch and Donovan 2006, Rogers and Cox 2008).

Over the last four years I have used Tablet PC technology predominantly in teaching chemistry and biochemistry. This has proven to be a very valuable tool in these disciplines, particularly where the teaching is a dynamic process (e.g. illustrating chemical equations and metabolic pathways). I also used the Tablet PC in teaching microbiology, albeit to a lesser extent and only to highlight main points.

Concepts maps and flow charts are a key feature in my teaching approach in microbiology, and, although I had used these two visual strategies for a number of years using the whiteboard, it was not until I had used Tablet PC technology in other disciplines that I started to reflect on how best I could use the technology in microbiology. According to Sandholtz, Ringstaff and Dwyer (1997) there is an evolution of thought and practice during the process of change that educators undergo with integration of technology. Tablet PC incorporates elements of traditional white-board teaching and PowerPoint presentation where tools both old (pen and paper) and new (computer software) are combined. Therefore, incorporating Tablet PC in the instruction of concept maps and flowcharts in microbiology was a natural progression and exemplified how technology can be an impetus for new teaching practices. The ability to annotate and produce screen casts enabled me to promote the use of flow charts and concept maps amongst students by providing the support in terms of visual display and consequently gave students more confidence in constructing them.

This paper documents how my pedagogical approaches in teaching an introductory microbiology class has evolved and how the use of Tablet PC has been the mechanism by which innovative practice has emerged over time. It outlines the progressive change in the use of concept maps from teacher-centred "chalk and talk" generated concept maps and flow charts to a more constructivist approach where students now generate their own maps through the aid of Tablet PC instruction. The combination of live audio and screen recordings using Camtasia recording software has produced a more dynamic approach to the construction of concepts maps and gives students another dimension to the interrelatedness of concepts which is not as easily afforded by traditional static concept maps on PowerPoint slides. This presentation will detail the role that Tablet PCs have played in designing innovative approaches, highlighting how pedagogical methods have evolved from previously taught concept map and flow chart exercises in an introductory microbiology class.

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43 Peter Aborisade; Voice to the Voiceless? Exploring African digital-immigrant students' reactions to Moodle resources

Author Institution: Federal University of Technology, Akure, Nigeria

Corresponding author: baborisade2002@yahoo.com

Format: oral

Programme Slot: Thursday 16 September 2010, 11:00-12:30, Room 1.8

Short biography of the author: Peter Aborisade lectures English for Academic Purposes (EAP) at the Federal University of Technology, Nigeria. He specializes in English and Communication. In 2007 he was awarded a Commonwealth Academic Fellowship and visited the University of Sussex, United Kingdom, as Senior Research Fellow where he took up the challenge of integrating technology into the language-teaching curriculum. His current area of research and practice is integration of learning technologies into the curriculum; he is heading a Blended Learning Group working on configuring and using the Moodle as a university-wide VLE platform. He has presented research findings recently in the area of Blended Learning in Durham University, United Kingdom (April 2007), E-Learning Africa, Dakar, Senegal (2009), Cardiff, United Kingdom (April 2009) and ICEL, University of Toronto, Canada (July 2009).

Keywords & Précis: blended learning; Moodle VLE; learning engagement; interaction; language proficiency; EAP (English for Academic Purposes)

This presentation reports on the impact of a move to online leaning using the Moodle VLE to support English for Academic Purposes modules in a scantily resourced, technology-poor context in a Nigerian Higher Education institution. It considers the evidence which suggests a rise in student motivation, engagement, interaction, critical thinking, autonomy and development of meta-cognitive skills of usually mute students, amidst confessions of stress and high expenditure.

Abstract:

In advanced educational systems learning has moved from the dominant behaviourist to social constructivist approach (Bransford, Brown and Cocking 2000). Transition from a teacher-fronted, rote learning, and large class (200+) English as a Second Language support programme to Blended (technology supported course) Learning in a scantily resourced, technology-poor context represents a quantum leap, in a Nigerian Higher Education institution. The distinction between digital natives and immigrants does not apply here, for most Nigerian university students are digital immigrants (Aborisade, 2009). The value of technology-supported education has been well accounted for in the literature. Barajas and Owen (2000) maintain that the development of Virtual Learning Environments (VLEs) enabling new opportunities to personalize learning is a milestone. That technology-supported courses "provide better support for the less able, engage students who do not respond well to 'traditional' classroom learning, provide opportunity for accelerated learning for gifted and talented students, and develop independent learning skills through a personalized learning" experience is well attested (Boulton 2008). The American National Research Council (1999: 218) contended that computer-based technologies can be "powerful pedagogical tools … [as] extensions of human capabilities and contexts for social interactions" supporting learning. Doering and Beach (2002) agree that technology helps students to construct knowledge.

In Nigeria, socio-economic and political factors make the adoption/implementation of any approach to teaching and learning personal to teachers. The large class situation led us at the Federal University of Technology, Akure, to seek alternative approaches to foster interaction and collaboration for language proficiency in the English for Academic Purposes modules for about 3000 freshmen over two semesters. The project was to support learning with technology by providing better learning environments, activities that enable involvement, interaction and collaboration among students while communicating in the L2 (second language). Because of lack of appropriate support and technical personnel, the team of five teachers embarked upon a trial and error configuration and setting up of the Wiki (and now Moodle).

This presentation reports on the stages of the project, the paradigm shift from "traditional" to constructivist pedagogy, the affordances of the VLE, including scaffolding and enabling social interaction (teaching materials, assignments, news, group work, discussions). Evidence from statistics extracted from, logs, posts and end-of-course evaluation is adduced to suggest a rise in motivation,

engagement, interaction, critical thinking, autonomy and development of meta-cognitive skills of usually mute students, amidst confessions of stress and high expenditure.

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46 Linda Schwartz-Trivett; Music Theory Pedagogy and the Critical Stance: Re-imagining purpose, content and method in the classroom by means of a critical pedagogy of inquiry

Author Institution: Trinity Western University, Canada

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Format: oral

Programme Slot: Wednesday 15 September 2010, 11:30-13:00, Room 1.8

Short biography of the author: Linda Schwartz-Trivett is Adjunct Professor (on extended appointment) to the School of the Arts, Media and Culture at Trinity Western University, British Columbia, Canada. She has held two posts as a Faculty dean: Faculty of Humanities at Kwantlen Polytechnic University (2006–09); and the Faculty of Professional Studies and Performing Arts at Trinity Western University (2001–06). Schwartz-Trivett holds a PhD in Interdisciplinary Studies (University of Manitoba) and specializes in music theory pedagogy, music analysis, critical theory, hermeneutics, and higher education research. She is also a composer-teacher, and has held several faculty positions in music theory and composition at University of Winnipeg (Concord College) and Trinity Western University.

Keywords & Précis: **music theory; music analysis; musical unity; critical theory; critical pedagogy**

There is no established means by which constitutive dimensions, clarified for all academic fields, can be articulated for music theory pedagogy. Problematic and unresolved factors, contributing to inauthentic practice in music theory instruction include: substantive, organizational and syntactical misalignment; undisclosed assumptions about subject content; and absence of systematic frameworks for teaching.

Abstract:

Of all instructional domains in undergraduate music studies, pedagogical practice in music theory is most misaligned. Many instructional practitioners transmit bounded, narrow and repeated discipline content and method, and are marginally informed with respect to currents in music scholarship and broader inquiry. Principles of effective teaching practice in music theory are generally not acknowledged or linked systemically to curricular aims or methodological approaches (Kerman 1980, McClary 1989, Street 1989). My research examines these concerns[1] and delineates an additional clash of oppositional ideologies that operate behind current musicology instruction and music theory pedagogy.

Techniques utilized by instructors interested more in methods-as-ends rather than openings to inquiry continue to fuel an ongoing practice of claiming perfection for a musical work through the act of analysis (Morgan 2003). Constitution of critical inquiry in music theory scholarship would challenge myths of high art music's unity and autonomy long established in music analysis (Kerman 1980, McClary 1991, 1989, Cook 1987). Such challenges to the presumptive method of music analysis originate in critical theory's project, specifically Adorno's (1983) theoretical critique of culture and his notion of an aesthetic unity "too-easily achieved" (theory of negative dialectics)[2]. Critical theory (or more specifically, critical pedagogy) is considered in this paper as an inquiring stance that could transform and reconstitute the aims of music theory pedagogy.

The research focus examines gaps in teacher knowledge, discipline content, scope of inquiry, and in

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[1] Tonal music theory instruction is not connected with modes of music research inquiry in other discipline fields or in other domains of music study, or with advanced scholarship in music theory and analysis; general practices of teaching music theory are weak pedagogically and ill-informed with respect to best instructional practices within and outside of music scholarship.

[2] Adorno is interested in musical works that involve complex relationships and oppositional tensions that are not dis-integrative and do not resolve easily or unethically. He is wary of music whose surface materials take on a commodity function, whose immediate unity negates the authenticity of the musical language, but is at the same time insistent that all musical material is culturally mediated and historically determined (Williams 2001).

student learning within the current norms of practice, prompted by lack of meaningful inquiry in the classroom. The methodological approach draws on three overlapping spheres of thought: matters of historical contextualization and ideology pivotal to the constitution of music theory as a disciplinary domain; theories of musical unity challenged by the influences of a "critical theory of musical meaning" (Cook 2001) and a scholarly paradigm shift (Popper 1963) within music theory instruction; and the possible adoption of a critical pedagogy that could engage learners meaningfully, transform discourse, and destabilize ideologies or sites of power in music theory instruction (Freire 1997, 1972).

A possible avenue for re-conceptualization of music theory instruction is proposed that would shift pedagogical practice to the edges of the domain, to liminal space between the polarities of music theory and cultural musicology, where responsible and ethical inquiry leads change by responding critically to the tradition, and theory no longer functions solely as a means of instrumental and ideological control but rather acts as a dynamic vehicle for mediating experience in the classroom. Various teaching strategies and disciplinary inquiry drawn from cultural studies (Krims 2003; Middleton 1990) are examined as possible models for reformulation of music theory studies.

Author Institution: University Tun Hussein Onn, Malaysia

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Format: oral

Programme Slot: Wednesday 15 September 2010, 14:00-15:00, Room 1.1

Short biography of the authors: Alias Masek is a PhD candidate/assistant researcher from the Technical Education Faculty, University Tun Hussein Onn, Malaysia. He is currently in the second semester of his study. Professor Dr Sulaiman Yamin is a Deputy Dean (Research and Development) in the Technical Education Faculty, University Tun Hussein Onn, Malaysia. He is currently a head researcher/supervisor for this research project under the University's short-term research grant.

Keywords & Précis: problem based learning; knowledge acquisition; creative thinking; critical thinking; perception

This paper addresses the potential of Problem Based Learning (PBL) as an instructional method to contribute to the positive development of students' knowledge acquisition, higher order thinking skills, and perception. An experimental control group study is to be designed to compare a PBL model with traditional lecturing methods. The context will involve the Electrical Technology module (ET101) in the technical engineering diploma programme in a Malaysian polytechnic. The sample will involve groups of 30 students each in the experimental and control group. The derived data will be analysed using unified and multivariate analysis of covariance. The study has just completed the first phase of its literature review; future phases will address the specification of instrumentation, and the PBL module development.

Full Paper:

The Effects of Problem Based Learning Instruction on Knowledge, Higher Order Thinking Skills, and Perception in a Technical Engineering Programme

Introduction

A recent campaign to improve the quality of teaching and learning in a Malaysian polytechnic recommended that pedagogical methods focus more on Student Centred Learning (SCL) approaches such as the Problem Based Learning (PBL) method (DPCCE 2008). Through this, the polytechnic graduates are expected to grow and develop other personal skills and abilities, which include problem solving, creative and critical thinking, social skills, and personal value, in addition to strong technical skills. Although in such technical programmes where skills acquisition becomes the main concern, knowledge is necessarily useful for practice (Savin-Baden 2007), and similarly, higher order thinking skills such as creativity have become the ultimate goal of education (Spendlove 2008). Since PBL promises positive development based on constructivist learning theory (Savery and Duffy 2001), this research proposes to investigate the effect of PBL on knowledge acquisition, creative thinking, critical thinking, and perception in a technical skills programme.

Background of the study

Evidence indicates that the PBL approach is effective in constructing students' knowledge acquisition as regards concepts and principles (e.g. Capon and Kuhn 2004, Bilgin, Senocak and Sozbilir 2009). On the other hand, evidence also indicates that the PBL approach is less effective or at least similar to traditional lecturing methods in constructing knowledge of concepts and principles for students (e.g. Matthews 2004, Sendag and Odabas 2009).

Published evidence indicating negative results in constructing knowledge of applications (e.g. Matthews 2004, Sanderson 2008) is quite similar to studies that report positive findings, when PBL is used as an instructional method (e.g. Kasai, Sugimoto and Uchiyama 2006, Dehkordi and Heydarnejad, 2008). Specifically, students in PBL were found capable of integrating and applying the concepts and principles that they had learned (Capon and Kuhn 2004). In other contexts of comparison, using Bloom's taxonomy of cognitive domains, PBL students performed much better at

the applications and evaluations level, but not at the understanding level (Dehkordi and Heydarnejad, 2008).

Several previous systematic reviews in the field of medicine conclude that students using PBL methods gained slightly less factual knowledge of concepts and procedures (Colliver 2000, Dochy et al. 2003). This conclusion is consistent with the reasons for PBL students showing an inclination to score lower in the final examination (e.g. Cheng et al. 2003). Given the knowledge of the whole structure of concepts, principles, and procedures (i.e. application), the study of PBL effectiveness appears equivocal, and this is in line with a study by Gijbels et al. (2005). This inconclusive finding suggests the need for more studies, which scrutinize different populations and disciplines.

In relating PBL to higher order thinking skills components, studies that relate PBL and creative thinking seem to provide encouraging findings, across levels of educations (e.g. Kwon, Park and Park 2006, Awang and Ramly 2009). Despite these positive findings, it must be noted that there is a limited number of studies that directly investigate the link between PBL and creative thinking. This is consistent with the claims of Tan, Chye and Teo (2009), in which more evidence is needed to arrive at a conclusion, particularly across disciplines and populations.

The studies that examine the effects of PBL on critical thinking show a tendency to produce positive results (e.g. Derry et al. 2000, Tiwari et al. 2006). However, several studies also produced negative or inconclusive findings when two groups are compared and examine the effects of PBL on critical thinking (e.g. Choi 2004, Polanco, Calderon and Delgado 2004). In addition, studies on these components of higher order thinking skills, such as creative and critical thinking, are mostly in the mathematical field (e.g. Leikin, Berman and Koichu 2009, Chiu 2009). However, fewer studies scrutinize the link between PBL and the components of higher order thinking skills, particularly in technical engineering. The evidence remains to support the argument about the ties between educational theories and the PBL approach that was raised by Colliver (2000). Substantial evidence to support PBL effectiveness has not been published because of the limited number of empirical studies that directly link PBL and higher order thinking skills, particularly creative thinking.

From the affective domain perspective, the evidence suggests that PBL contributes to positive changes in attitude, motivation, engagement, and self efficacy (Akinoglu and Tandogan 2007, Pederson 2003, Mossuto 2009, Dunlap 2005). Some research findings also indicate that PBL has turned students' perceptions towards a more positive position and lead to more satisfaction (Tiwari et al. 2006). Other research findings are in contrast, indicating no effect on attitudes (Polanco, Calderon and Delgado 2004). It is difficult to formulate a general conclusion, since many attributes have been scrutinized within the affective domain. Fewer studies link PBL and perceptions that involve elements such as attitude, motivation, engagement, and efficacy.

Research that scrutinizes the relationship between PBL and knowledge, creative and critical thinking skills, and perception is still scant. The available evidence on PBL effectiveness has produced findings too equivocal to be deemed conclusive. There is a need for specific research, and therefore this study comes to fill gaps within the body of knowledge. This is in line with the suggestion by Tan, Chye and Teo (2009), suggesting more studies are needed in controlled experimental conditions, and using actual measures, rather than subjective self-rating to assess the impact, and to investigate whether PBL is effective in constructing students' knowledge, creative and critical thinking, and fostering positive perceptions.

Problem statement

The purpose of the study is to explore the potential of PBL as an effective teaching and learning method that contributes to positive development on students' knowledge, creative and critical thinking skills, and perception. In addition, the study also attempts to develop a model for PBL learning in Electrical Technology 1 (ET101) in polytechnic modules for an electrical and electronic engineering programme.

Research objectives

The objectives of the study are:

1. To examine the effect of PBL on three levels of knowledge structures (concepts, principles and knowledge of application).

2. To investigate the effect of PBL on students' creative thinking and critical thinking ability (higher order thinking skills).

3. To explore the effect of PBL on students' perception with respect to attitude, motivation, engagement in learning, and self efficacy.

4. To explore the relationship between critical thinking ability and variables knowledge, creative thinking skills, and perception.

5. To develop a model of PBL learning on Electrical Technology 1 (ET101) in polytechnic modules for an electronic engineering programme.

Methodology

This study will employ a pre-test and post-test with experimental research and control group design. Two equal groups of 30 students will be randomly chosen. Both groups are geographically isolated in two different polytechnics, as a precaution to avoid information diffusion. Both groups will also be taught by two different lecturers, but they are matched and will be chosen according to their teaching experience and teaching qualifications. Other variables that may threaten the experiment will be taken care of by the study design and the statistical methods used.

The targeted population will be the students of the Electrical and Electronic Engineering Diploma programme, who enrol in Electrical Technology 1 (ET101) for their first year in the first semester. There are currently twelve polytechnics that offer this module nationwide; within this number, two will be randomly chosen and assigned to control and experimental groups.

The independent variables will be the instructional method for treatment, which in this case is the PBL (experimental group) and traditional lecturing method (control group). Both methods of instruction will be implemented to cover six out of eleven units within the syllabus. The treatment will be ongoing for eight weeks, and both groups will be scheduled for a pre-test and post-test comprising a knowledge acquisition test, creative thinking test, and critical thinking test. The perception questionnaire will be deployed at the end of the experiment.

In brief, the control group will undergo traditional methods of lecture creativity, and typically students will be taught concepts and principles through lecturing sessions.

In the experimental group, as the first attempt to implement PBL in this particular module in the polytechnic, a subject level implementation will be employed in order to explore feasibility and effectiveness. Therefore, the subject-centric problem will be designed as a trigger, and mini lectures will be used to fill up the gaps within subject-centric problems. It is suggested that the mini lectures are integrated within tutorial sessions, and take place for a maximum of half an hour according to the content and objectives of the tutorial session.

The Format and Design of the Problem: it is suggested that the problem is presented through several formats including written scenario, events, case based, product prototypes, video, audio, and laboratory sheets. The problem format is decided according to the suitability of the topic, requirements, objectives, and learning materials that are available in the polytechnic laboratory.

The main problem will comprise two sub-problems, integrating at least three topics within the syllabus. A total of two major problems should cover all six topics given. The sub-problems will be structured in approach, with a mixture of both easy and difficult problems. The sub-problems will be designed to be solved within a two-week working period of problem solving. An artificial problem is proposed but implies a real-world application. The solutions are expected to be open ended without any single right or wrong answer.

The Implementation Method: students are to work in problem-solving groups of five or six. The first meeting is to deliver the problem, and students will begin to define the problem and learning outcomes. The second meeting will be devoted to group discussions and a short presentation. However, the number of meeting sessions is according to the size of the project. The method operating during the problem-solving process in tutorial sessions should employ the Seven-jump model as in the Maastricht PBL model.

In the problem solving process, all groups will receive a similar set of problems. There will be no issue of plagiarism, since the problem is designed to have open-ended solutions. In fact, students are encouraged to share materials amongst group members or with others groups. The methods and the problem solutions are expected to be different, but groups learn the same concepts, aiming for similar learning outcomes. Therefore, when the groups come to share their problem solutions in a short presentation session, they are expected to engage different methods of solution, while applying the same concepts and principles.

In the first tutorial meeting, the facilitator will guide students through the problem-solving process. They begin with the process of understanding the problem and identifying "what they know", "what they do not know", and "what they need to know". This will be done by probing students with questions that lead to the activation of their meta-cognitive thinking and utilizing existing knowledge and experiences. In the second tutorial meeting, the facilitator continues with probing questions and monitors students' progress. During the last session of the problem-solving process, feedback will be given to each group on short presentation sessions. The facilitator will provide a feedback comment on students' progress, based on rubric rating scales that will be provided.

The Assessment Strategy: in the first meeting, students will be provided with several rubric rating scales which deliver the facilitator's expectations of the skills to be developed during the PBL process. They will always be encouraged to refer to the rating scales and to keep up self-assessment during the problem-solving process. The rubric rating scales should also be used in conducting facilitator and peer assessment.

Several short presentations will be scheduled to diagnose and support students' learning. These presentations should be conducted by the group, with all group members presenting their parts. In this session, the other groups will perform peer-assessment. At the same time, the facilitator also assesses the group performance and awards them group marks. The results from peer-assessment will be used to modify the group marks, leading to an individual mark. In addition, feedback is given to each group, which is intended to improve their learning process.

At the end of each problem-solving cycle, students will be asked to answer several fixed reflective questions. The reflective questions are submitted immediately at the end of the tutorial session. Students will properly document their part in each cycle of problem-solving for a portfolio. The portfolio is then submitted at the end of the semester for another evaluation if necessary. In addition, other forms of assessment may be conducted in order to support students' learning; these include quizzes, short essays, and short-test on concept as necessary.

In summary, the procedures over 10 weeks' planning can be seen in Table 1 below:

Weeks	Experimental group	Control group
1	Knowledge pre-test	Knowledge pre-test
1	Creative & Critical thinking pre-test	Creative & Critical thinking pre-test
2-9	**Problem based learning**	**Traditional lecturing**
10	Knowledge post-test	Knowledge post-test
10	Creative and critical thinking post-test	Creative and critical thinking post-test
10	Perception questionnaire	Perception questionnaire

Table 1: The summary of research procedures

The data will be analysed using unified and multivariate analysis of covariance in order to control extraneous variables in this experimental study.

Conclusion

The study has completed the first phase, the literature review, and the tentative PBL model is ready for experimentation. Currently the study focuses on the instrumentation aspect, and the next phase will involve the PBL module development. The full study is expected to take place in the second semester's intake in 2011.

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68 Nicole Steils; The Impact of Methodology: Approaching and involving university students as research participants

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Short biography of the author: Nicole Steils started a PhD in the CURLIEW project funded by the Leverhulme Trust at Coventry University in 2009. Her research interest concentrates on the impact of teaching in immersive virtual worlds on learner and teacher identity and how students and teacher use the "new" opportunities of learning and cooperation. Originally qualified as a teacher in secondary schools, she has been working in out-of-school education as a training expert and coach for over ten years and has lectured student teachers at Goethe-University, Frankfurt, Germany.

Keywords & Précis: research methodology; student participation

In qualitative research, aiming for involvement and participation can be a crucial factor in establishing effectiveness and trustworthiness. This paper investigates similarities and differences between two methodologies – Participatory Action Research and Narrative Research – focusing on their impact on the participation and involvement of university students in educational research projects.

Abstract:

In qualitative research, aiming for involvement and participation can be a crucial factor in establishing effectiveness and trustworthiness. This paper investigates similarities and differences between two research methodologies, focusing on their impact on the participation and involvement of university students in educational research projects. The two methodologies under discussion are firstly Participatory Action Research (PAR) conceptualizations (e.g. Kemmis and McTaggart 2005, Fals-Borda 1991), and secondly Narrative Research frameworks (e.g. Riessman 2008, Clandinin and Connelly 2000, Casey 1995). Findings from the literature are contrasted with real-life contexts experienced during an on-going research project by the author of this paper with university students at two research sites.

In theory, research conducted using PAR aims to gain knowledge to change and improve specific situations and the participants' lives (Kemmis and McTaggart 2005, Fals-Borda 1991). Or, as Kidd and Kral phrase it, PAR should "get the people affected by a problem together, figure out what is going on as a group, and then do something about it" (2005: 187). To achieve this target, the PAR methodology seeks to involve participants at all stages of research. Participants become "subjects and coresearchers" themselves (Argyris and Schön 1989: 613) or, in the words of Reason and Bradbury (2001), it is research conducted "with people not on people". With a similar understanding of the participant, Narrative Research aims to explore, illustrate, understand and make sense of aspects and events of lives through selective stories (Riessman 2008). The methodology is structured to allow users to be "able to see different and sometimes contradictory layers of meaning, to bring them into useful dialogue with each other, and to understand more about individual and social change" (Squire, Andrews and Tamboukou 2008: 1).

However, the challenge for the researcher is to find appropriate ways to achieve these targets whilst managing associated dilemmas. For example, how is it possible to involve university students in an ethical way? How does the researcher maintain the integrity of data participants share without raising expectations which are impossible to achieve? Moreover, how can a research project allow students to improve individual or collective learning effectively and create a "win-win" situation for both researcher and research participants?

The research project presented here explored a number of the issues mentioned above in relation to explorations of learner identity. The study started by using a PAR methodology but was moved to a Narrative Research approach because of the difficulties and dilemmas of using PAR with students. This paper will discuss ways in which the participants have been approached and involved under a PAR methodology and will critically compare these with ways in which the participants have been approached and involved under a Narrative Research methodology. Findings relating to the impact of this shift, firstly on the role of the participants, secondly on the role of the researcher, and lastly on the research context, are presented for future discussion.

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70 Marina Orsini-Jones, Mike Cribb, David Jones, Ross Graham, Rebecca Lund and Fiona Lee; Student-Driven and Threshold-Concept Informed Curricular Change

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Format: PhD Work in Progress report

Programme Slot: Thursday 16 September 2010, 13:30-15:00, Room 1.4

Short biography of lead author: Marina is Principal Lecturer in the Department of English and Languages at Coventry University (UK), where she manages the Master's programme in English Language Teaching. She has published work on the impact that education technology can have on the undergraduate students' learning experience and is particularly interested in developing constructivist tasks that can enhance the development of students' critical multiliteracies. For her PhD Marina is currently investigating both subject-specific threshold concepts in languages and linguistics and more generic troublesome knowledge relating to academic and professional competences (e.g. undergraduate research skills). Her research is underpinned by action research-led curriculum change. Marina has contributed to numerous national and international conferences.

Keywords & Précis: threshold concept; troublesome knowledge; English; action-research; curricular change; student

This paper will illustrate a threshold-concept-related research project carried out by a student for her dissertation in English Studies at Coventry University and based upon previous studies on troublesome grammar knowledge by Orsini-Jones and Jones (2007), Orsini-Jones and Sinclair (2008) and Orsini-Jones (2009). It will discuss how the student implemented an experimental curricular intervention aimed at making formal grammar learning less troublesome for first year students. It will finally report on how staff are planning to address her findings in terms of curricular change.

Full Paper:

Student-Driven and Threshold-Concept Informed Curricular Change

Introduction

This paper is part of the work-in-progress for a PhD. The Principal Investigator (PI hereafter) for the PhD study is also a lecturer at Coventry University and has been studying the learning, teaching and assessment of grammar awareness to first-year undergraduate students in linguistics in cycles of action research for the last seven years. The innovative feature of this study is that one of the PI's undergraduate students – Rebecca Lund – decided to replicate part of the PI's PhD work on a smaller scale for her undergraduate dissertation in her final year in 2009–10. It could be argued that this paper presents therefore a "double loop" of student-centred research. It focuses on the threshold-concept-related research project carried out by Lund for her dissertation in English Studies at Coventry University, but is based upon previous studies on troublesome grammar knowledge underpinning the PhD work carried out by Orsini-Jones (Orsini-Jones and Jones 2007, Orsini-Jones and Sinclair 2008, Orsini-Jones 2009).

The paper discusses how the undergraduate student implemented an experimental curricular intervention aimed at making formal grammar learning less troublesome for first-year students. It also reports on how staff (including the PI for the PhD study) are planning to address the undergraduate student's findings in terms of curricular change.

Previous work (Orsini-Jones and Jones 2007, Orsini-Jones 2008) had stressed how the encounter with new knowledge at an academic level also requires students to engage with the subject matter studied in novel ways not experienced before. Therefore the acquisition of the "epistemological armoury" (to use Perkins's term, 2006) is not sufficient; students also need to be supported in "becoming linguists", that is to say in engaging with an ontological shift and "visualizing" themselves as scholars in linguistics. However, both the epistemological and the ontological dimension of knowledge can prove to be daunting for undergraduate first-year students.

Very often there appears to be a gap between what students think they know and what they actually know with reference to grammar awareness (Orsini-Jones 2008: 220). Motivational factors also play a

major role in the way English students position themselves towards the learning of grammar concepts.

Many undergraduate students educated within the English state system perceive grammar and grammar analysis as "troublesome". Perkins (2006) and Land, Meyer and Smith (2008) define "troublesome knowledge" as knowledge that can be perceived as "alien", or counter-intuitive by students. The work carried out with language students between academic years 2003 and 2008 led to the hypothesis that the overarching structure of a sentence also known in linguistics as the "rank scale concept" was "troublesome knowledge" and possibly a "threshold concept" for languages students. The table below (Crystal 2006:251) illustrates the grammar concept and its components:

Sentences	morphemes
which are analysed into	*which are used to build*
clauses	words
which are analysed into	*which are used to build*
phrases	phrases
which are analysed into	*which are used to build*
words	clauses
which are analysed into	*which are used to build*
morphemes	sentences

Land, Meyer and Smith (2008: ix–xxi) suggest that the identification of threshold concepts allows tutors to put in place targeted curricular interventions aiming at enhancing the students' learning experience and making such "troublesome knowledge" less troublesome. Grammar would appear to be "troublesome" for many students and staff teaching languages. Troublesome knowledge has been associated with the idea of a threshold concept[1] that Meyer and Land (2003) define as:

> akin to a portal, opening up a new and previously inaccessible way of thinking about something. …. It represents a transformed way of understanding, or interpreting, or viewing something without which the learner cannot progress… As a consequence of comprehending a threshold concept there may thus be a transformed internal view of subject matter, subject landscape, or even world view…This transformation may be sudden or it may be protracted over a considerable period of time, with the transition to understanding proving troublesome (Meyer and Land, 2003: 412).

The major characteristics of a "threshold concept" are that it is (Meyer and Land 2003, 2005, 2006):

• Troublesome: the learners will often find it problematic;
• Transformative: once understood, its potential effect on student learning and behaviour is to occasion a significant shift in the perception of a subject;
• Integrative: It exposes the previously hidden interrelatedness of concepts that were not previously seen as linked;
• Irreversible: the change of perspective occasioned by acquisition of a threshold concept is unlikely to be forgotten.

This paper introduces a constructivist "spin" to the investigation into threshold concepts in linguistics, and documents an undergraduate student's journey into troublesome grammar knowledge. The student, Rebecca Lund, had experienced the module *The Nature of the English Language* first-hand and had realized how troublesome some grammar concepts were for her peers. She therefore decided to carry out an extra-curricular intervention for self-selected volunteers aimed at enhancing grammar learning as her final-year research project for her dissertation; 5% of the students on the module participated. Working in collaboration with staff, she designed three grammar teaching and learning units informed by the existing relevant threshold concept research and carried out grammar tests (immediate recall) and interviews with the self-selected first-year students after her intervention. The paper illustrates how her findings fed into the design of the module *The Nature of the English Language* for academic year 2010–11 in a new cycle of student-driven action-research-led curricular change. It also discusses how Lund's contribution helped staff with viewing the threshold concept under investigation in a new light.

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[1] Please note that in this report "threshold concept' is not intended in any way as linked to its definition by the Council of Europe within the context of the self-assessment language competence grid for the European Language Portfolio.

Methodology

The paper illustrates on a micro-level a cycle of action research carried out in academic year 2009–10 following on from previous ones carried out between academic years 2002 and 2009. Although there are a variety of action research models, the one adopted for the work presented here is after Kemmis and McTaggart, known as "participatory action research" (2005):

- A problematic issue is identified;

- Change is planned collaboratively to address the issue;

- The change process is implemented: "acted out";

- All agents involved in the change process reflect upon its outcomes, both while it is happening and at the end of the first phase of implementation;

- A new cycle starts.

The adoption of a metacognitive approach (Schön 1983, Orsini-Jones and Davidson 1999, Moon 2004) on the part of both learner and lecturer is also required for an effective implementation of the action research cycle. Action-research was originally carried out for this study in a kind of role-reversal, whereby an undergraduate student, Lund, became the researcher. She "drove" the curricular change via her analysis of the outcomes of her research project. The student herself had taken part in a previous iteration of the action-research intervention carried out by staff in English at Coventry University in academic year 2007–08 as a participant, and this triggered her interest in the topic. She subsequently became a student mentor in academic year 2008–09, and while supporting the first-year students' learning experience she ascertained that many of them needed further help with understanding troublesome grammar knowledge on module *The Nature of the English Language*. Encouraging students to become researchers and to engage in research in a way that mirrors that of their lecturers is part of the objectives of the English Degree programme at Coventry University. This reflects the recommendations on the research-teaching nexus and the need to encourage higher education students to engage with scholarship at every stage of their study, promoted by Jenkins and Healey (2009, quoted in Orsini-Jones 2010: 344).

In keeping with the previous related action-research cycles the student-researcher collected both qualitative and quantitative data (mixed method approach), and put a stronger stress on the outcomes of her qualitative data ("QUAL-quant" model, see Dörnyei 2007). Informed consent to participate in the research was sought from each participant and the student researcher adhered to the ethics guidelines issued by the central Research Unit at Coventry University which also comply with those issued by the British Educational Research Association (BERA).

The parameters for the selection of the participants followed recommendations contained in a paper illustrating the "reconnaissance" stage of the action research cycle with reference to the identification of troublesome grammar knowledge in linguistics (Orsini-Jones 2009). In view of previous findings, participants should:

- be studying English as a "major" subject on their degree;
- have been schooled in England (because of the results from previous studies relating to grammar teaching in English schools and their impact on students' grammar awareness at HE level).

Participation in the project involved:

1. Taking a diagnostic online multiple-choice test on troublesome knowledge identified in related previous cycles of action-research and allowing the student-researcher to process their results;
2. Taking part in three extra one-hour taught grammar sessions designed and delivered by the student-researcher with purpose-built activities;
3. Taking part in a semi-structured group lunch-time interview with the student-researcher;
4. Writing up their reflections on grammar learning in a shared gateway area in PebblePad after having participated in each session and allowing their processing by the student-researcher.

In order to keep the ethical risks at a low level, it was decided not to implement the curriculum intervention within the activities and assessment of the module. Students were offered optional extra grammar sessions running at times mutually agreed between the researcher and the participants. It

was also decided that participants should be self-selected. All students on the module *The Nature of the English Language* were provided with information on the project on paper and online via module mail on the Virtual Learning Environment. The student researcher also briefed them orally about the purpose of the project at the beginning of face-to-face seminars. Of the 140 students on the module, 14 volunteered to take part, but only seven actually did (5%). Despite the small sample, the results of this small scale replica study appeared to tie in with those from previous cycles of related research. Self-selection had also been utilized on the previous related cycles.

The teaching materials and the lesson plans were designed by the student-researcher in consultation with the above-mentioned group of staff. Great stress was also put on the reflective and metareflective aspect of the intervention, as students were encouraged to share their thoughts on the difficulties encountered before and after each activity took place and as a group at the end of the project. They were also asked to write their individual reflections on the e-portfolio *PebblePad*. This was done in view of the evidence in relevant literature supporting the importance of metareflective activities to enhance the understanding of the subject matter being learnt and of troublesome knowledge (e.g. Moon 2004: 86, Bransford, Brown and Cocking 2000, Orsini-Jones 2008: 220). In her taught sessions the student-researcher focused on specific aspects that had been already identified as the most troublesome within the threshold concept of the "rank scale", i.e. "phrases" and "clauses" (Orsini-Jones 2008, Orsini-Jones and Sinclair 2008, Orsini-Jones 2009).

Lund also administered the same online diagnostic grammar quizzes that had been administered by staff in previous iteration of the action-research intervention. This was done via the assessment area within the module website in the Virtual Learning Environment that was WebCT in 2002 and became Blackboard later (Orsini-Jones and Jones 2007, Orsini-Jones 2009).

It could be argued that the student-centred methodology underpinning this paper takes previous student-centred curricular action-research by Orsini-Jones (e.g. Orsini-Jones 2008) one step further. Cousin has already highlighted the original way in which Orsini-Jones has successfully matched threshold concept research with action research by providing a student-centred perspective on educational inquiry (Cousin 2009: 209–11). This paper presents an example of constructivist transactional inquiry where the student is actually driving the change from within. The student-researcher took the curricular initiative and drove the action-research-led change, with the support of the lecturers, not the other way round.

Findings

Many of the findings appeared to confirm those that had emerged from previous action research cycles: in line with research by Orsini-Jones and Jones (2007) and Orsini-Jones and Sinclair (2008), students stated following the pre-sessions quiz that the aspect of the "rank scale" threshold concept that they found most troublesome was "clauses". This was reflected in the results of the diagnostic online quizzes. Also, there appeared to be a gap between perceived proficiency in grammar and actual competence: students found that those questions that they felt most confident about at the time of completing the quiz were the ones that they found they had answered incorrectly, and vice versa. This also reflects previous findings by Orsini-Jones (2008: 220): there can often be a gap between what students know and what they think they know.

Motivation emerged again as a determining factor in overcoming (or not) troublesome grammar knowledge. White's "competence motivation" suggests that when a student succeeds at something the likelihood of future success increases (White 1959). This is supported by research which demonstrates that students' perceptions of their previous performances influence their expectations for future performances (Ushioda 1996: 31). Such research provides a potential explanation as to why students find grammar troublesome at university: their past experience of grammar as "boring" and troublesome influences their approach to grammar at degree level. A contributing factor in this context appears again to be former teachers' attitudes towards grammar. According to Thornbury (1996: xi), a key factor affecting students' learning is the language awareness of the teachers they were taught by at school, and this applies both to English and to Foreign Languages. He defines language awareness as "the knowledge that teachers have of the underlying systems of the language that enables them to teach effectively" (Thornbury 1996: x). Andrews (2007) also emphasizes the importance of teachers' language awareness and its correlation with the negative attitudes towards grammar students can harbour.

The epistemological challenge posed by studying linguistics at HE level was moreover mentioned by students as it had been in the previous cycles of the action research project: participants generally agreed that they were "shocked" at the level of grammar analysis that was expected at university. The

need to cope with a new "epistemological armoury" (Perkins 2006) was highlighted by one student in particular who described buying and reading the book before the module started as like "reading a foreign language" in the semi-structured interviews carried out by the student-researcher.

Another area of coincidence with previous findings is the importance of reflective practice and metareflection to enhance learning and enhance confidence in relation to troublesome knowledge. Ertmer and Newby (1996) state that more successful students are those who are aware of their own learning process and of their own strengths and weaknesses. Students who participated in the project discussed here commented positively on the various opportunities for reflective practice offered to them both by the student-researcher in her sessions, and by the module tutors in their seminars, confirming what was previously claimed by Orsini-Jones:

> in order to help students to cross threshold concepts it is necessary to devise student-centred activities that allow them to engage both in individual and collective reflection on the troublesome knowledge encountered. The overcoming of "stumbling blocks" will be greatly helped by the opening up of a dialogue between students and tutors and amongst students themselves and by activities that foster this dialogue, as well as by encouraging students to engage in "metareflection" on the difficulties encountered (Orsini-Jones 2008: 220).

Students also stressed that the sharing of troublesome knowledge and the realization that they were not alone in finding certain concepts troublesome as part of the activities carried out for the research project enhanced their confidence (semi-structured interviews March 2010):

> I think the practice is really good to drill it in your brain, and when you talk about it with everybody it's not tedious, you're all doing it together and I think that you find as well that the things you struggle with, everybody struggles with, which kind of builds your confidence because otherwise you think you're at the bottom of the pile but actually you're on a level with everybody else, everybody struggles with it so it's quite nice to understand that then you can all push yourselves a bit harder.

A novel development in this action-research cycle, was a reflective session on the grammar section of previous examination papers for module *The Nature of the English Language*. Students discussed how they would answer the questions, as well as their feelings toward the topic and the exam. The participants discussed each problematic issue in detail, correcting one another and sharing their methods of finding the answers. This practice appeared to work well for them and by the end of the session they were answering almost every question correctly and their confidence appeared to have improved significantly. The help of a peer-tutor was also seen to be a key-factor in enhancing the confidence of the students who participated in the sessions for this project as well as the realization that the troublesome knowledge was shared with others.

An unexpected finding was the fact that the student researcher realized that she herself still had some issues with understanding the threshold concept under investigation. This emerged when she submitted the draft of her teaching sessions to her supervisor and the module leader. The reflective process involved in her project therefore also helped her to throw further light on troublesome knowledge that she had assumed she had mastered previously. The process of teaching such knowledge to others helped her with crossing the threshold concept, while it could be argued that before engaging in the project she was still "mimicking" understanding, "pretending" to know, which is a strategy often reported in threshold concept literature (Cousin 2009: 209).

On the whole students agreed that:

- Most of the grammar that they had learned before university was through the learning of a foreign language;
- The only grammar covered at school was classifying words;
- Grammar *should* be taught at school;
- They viewed the aspects of grammar that they had learnt at school as "easy" and what was new to them at university as "troublesome";
- They would greatly value having online quizzes on a regular basis to practice troublesome knowledge;
- They benefit from inquiry-based small group reflective activities where they can share knowledge, doubts and fears;

- They could see a role for an "expert student" or grammar mentor to support other students.

Conclusion

Lund, the undergraduate student researcher, and the rest of the grammar team from the previous action research cycles met in March 2010 to discuss the findings of the student project and to see whether changes could be implemented for academic year 2010–11 to address the troublesome grammar knowledge identified.

It was agreed that the correlation between grammar awareness at university and the experience of grammar learning in prior schooling experience must be investigated further. Also, the link between grammar awareness and "A" level in English must be explored. Many students read English without having an "A" level in that subject and it is necessary to ascertain whether they are the ones who struggle most with troublesome grammar knowledge.

The team of staff running the module agreed to take on board Lund's recommendations that more online quizzes should be provided. As a result the module descriptor, indicative content, aims and objectives, learning outcomes and assessment were changed. A pass/fail component of diagnostic quizzes was added to the assessment for the 2010–11 cohort. It was also agreed to appoint a dedicated "grammar mentor" who would take the mentoring module on the Add+Vantage scheme at the University[1] to support students on module *The Nature of the English Language.*

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[1] The Add+vantage scheme was introduced in academic year 2006–07 to provide students with the opportunity to develop employability competencies via dedicated employability modules (10 mandatory credits out of 120 per year), created and delivered by the staff in the various faculties but managed by the Careers Office at CU.

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71 Jonathan Worley, Mary Eakin and Martine Martin; Evaluating the Effectiveness of Peer Tutoring in Writing: Quantitative and qualitative methods

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Format: oral

Programme Slot: Wednesday 15 September 2010, 11:30-13:00, Room 1.8

Short biography of the authors: Jonathan Worley is Writing Centre Director at St Mary's University College Belfast. His research interests include writing center pedagogy, teaching of writing and writing theory. Mary Eakin and Martine Martin are undergraduate research assistants at the Centre with interests in peer tutoring and quantitative analysis.

Keywords & Précis: evaluating; peer tutoring; writing

An analytical presentation of five years of data regarding the practice of peer tutoring in writing at St Mary's University College Belfast, reflecting quantitative and qualitative approaches. Using results from approximately 1,750 tutorial sessions and fifty videotaped interviews, we will demonstrate the particular relationship between our quantitative and qualitative analysis. Qualitative data will be presented by the Writing Centre Director, while quantitative data will be presented by two undergraduate research assistants.

Abstract:

The Writing Centre at St Mary's University College Belfast, designated as a Centre of Excellence in Teaching and Learning in 2005, has collected data from the five years of its operation. The central component of the centre was a peer tutoring in writing programme whereby selected students were trained to tutor other students, and one of our key goals was to discover the best methods for evaluating the success of such a programme. We operated under the principle that there are two ways to convince others of success: good quantitative evidence and, qualitatively, powerful ideas. In terms of quantitative evidence we have approximately 1,750 individual tutorial sessions to draw upon. In terms of what we hope are powerful ideas, we have gathered extensive data from videotaped interviews with our peer tutors.

Quantitative evidence consists of forms completed by our tutors recording students' initial concerns, the results of individual tutorial sessions, followed by feedback forms from the students which are matched with their tutors' records. Two undergraduates at St Mary's (Mary Eakin and Martine Martin) spent six weeks analysing this data and will present their findings making use of spreadsheets and graphs. Their presentation will provide the following analyses:

- Number of students making use of the Writing Centre for the past five years, attendance trends and reasons for these trends;
- Number of students making use of the Writing Centre in the past five years by degree: BA in Liberal Arts, BEd and MEd;
- Breakdown of subject areas making use of the Writing Centre and an evaluation of why some subjects are better represented than others;
- Spread of lecturers whose students made use of the Writing Centre with follow-up interviews with those lecturers;
- Analysis of the types of concerns about writing expressed by the students, tutor response to those concerns and subsequent feedback from those students.

Of these analyses, the most crucial exploration is of the feedback loop created by the students' expressions of their initial concerns, followed up tutors' response, followed by student feedback. This particular loop takes advantage of the concept of student-centred tutoring which asserts that fundamental to any tutoring session is the students' expressions of initial concerns followed by the tutors' responses. It also focuses on what students construct as their learning needs in writing and how Writing Centre responds to those concerns (albeit Writing Centre tutors may have observed other concerns than those expressed by the student). Finally, it allows the student to assess whether the session has been useful.

In the second part of the presentation, Jonathan Worley, the Writing Centre Director, will link these results to videotaped interviews with peer tutors. In the interviews, tutors describe past tutorial sessions – both successful and unsuccessful ones from which they learned – and also evaluate a sample piece of writing (which will be made available at the presentation). In their descriptions of past tutoring sessions, peer tutors often present original and sometimes inspiring insights about peer tutoring, which serve to enrich the quality of the tutoring at St Mary's. In analysing an essay, tutors focus upon the student's insights about what might foster good academic writing. Although there is a wide range of responses from the tutors, they tend to focus on particular aspects of tutoring: (1) their discovery of the collaborative nature of the enterprise whereby they work with students to establish the direction for a piece of writing; (2) their development of a sense of community within the university as a consequence of tutoring; (3) the insights that they have developed about writing; and (4) the personal skills that contribute to good tutoring sessions.

The quantitative and qualitative analyses complement each other by demonstrating that issues discussed by the tutors in interviews occur repeatedly in the quantitative analysis. More importantly, a comparison of the two methods indicates that while quantitative analysis may provide reassurance that the peer tutoring programme is working effectively, it is the qualitative analysis that contributes most significantly to the development of the quality of the programme by generating and disseminating new insights and, intrinsically, in method, practising collaborative learning.

72 Mark Oliver, Stephen Bate and Mark Childs; Evaluation of Audio Message Feedback to a Signal Processing Class

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Format: oral

Programme Slot: Thursday 16 September 2010, 11:00-12:30, Room 1.2

Short biography of the authors: The authors are staff in the Faculty of Engineering and Computing at Coventry University. Mark Oliver and Stephen Bate are Senior Lecturers in the Department of Computing and the Digital Environment. Mark Oliver is the module leader of the Advanced Digital Systems module. Stephen Bate is course tutor for many of the students who took part in the assignment. He is also a member of the Faculty Learning, Teaching and Assessment Group. Mark Childs is a Teaching Development Fellow.

Keywords & Précis: formative; audio; feedback; recorder; assessment

This paper describes a project based in a UK university. A UK Higher Education Academy grant supported a follow-on project from the UK JISC Audio Supported Enhanced Learning (ASEL) Project. Formative audio feedback recorded with a portable audio recorder was given to a group of students who had done a literature study as part of an assignment about digital filter design.

Full Paper:

Evaluation of Audio Message Feedback to a Signal Processing Class

Summary

The UK Higher Education Academy provided a grant to a research team in the Faculty of Engineering and Computing at Coventry University. This was for a follow-on project from the UK JISC Audio Supported Enhanced Learning (ASEL) Project. The aim of the project described in this paper was to evaluate the use of audio feedback in formative assessment. Students had been set an assignment about digital filter design and were required to complete a literature review at the beginning of the assignment. The purpose of the literature review was to encourage the students to read up on the filter design literature in order to plan their design work. Audio feedback messages were uploaded to a virtual learning environment (VLE) so that students could follow the advice given and plan their designs more effectively. The students were then surveyed in their scheduled laboratory sessions to identify how useful the feedback had been. An analysis of these results is reported which indicates that students took a generally positive view of receiving audio feedback although there was a clear preference to receive both audio and written feedback.

Introduction

Our project was one of the Joint Information Systems Committee Users and Innovations (JISC U&I) Audio Projects (Engineering Subject Centre 2010). These projects were designed so that the wider academic community could benefit from the Audio Supported Enhanced Learning Project (ASEL 2009). The ASEL project was a JISC-funded project under the Next Generation Technologies and Practices strand within the Users and Innovation: Personalising Technologies programme. This project was reported by Will Stewart (Stewart 2009).

Audio feedback is not, in and of itself, new. It has been pointed out (Northcliffe and Middleton 2008) that Moore studied the topic of analogue audio feedback in 1970 and others have worked in various aspects of the field since then including Northcliffe and Middleton's own work in conversational audio feedback.

In addition to the ASEL project, other studies informing the work were the Sounds Good project (Rotherham 2009) and the study by Ice et al. (2007). Although lecturers in these studies focused on the time advantage that voice feedback gave as the main reason for adopting it (Ice et al. 2007: 19), students particularly welcomed the added social aspects of using voice. Ice et al. found that the lecturer's presence is enhanced through the additional nuances and paralinguistic elements that voice has over text (2007: 4). Students also found voice more encouraging and supportive than text, perceiving "increased caring on the part of the instructor" (2007: 19).

These observations on feedback are not consistently found across the literature, however. France and Ribchester found that this sense of immediacy made students more sensitive to negative comments, so that "the impact of the words being spoken [will] be much harder hitting and may be a bit demoralising" (2008: 77). Overall though, France and Ribchester found that students preferred spoken to written feedback (as indeed did the ASEL and Sounds Good projects mentioned above), a typical comment being "Really like this idea, I find listening to things that much easier" (2008: 77).

Our aim was to use audio feedback to help supplement written feedback on a final year undergraduate digital signal processing design exercise using Matlab and Texas Instruments digital signal processor boards. It was decided not to use audio to provide summative feedback. We felt that these items of feedback would need to appear in the material given to external examiners, and might also be used in connection with student appeals. Hence for the avoidance of dispute these probably need to be written. Formative evaluation can help students learn as it helps them to think about a task as it is being carried out. The audio feedback was therefore planned as a formative exercise.

An initial possible implementation approach that was considered was to create Matlab-based interactive training materials that would have audio feedback embedded within them which automatically generated appropriate feedback for different student choices. This idea was discontinued due to its technical complexity. It might also have been inflexible. An alternative method became apparent in discussion.

Students on a final year Incorporated Engineer level module about Advanced Digital Systems were about to undertake assignment work. They were to design a digital filter, using the software package Matlab, and then to implement it in real-time in the laboratory by using a connection between Matlab and a Texas Instruments development board based on a 6713 processor. It had been the practice on similar assignments to ask the students to carry out a literature study in areas directly related to the design task. These areas were pre-planned as part of the assignment design. The students were asked to submit the literature study online through Coventry University's Blackboard system. This submission was scheduled to be early in the assignment process so that students could receive personalized audio feedback messages. These messages would then provide feedback to the students in relation to the literature study and also help them with the process of design.

Methodology

A digital filter design assignment was issued to the students on paper and online. The audio feedback to students was delivered a little later than the planned schedule. Due to a significant increase in student numbers on the Advanced Digital System module it became clear that the individual audio feedback was going to be far too time-consuming. University policy is to reduce assessment load on staff as much as possible whilst maintaining quality. Because of the importance of this final-year module to the students, it was decided to survey the literature studies received and prepare a single audio message that would provide general feedback to all the students. The audio recorder used was the Edirol R-09HR. This process began a few weeks after the literature studies had been received (including those that were late but still permitted to be assessed under University regulations). Two assessors reviewed the messages and prepared to record the messages. The audio recorder manuals were scrutinized in order to ensure effective operation on recording day, and a feedback message was written as a script. It became clear that it was necessary to find a quiet place to make the actual recordings, to avoid any disturbances. The assessors recorded the two parts of the message individually. Once the messages had been taken, backups were made to a computer.

The recordings now needed to be made available to students. This was done in three different ways. Firstly, the wave files were stored in a computer directory structure in the laboratory that the students were using for their assignment practical work. Secondly, an attempt was made to upload the .wav files recorded to the Coventry University CUOnline Blackboard environment. This was not possible due to an upload file size limit. The solution to this was to use software supplied with the audio recorders to compress the files into .mp3 files that could be uploaded. It was also found that it was best if the students were provided with a downloadable version as the Windows environment did not always automatically load up the correct media player. Thirdly, arrangements were made to play the recordings to the students in lab classes.

The evaluation of the audio feedback made use of a survey of the students. Ethical permission was obtained from Coventry University in respect of conducting a survey of students by questionnaire. The questionnaires were given out over a series of lab classes in the Spring term of 2010. Details of the questions used can be found in Appendix A.

Findings

The total number of students registered for the module was 74 (measured 5 May 2010). There were 35 respondents to the questionnaire. This is the complete group that was surveyed. An explicit decision was made to miss out later groups so as not to interfere with the actual assignment work, which was getting close to a deadline. Data was obtained from the surveys which were held during a series of lab classes over several weeks. The summary quantitative data obtained from the questionnaire can be found in Appendix B. The mean values of the response data are shown in Figure 1.

Figure 1 – Mean response for each question

Questions 1 and 2 relate to accessibility and playability issues. It should be noted that these two questions were closely related and that the questionnaire was filled in whilst students were in the laboratory with a member of staff who was able to play the audio to the students through loudspeakers if they said they had not listened to it yet. Responses to question 1 had a mean of 4, showing that students found the audio easy to access through the VLE. Responses to question 2 had a mean of 3.94, indicating that students also found it easy to play back the audio.

Questions 3 and 4 relate to the usefulness of the feedback, in connection with planning practical design work and carrying out literature studies. The mean responses for these questions were 3.46 and 3.44 respectively. As these are still over three, this indicates that students found the formative feedback useful, to some extent, in planning their practical design work as well as in writing literature studies. It is notable that the standard deviation for question 4 is the lowest from all nine quantitative questions. This might be related to the fact that students would have experienced the writing of literature studies and reports in a variety of subject areas by the time they reached level 3 of an undergraduate course, and so were able to judge this answer well.

Questions 5, 6 and 8 relate to comparisons between written and audio feedback. Question 5 had a mean response of 3.21 which indicates, by a small margin, that students believed that the audio feedback was more detailed than they normally received in written form. However the standard deviation of these responses was higher than any other question and only about one third of the respondents agreed or strongly agreed. Question 6 had a mean response of 3.63 which indicates that overall, students' perception is that audio feedback from lecturers is more personal than written feedback. Question 8 had a mean response of 3, the lowest in the quantitative questions, which indicates ambivalence as to whether audio or written feedback is best for them, with the number of respondents agreeing or strongly agreeing being equal to the number of those disagreeing or strongly agreeing.

Students clearly indicated through their responses to question 9 that they would have preferred both written and audio feedback. This question gained the highest mean response of 4.37. They were probably unaware at that stage that they would receive written feedback on their individual reports.

The answers to question 7 indicate that, in general, students felt that that they understood the feedback they received through the audio.

A range of qualitative comments were also received in response to questions 10 and 11 in the questionnaire. These responses are presented firstly in summary form, as follows:

> From a positive point of view, some students indicated that audio feedback was novel to them, that it was more personal than written feedback and that they liked it. More critically, some indicated that they would have preferred individual audio feedback, written feedback as well as audio feedback, visual explanation added, some kind of indication (for example email) given to them to indicate that feedback had been left, and a comment that feedback could have been clearer and louder. Some described themselves as overseas students and seemed particularly keen to receive written feedback instead of audio feedback.

Secondly, we bring out direct quotations from student comments. The fact that some students were of an overseas origin coloured the English phraseology used:

Although the audio was generic, rather than individualized, the students still felt that the audio produced a more personal connection with the tutors. Students said that

> *It's more personal and sophisticated*

> *The audio feedback to some extent is likened to a one-to-one session with lecturer. I feel more compelled to ask my lecturer questions relating to feedback.*

The difference in opinion between those students who prefer text to audio is revealed in the following quotes. On the one hand some students found it:

> *More clear and feel easy to remember*

> *Easy to understand*

However, for others:

> *I think it's a good idea for English students, but for foreigner students not so. I would prefer to have both audio and written feedback.*

> *I think receive feedback through writing is better for me*

> *As long as there are many foreign students written feedback is necessary.*

As a whole then, it appears that students appreciate that in principle the idea is a good one. However, written feedback is the best option for those students for whom English is still something they struggle with to some extent. The comments of the students reflected the findings of Ice et al. mentioned above, in that they perceived a stronger degree of teaching presence than text alone would have conveyed, such as the following:

> *I feel more concerned* [for]

> *A feeling that lecturers really care about students*

Conclusion

The relatively positive responses that students made to the majority of questions in our survey indicate to us that it is worthwhile carrying on with this work. It is also notable that there is generally strong agreement between the different students. We have learnt a lot about the recording and upload processes so would be better able to carry these out in the future. It would have been better for us to have made the judgement that we needed to give one message to all the students at an earlier stage.

The findings reflect the literature in some ways, in that, as with previous studies, the teaching distance is lessened through the use of audio, and as Ice et al. state (2007: 18–19):

> *We consider the role audio feedback played in developing this type of interpersonal relationship with students in our asynchronous courses to be a compelling enough reason for its continued use even if no other positive factors had been discovered.*

Unlike the previous studies, the use of audio was not overwhelmingly positive. Students who were less confident with respect to their language ability stated that they preferred written, or more

commonly, both written and audio feedback. Providing a written transcript of the audio feedback would therefore be very popular with students and would particularly benefit overseas students.

We are planning to conduct a similar exercise on the same module next year so that a comparison can take place, and we will consider extending the ideas to other modules, including those at lower levels in our courses.

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Appendix A

Evaluation of feedback through audio – questionnaire summary

Students were asked to rate the extent to which they agreed with the following statements about their opinion of receiving feedback through audio. They were told that a response of 1 represented 'Strongly disagree' and a response of 5 represented 'Strongly agree'.

	1	2	3	4	5
1. It is easy to access the audio through CUOnline					
2. It is easy to play back the audio					
3. I found the feedback using audio useful in relationship to planning my practical design work					
4. I found the feedback through audio useful in connection with writing literature studies					
5. I got more detailed feedback through audio than I usually receive from written feedback					
6. I think getting hearing the lecturers giving me feedback is more personal than reading their feedback					
7. I understood the feedback I received through the audio					
8. I prefer getting my feedback through audio than through writing					
9. I would prefer both audio and written feedback					
10. What did you like about getting feedback from audio?					
11. How could we improve it?					

Appendix B

Evaluation of feedback through audio – questionnaire data

	No. respondents for each agreement level					No. respondents per question	Mean response	Standard deviation of response
Question	1	2	3	4	5			
Q1	1	0	8	15	11	35	4.00	0.89
Q2	0	2	9	12	11	34	3.94	0.91
Q3	2	2	13	14	4	35	3.46	0.97
Q4	0	5	11	16	2	34	3.44	0.81
Q5	2	6	14	7	5	34	3.21	1.08
Q6	1	3	11	13	7	35	3.63	0.99
Q7	0	3	8	16	7	34	3.79	0.87
Q8	3	8	13	8	3	35	3.00	1.07
Q9	0	2	3	10	20	35	4.37	0.86

Table B.1 – Questionnaire data

73 John Heyda; Imagining Another Chance for Reader-Response Theory

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Format: oral

Programme Slot: Wednesday 15 September 2010, 15:30–16:30, Room 1.8

Short biography of the author: John Heyda is Associate Professor of English at Miami University Middletown in Middletown, Ohio. He has years of experience teaching Composition and Literature, a required course for first-year students at many American colleges and universities. His essay, "Along the DMZ Between Composition and Literature" appears in Edith Baker and Linda Bergmann (eds) *Composition and/or Literature: The End(s) of Education*. Urbana, IL: NCTE Press, 2006.

Keywords & Précis: **academic reading; literary theory; writing/reading relationships**

Is a viable, academically-oriented reading pedagogy recuperable from reader-response theory? This presentation argues that giving reader response another chance in the classroom will require a more inclusive pedagogy, one that engages texts besides the literary. A David Worster essay on "sustainable development" will serve as an example of a non-literary text students can learn to negotiate via a reimagined reader-response pedagogy.

Full Paper:

Imagining Another Chance for Reader-Response Theory

In July 2004, a major National Endowment for the Arts (NEA) study, *Reading at Risk: A Survey of Literary Reading in America*, reported that "the percentage of Americans who read at least one book of any kind in the past year… declined from 60.9% to 56.6%," and that "the percentage that… read a work of literature in the past year declined even more, from 54% to less than half, or 46.7%" (National Endowment for the Arts 2004). The NEA's data showed, as well, that "the sharpest decline in literary reading rates" had "occurred among people between the ages of eighteen and thirty-four". These declines were linked to "increased participation in a variety of electronic media" and pointed to "an erosion in cultural and civic participation". Dana Gioia, NEA chair, observed that "anyone who loves literature or values the cultural, intellectual, and political importance of active and engaged literacy in American society will respond to this report with grave concern". For Gioia, a crisis in reading was now at hand.

It wasn't long before the national media were weighing in on this latest crisis. Columnist George Will declared the decline in literary reading to be but one more symptom of "the depredations of higher education", which, for Will, were all about the undermining of the traditional humanist canon (Will 2004). Because we have lost "a common culture of shared reading", an entire nation now found itself at risk in "today's new age of barbarism". In an editorial-page column for the *New York Times*, entitled "The Closing of the American Book", Andrew Solomon treated the decline in "reading for pleasure" as no less than a crisis in national health, national politics, and national education. Indeed, for this writer, the decline threatens our very way of life. "The retreat from civic to virtual life is a retreat from engaged democracy," Solomon observes, "from the principles that we say we want to share with the rest of the world. You are what you read. If you read nothing, then your mind withers, and your ideals lose their vitality and sway" (Solomon 2004). Newspaper editorials were quick to pick up on sentiments expressed by Will and Solomon. On the editorial page of the *Cincinnati Enquirer* one could read, for example, that "it's not that people can't read, it's that they don't want to read. And what they don't want to read is 'literature' – novels, short stories, plays and poetry, works whose complexity of thought and richness of expression cannot be matched by the quick-cut flash of electronic media" (Cincinnati Enquirer 2004).

The NEA study drew the attention of academic leadership as well. In "The Situation of the Humanities", Bates College President Elaine Tuttle Hansen claims that "my experience confirms the results of the NEA report and suggests to me that we ought to be talking far more often and vocally about why we need readers and how to develop them" (Hansen 2006). She adds that "we as humanists need readers because if you do not read much to begin with, you aren't going to find your way easily to most humanist disciplines". Hansen goes on to say that we "need readers, … especially… literary readers, because even as other sources of information may supplant books…,

books remain a singularly important source of information about certain values, perspectives, approaches".

Responses to the NEA report show, among other things, how clumsy manufacturers of literacy crises have become of late. Will and Solomon and the editors at the *Cincinnati Enquirer* might have been ready to stir things up but, for the most part, response to *Reading at Risk* has been muted. It is rather ironic that this new clumsiness and the media's muted response will not benefit academic reading instruction in the United States. How helpful it might have been had the report exposed the narrowness of what passes for academic reading, its preoccupation with the remedial, its disdain for theory and research.

By misdirecting its outrage, *Reading at Risk* has done nothing to help launch a critical pedagogy for reading capable of displacing the nuts-and-bolts preoccupations with comprehension, fluency, and study skills that define academic reading today. What might *Reading at Risk* have attended to had it tried to define reading as an academic rather than leisure-time pursuit? Would it not have had to devote some time to the case of reader-response theory and its not entirely happy reception in the U.S.?

Let us return, for a moment, to the ineptness of the NEA's report. It must be said that its shortcomings are rather surprising, given that the business of conjuring crises in the humanities has become quite the art form over the years. Consider the 1975 *Newsweek* magazine cover story, "Why Johnny Can't Write", which came down hard on writing instruction, and the National Commission on Excellence in *Education*'s 1983 study "A Nation at Risk", which blasted the American public education system. The *Newsweek* cover story didn't try to establish that Johnny couldn't write; it's title, "Why Johnny Can't Write" makes it obvious enough that its main aim was to cast blame, and a principal target of its blame game turned out to be a 1974 Conference on College Composition and Communication document, "Students' Right to Their Own Language", that had little if anything to do with *Newsweek*'s cover-page crisis. Still, by concentrating on students and what they weren't able to do, the magazine managed to create enough of a stir so that, even to this day, the *Newsweek* story gets credit for jumpstarting subsequent nationwide reforms in writing instruction. The 1983 study, "A Nation at Risk", succeeded in making its mark by targeting declining educational attainments. Again, students and their shortcomings were the focal point and, again, a crisis-creating study won a place in education history. Just a few years ago, for instance, when "A Nation at Risk" marked its twentieth anniversary, the *Peabody Journal of Education* organized a special symposium to reappraise the study and review its impact.

It's unlikely that *Reading at Risk* will have anything like the staying power of either of these crisis-producing texts and for a surprisingly simple reason. *Reading at Risk* treats reading as outside the jurisdiction of educators, as an extra-curricular activity. If Johnny couldn't write back in 1975 due to inadequate instruction in writing (that according to a successful crisis-manufacturing cover story by *Newsweek* magazine in December of that year), Johnny won't read today for reasons other than his teachers' or the educational system's shortcomings. The NEA report isn't even targeting students, but Americans, albeit younger Americans. The report, which wants to offer an "invaluable snapshot of the role of literature in the lives of Americans" purports to come "at a critical time, when electronic media are becoming the dominant influence in young people's worlds". For a report that wants to herald crisis, however, *Reading at Risk* has its targeting all wrong. Instead of going after reading instruction and its failings, the report goes after declines in literary reading. As a result, the report is in no position to target educators for such fall-offs in this leisure-hour activity. The NEA winds up targeting, instead, leisure reading's new competition, which emerges as the villain of the piece. We learn, for instance, that "in 1990, book buying constituted 5.7 percent of recreational spending, while spending on audio, video, computers and software was 6 percent. By 2002, electronic spending had soared to 24 percent, while spending on books declined slightly to 5.6 percent." In truth, the teaching of reading in the schools gets off easy in *Reading at Risk*.

What if the NEA's bid to conjure a new literacy crisis had dealt with reading defined as an academic rather than extra-curricular activity? What signs of crisis might such a report have called attention to? Consider the essay "The Transition to College Reading", in which Robert Scholes cites a colleague's observation that students "are more inclined to substitute what they generally think a text should be saying for what it actually says, and lack a way to explore the intricacies of and interests of the words on a page" (Scholes 2002). Scholes identifies but one of the myriad difficulties college students encounter with academic reading. Signs of crisis might include, too, reading pedagogies' general absence from the undergraduate curriculum, and the failure in the U.S. to establish even a semblance of a programme for academic reading beyond the limiting curricular space of the required first-year

writing course, known as "litcomp", that has combined the teaching of writing with the study of literature. Yet another sign of crisis might be academic reading's once promising but ultimately unhappy encounter with reader-response theory. In "The Reception of Reader-Response Theory", Patricia Harkin details how reading's most popular and successful postwar pedagogical initiative, reader-response theory, lost ground in the U.S. during the theory boom of the 1970s and 1980s (Harkin 2005). For Harkin, this happened for two main reasons.

For one thing, this body of work (Bleich, Holland, Iser, Rosenblatt, etc.) has become a victim of its own "overexposure". If reader-response theory is, as Harkin notes, "an effort to provide a generalized account of what happens when human beings engage in a process they call 'reading'", then such accounts belong, quite properly, to the work of a range of disciplines, from linguistics to psychoanalysis. Soon enough, commonplaces of reader-response theory were appearing "as assumptions in cultural studies, as well as in performance, postcolonial, and queer theories". In other words, as Harkin puts it, "reader-response *conceptions* are simply assumed in virtually every aspect of our work.' Even if it has become this ubiquitous, though, reader-response was bound to lose out to "high theory" in the academic culture wars of the last quarter century.

For another thing, reader-response proved entirely too successful in the classroom. It made acts of reading teachable and in ways that could include all readers. This set it at odds with much of the rest of the theory movement. Harkin observes that "all of the theories of the theory boom took the power of meaning making away from the author (exclusively), but only reader-response gave that power to any old reader". For the newly professionalized and expert readers of Derrida, Lacan, and Lyotard, reader-response's openness to a wide range of possible readings of difficult texts would not do. Reader-response was dismissed, too, by compositionists, who wanted to establish academic identities of their own and saw attending to writing – and not reading – as the way to do so. Reading theory was seen as inevitably to do with literature, and literature had become composition's principal adversary in its own drive to professionalization. In the end, reader-response was bound to lose out to "high theory" in the academic culture wars of the last quarter century.

There is hope now, though, that reader-response might yet align with writing and other communication arts in building coalitions capable of tackling the pedagogical challenges of a new century. New initiatives such as communication across the curriculum programmes, the development of undergraduate writing majors, service and community-based learning, and the study of visual and nonprint rhetorics give reading another chance to find a place for itself at the table of academic disciplines. This new constellation of academic opportunities might succeed, however, only in reinforcing an academic identity for reading that emphasizes pedagogical or service orientations at the expense of research. What are the prospects, then, that reader-response theory might get a second chance to establish its own identity? What chance is there that, this time around, reading will gain a foothold in the research realm? If it does succeed in doing so, what will inform its research agenda?

So, where are we today? Harkin claims that "a pedagogy is still recuperable" from reader-response. Certainly, there is much to retrieve from what was once a popular if theoretically flawed pedagogy developed through reader-response criticism. One way to go about this work is suggested by Michael Berube, for whom the demise of reader-response can be attributed, in no small part, to the outcome of the Stanley Fish/Wolfgang Iser debates of the early 1980s. "In 1980," Berube writes, "reader-response criticism was considered a major school of contemporary literary criticism," but "by 1990… any informed observer of the academic scene would have to have wondered where in the world reader-response criticism had gone" (Berube 2004).

And what happened to reader-response? According to Berube, "one of its most important American exponents, Stanley Fish, killed it the day he published his review of Wolfgang Iser's 1978 book, *The Act of Reading: A Theory of Aesthetic Response* (Fish 1981). To make a long story short, "after the Fish/Iser exchange," Berube observes, "it became possible for professional literary critics to operate as if there were nothing inside the text, and as if this were a good thing too". This was because, as Berube would have it, "the problem with Iser's account of reading… is that it presumes that some features of texts exist prior to or beyond any scheme of interpretation".

Iser's programme showcased "gaps", moments in the reading of a text when a reader encounters difficulties in meaning making. Fish seized on Iser's treatment of gaps to claim that "if gaps are not built into the text, but appear (or do not appear) as a consequence of particular interpretive strategies, then there is no distinction between what the text gives and what the reader supplies". Was everything up for grabs then?

Not for Fish. "There is no subjectivist element of reading, because the observer is never individual in the sense of unique or private, but is always the product of the categories of understanding that are his by virtue of his membership in a community of interpretation." Soon enough, Iser's promising reading programme of identifying gaps and finding ways of closing them gave way to what Fish had wrought: "the denial of determinate meaning, the insistence on the ubiquity of interpretation, and the anti-voluntarist, strong-constructionist account of 'communities' that constrain any individual's activity of interpretation".

If reader-response is to get another chance, then, it will need to be more interdisciplinary and about more than reading literary texts. Reading will have to cross disciplinary boundaries. Reader-response will have to take on non-fiction – primary sources, scholarly journal articles, well-styled essays, opinion pieces, manuals and textbooks.

Reader-response will need to take up Iser's theoretical shortcomings as well. In its first incarnation, reader-response concentrated on the individual reader and his or her encounters with difficult texts. Fish was right, certainly, to question this reliance on the individual. His focus on community proved crucial, regardless of how rarefied a notion it might have seemed at times. Pedagogies capable of accommodating his social-constructionist alternative have succeeded in the realm of academic writing. They can play a role in a revived programme for reader-response as well.

Can we not imagine, then, a revived reader-response applying to all sorts of academic reading? Would not a new, more capacious reader-response pedagogy help us think beyond the "nuts and bolts" approach so commonplace today in the teaching of reading? Is it not time to envision a reader-response approach useful for many disciplines, and not just those of a more literary character?

* * *

For my presentation, I will review the *Reading at Risk* survey in order to distinguish between the more commonplace definitions of reading (reading for pleasure, extra-curricular reading) represented by such surveys and a more fully-developed conception of academic reading that a revised reader-response approach could supply. From there, I will go on to suggest ways in which we might develop a more academically inclined reader-response approach. To illustrate how such an approach might work in the classroom, I will offer, as an example of a text to read with students in a reimagined reader-response, David Worster's "The Shaky Ground of Sustainability" (Worster 1993). I assigned this reading in a team-taught Integrative Studies seminar built around the theme of sustainability. Worster's essay questions the "popular environmentalist slogan of 'sustainable development'", claiming that it has come to represent "a broad, easy path where all kinds of folk can walk along together, … unaware that it may be going in the wrong direction". He goes on to assert that, "although it seems to have gained a wide acceptance, it has done so by sacrificing real substance". Worster links the rise of sustainable development to "a new permissiveness in ecology", one that "makes human wants and desires the primary test of what should be done with the earth". This permissiveness runs counter to the "contemporary environmentalism" first emerging back in the 1960s and 1970s, where "the goal was more obvious and the route more clear before they became obscured by political compromising".

To respond to Worster, readers must carry out a number of reading acts. These acts must probe the slogan of sustainable development, evaluate how helpful the new expertise involved with "sustainable development" can be, and follow Worster's line of thought as he details "flaws in the ideal". They must work out "where the discussion is right now", both as Worster sees it and as they see it themselves, and they must sort out what he objects to so much in the "sustainable development ideal". Needless to say, venerable classroom practices associated with traditional reader-response pedagogy can offer students little guidance when having to perform so many intricate, closely linked reading acts. My presentation will offer my classroom experience with this text to show how a new kind of guidance might be constructed, how guiding students in new ways must expose limitations in traditional reader-response pedagogy, and how these new ways might point up new directions and another chance for reader-response theory.

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74 Alison James; Maps, Membership, Mazes: How recognizing and producing their own landscapes of practice helps students deepen their personal and professional development

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Format: oral

Programme Slot: Wednesday 15 September 2010, 11:30-13:00, Room 1.1

Short biography of the author: Alison is Head of Learning and Teaching at the London College of Fashion and has a broad remit spanning staff development and qualifications, educational projects, pedagogic research, and teaching. One of her principal interests lies in all aspects of personal and professional development and most particularly how students can engage more deeply with this through autobiographical perspectives of all kinds.

Keywords & Précis: personal & professional development; visual; reflection; community; practice

Research evaluating the impact of approaches to personal and professional development rooted in social learning theories (particularly Communities of Practice), as well as those of autobiography, narrative and self-construction. Using innovative and visual media with this practice/theory basis to explore with students how identity informs reflection and future-building.

Abstract:

Introduction

In 1997, the Dearing Report advocated the explicit integration of Personal Development Planning (PDP) into HE courses in the UK to help students plan and monitor their learning and decide on future actions. The reflective practice PDP advocated is revisited in *Maps, Membership and Mazes* from the perspective of Communities of Practice (CoP) theory (Wenger 1998); at the London College of Fashion, this process is known as Personal and Professional Development (PPD).

Maps refers to how students navigate their personal, academic and professional landscapes, *Membership* the different "communities" they belong to en route and Mazes the responses they make to obstacles, dead ends and changes of direction. *Mazes* is also a direct visual referent to *PPD Coach*, an online, activity-based resource (which can be used with e-portfolios or face to face) to enhance students' reflective capacity and self awareness, while broadening their conceptions of employability from "getting a job" to learning a way of being and acting in the world

PPD Coach

Stuart Hall has written of the ways in which personal identities are multiply constructed through experiences and encounters and argues that the shaping of the self is not merely a "return to roots but a coming-to-terms with our routes" (Hall 1996: 4). This belief is central to *PPD Coach*; while other PPD tools focus on skills audits and practical tasks (CV writing, etc.), *PPD Coach* is designed to enable students to identify not simply the things they can do, but who they are, where they have come from (their "routes") and where they might best flourish. This chimes with the need voiced by Stephen Isherwood, Graduate Recruiter at Ernst and Young, for employers to "get to the heart of the candidate" (Isherwood 2009) – not just their functional capabilities. *PPD Coach* embeds aspects of learning and identity theories (e.g. of Personal Constructs and of the emotions) in activities using inflatable pods, wikis, and movies to boost student motivation and interest in critical and reflective thinking as key to building their professional identity. Such activities are deliberately prioritized as our students are largely visual/kinaesthetic learners who are not always fond of writing, while reflective practice is often associated with text.

The research

PPD Coach was trialled primarily at LCF on a final year BA unit, Reflective Discourse 2009–10, and I am now relating elements of CoP theory to this experience in order to understand

The relevance of CoP to students as a way of making sense of their worlds;

The usefulness of *PPD Coach* in enhancing understanding of self and world, explored through Wenger's key modes of belonging – engagement, imagination and alignment (Wenger 1998:173–4);

Lessons for future delivery.

Naturally occurring data for this study was drawn from taught sessions with 200 students over eight months, 20 student podcasts, 200 student essays, and elicited data from 7 semi-structured interviews.

This paper will present:

- preliminary analysis of findings;
- discuss the challenges and benefits of embedding practical and theoretical perspectives on identity within the curriculum;
- suggest that these can add an important dimension to the student experience.

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75 Karen Quinn; Embedding Employability in HE – Worlds Apart: Illuminative lessons in understanding stakeholder perspectives

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Format: oral

Programme Slot: Wednesday 15 September 2010, 11:30-13:00, Room 1.1

Short biography of the author: Karen Quinn works in the role of Senior Project Manager for ACU (Add+vantage Coventry University), a scheme of 300+ mandatory, credit-bearing employability modules. Karen is based in the University Careers and Employability Service. Prior to this she taught A level Economics, HND Business and Finance and Professional Programmes (CIM, CIPS, ACOT and CIPD) for twelve years. Karen holds Qualified Teacher Status with specialism in Business Education and is also a qualified careers adviser. Karen's research interest lies in designing pedagogies that enable students to develop, recognize and articulate their employability effectively in line with employer and other external stakeholder requirements.

Keywords & Précis: graduate employability, HE institutional approaches to employability, employers' requirements

The findings of this research paper highlight a series of recommendations to inform policy development on future cross-university employability pedagogies, in order to manage stakeholder differences better, vis-à-vis: changing employer requirements; student expectations and satisfaction; fit with corporate agendas; wider trends in internationalization and globalization; and government policy.

Abstract:

Corporate objectives for developing students' employability appear high on UK university agendas and have led to much rhetoric and a myriad of institutional approaches to embedding employability. Arguably, successfully integrating the development of students' employability is still one of the biggest challenges facing Higher Education.

Examined in this paper is one such example of an employability initiative; Add+vantage Coventry University (ACU), a university-wide, whole-curriculum approach for over 10,000 students. Launched in 2006, ACU embeds 300+ mandatory credit-bearing employability modules into the undergraduate curriculum. Designed to give students employability, personal development, and career management skills over other newly qualified graduates, ACU crucially aims to support students in achieving their further study, career or self-employment aspirations. At an institutional level a target, known as the 2010 Test, was set for uplifting the number CU graduates into graduate jobs from 60% to 70% (as measured by the Government's Destination return – DLHE – at six months after graduation).

Shared in this paper are the author's experiences of developing, implementing and, most recently, conducting a large-scale review of ACU using the RUFDATA framework (Saunders 2000). These experiences form the basis of this research paper which aims to "illuminate" (Parlett and Hamilton 1972) the complex nature of employability and challenges HE faces when developing appropriate employability pedagogies. A range of stakeholder perspectives are examined by collecting data on stakeholder perceptions about ACU and employability. Data were collected using semi-structured interviews, online survey instruments and observation. Data were analysed for clusters of common themes which form the basis for ACU policy recommendations.

Furthermore, the author's experiences show that employability appears to be widely misunderstood by the academy whose curricula responses and designs can often be at odds with the requirements of employers and other external stakeholders, as evidenced by the performance of graduates during graduate recruitment processes. In particular, developing students' abilities to recognize, reflect upon and articulate their employability to employers remains problematic. This is a challenge for curriculum designers, with responsibility for producing learning and assessment materials to address students' employability.

This paper therefore highlights a series of recommendations which will inform the development of content and assessment of ACU employability pedagogies, in order to introduce and/or re-enforce the values of employers and external stakeholders into the curriculum. The Add+vantage Scheme represents a significant institutional attempt to address undergraduate employability. It involved major

structural, technological and cultural change. The findings of this research may inform policy development on cross-university employability pedagogies elsewhere within the sector and will be of interest to those with responsibility for employability.

Of notable significance from the findings of this research, is the perception of how well some students (and their academy) think they have developed their employability in relation to how well employers perceive this to be the case. This difference is a defining feature arising from the research findings and is of major concern to the author. This paper may contribute to current debates in this area. The paper draws upon up-to-date extant literature on graduate employability and contextualizes the Coventry experience, within that of the UK HE sector and labour market/s.

The author recognizes that "the diversity of the [HE] sector" will mean that "caution needs to be applied when extrapolating the experiences of one institution to that of another" (Atlay and Harris 2000). Therefore the intention of this research paper, through the author's experiences, is to shed light on the different paradigms or worlds of stakeholders, and to show how these boundaries can be traversed within the context of employability learning and assessment activities. New sets of understanding about embedding and developing students' employability are formed, which may be of interest to HEI policy-makers and practitioners alike, with responsibility for developing undergraduate employability.

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76 Hyacinth Skervin; Dialogic Analysis of Narrative Results from a Gender Study: Lessons for transformative research

Author Institution: North West University, South Africa

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Format: oral

Programme Slot: Thursday 16 September 2010, 11:00-12:30, Room 1.1

Short biography of the author: Hyacinth Skervin is a Post Doc Fellow based at North West University, Potchefstroom Campus, South Africa. Her current research focus areas are gender equity and human rights education. She specializes in curriculum and instruction, higher education theory and policy.

Keywords & Précis: transformative research; critical dialogue

This article is a critique of a research study aimed at social and cultural transformation within a South Africa context. It advances the suggestion that results of the study were found unacceptable due to a proposition-result dialectic that exposed different structures of thought and meaning-making between researchers and subject participants.

Abstract:

This article is based on the pilot study of a South Africa Netherlands Research Programme on Alternatives in Development (SANPAD)-sponsored research project aimed at social and cultural transformation in the South Africa context. The project gives focus to the violations of the rights of girls making truth claims insofar as they relate to traditional belief systems and cultural practices primarily among ethnic South African groups. The author of this *auto-feminist ethnographic* study has specific responsibilities within the team of ten researchers to: observe the research process; contextually map the research environment; and is one of two administrators of the field exercise directly involving the subject participants. Primary activity in the pilot study was a narrative writing exercise in which a mostly peri-urban class group inclusive of fourteen pre-teenage girls from South Africa (and, for comparative purposes, an undetermined number from the Netherlands) were asked to write about their own *"cultural and religious practices that made them [personally] comfortable and uncomfortable"*. With the South Africa group being the more scrutinized, narrative responses were solicited within the assumption that the girls would apply knowledge of South Africa as a new, diverse, actively democratic society, and of the human rights education, which forms an integral part of the national school curriculum that they study.

Narrative analysis involved use of Gee's (1986) micro-line technique to indicate each idea in the narrative as a unit of discourse and Singer's et al. (1993) method to tally the number of commonalities and variations among the discourses. Results from the pilot study showed that links to traditional practices, where they were made, were tenuous at best and were related to gender, where they did so to any significant degree, as a constitutively discriminating set of [cultural] roles in the home. A failure to understand the concepts of "culture and religious practices" in the narrative question was common throughout researchers' reflection on the results. The main recommendation was that participants needed to be more closely sensitized to the *"issues"* of concern to the research project.

Although the narrative results were deemed unacceptable, this article submits that both the narrative question and narrative results represent a proposition-result dialectic and dialogue that exposed different structures of thought and meaning-making between the researchers and the subject participants. That the two belong to diverse ethnic and social backgrounds already presupposes diverse contexts of experiences that are unique and meaningful given South Africa's history and newly democratic environment. It submits further, that beyond the lack of understanding of what culture means, as researchers initially concluded, are several interrelated factors that were responsible for the nature of the responses and conclusions that were drawn from them. These relationships are fully developed in the article. Grouped as themes, they are:

i)   Impact of social group context and contextualities on the structure of thought and reason in both groups;

ii) Divergent structures of language and thought patterns between subject participants and researchers

iii) Disjunctures in the interpretation of human rights used as a means to universalize and/or essentialize certain patterns of human formation and behaviour;

iv) Lack of clarity in the dialogue between researchers and subject participants about what the research is aiming at in the narrative discourse.

From both Habermasian and African philosophical perspectives, the article attempts further to show how these differentiated factors facilitate dissonance in a dialogue that appears to have subverted the expected outcome of agreement needed to further guide the gender study. A central premise of the article is that the dissonance in communication is rooted in historical and socio-cultural antecedents that are averse to each other and irreconcilable in a public sphere in which they continue to have import. Discrete gender roles and gender *inequality* in home chores for instance, were strongly noted by both girls and boys as cultural practices in the lived realities of their everyday lives. While shifting the dialogue from culture and religious practices of difference that may or may not violate the rights of girls, it especially brought into focus an issue that was more sociological in nature – a concern relating to the *quality of life* among this group. More significantly, it is also a concern that echoes one of the most definitive theme areas of the country's authoritative body on gender (Commission for Gender Equality Strategic Plan 2008-2013) where they did to any significant degree, in its effort to address issues that limit the access of women to social and economic parity particularly among ethnic African groups. The article offers an example of how to delineate causes of dialogic ruptures in research that seeks to traverse socio-cultural spaces and values and ideas on how to respond to them.

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77 Kathy Courtney; Exploring the Idea of Interprofessional Teaching in HE

Author Institution: Coventry University, United Kingdom

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Format: oral

Programme Slot: Thursday 16 September 2010, 13:30-15:00, Room 1.2

Short biography of the author: Kathy Courtney has worked for a number of years as an Educational Developer at Coventry University. Working in collaboration with academic staff, librarians, careers staff and technicians, she enables staff development in the context of supporting innovative teaching and learning projects. Her research interests focus on the changes required in delivering higher education in order to respond adequately to the information- and technology-rich environment in which we now live.

Keywords & Précis: educational development; teaching in higher education; interprofessional teaching

Having collaborated in a number of developmental projects over a number of years, an opportunity to work with the Centre for Interprofessional e-Learning (CIPeL) has triggered the idea that interprofessional teaching in Higher Education would be an effective and appropriate response to the changing landscape in which HE is now functioning.

Abstract:

This paper draws on observations and insights gained by an educational developer through participation in separate development projects over a number of years, and ends by suggesting that interprofessional teaching in Higher Education is relevant and appropriate in the context of an increasingly technological, information-driven and global environment. Going back nearly a decade, the author worked collaboratively with a subject librarian to introduce a blended approach to the teaching and assessing of information skills (Patalong and Courtney 2001, Courtney and Patalong 2002, Patalong 2003). One outcome of this collaboration was the revelation, for the author, that librarians feel marginalized within the institution, that academic colleagues are often seen as "gatekeepers" and, generally, that the substantial contribution librarians make to student learning is undervalued (Courtney 2004).

A second project brought contact with a group of technicians, whose role had changed considerably though greater involvement with technology and increased direct student support. A project led by Elizabeth Grant, designed to change the perception of technicians' work, culminated in a total of three exhibitions which targeted and celebrated technicians' work and their contribution to student learning. These exhibitions were enormously successful, in the sense of changing perceptions and attitudes across the university, and they also changed the way the technicians saw themselves. Regrettably, the positive effects of this project could not be sustained, and technicians are likely to continue to feel "in the shadows" (Grant et al. 2002, Courtney 2004).

More recently, collaborative efforts with the Centre for Interprofessional e-Learning (CIPeL) have introduced the author to the interprofessional agenda in health and social care (Courtney 2008). Concepts from this domain seemed to resonate with previous experiences: the problem of getting members from allied professions to work in much closer collaboration, as equal partners, in the interest of providing a better service for their clients. Why not import this approach into teaching and learning in Higher Education? There are many similarities between the two domains. It is suggested that professional identities in an interdisciplinary context should be visualized as having a "core" that corresponds to the established uni-professional identities, but adds a "peripheral" part which consist of aspects of expertise which is core to the other members of the interprofessional team. Team members would be able to provide support and development for each other (Nomdo 2004). The introduction of interprofessional teaching would represent a major shift, involving double-loop learning (Argyris 1983). It would require courage to implement such an approach, but it would have the potential to increase organizational learning (Boyce 2003). As Furber et al. (2004: 360) note, the developing interprofessional practice is a way of facing "ever growing dilemmas of health care in the 21st Century". Adopting interprofessional teaching in HE may well give a higher education institution a similar edge in the future.

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80 Juliana H.C Hsu and Ching-Yi Li; The Construction of an Affective Curriculum: Building a learning network on campus

Author Institution: Chung-Jen College of Nursing, Health and Management, Taiwan

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Format: oral

Programme Slot: Thursday 16 September 2010, 13:30-15:00, Room 1.2

Short biography of lead author: Dr Hui-Chen Hsu was awarded a PhD degree in the area of affective education at the University of Warwick in October 2009. She is currently working in Life Education Centre, Taiwan as the coordinator of affective curriculum.

Keywords & Précis: **affective learning; learning proficiency; motivation**

This study was conducted according to the Taiwanese Educational Policy of Improving Students' English Learning Proficiency in the System of Higher Education (MOE, 2007), and it was sponsored fully by the Ministry of Education for a period 2008-2009. The study aimed to investigate students' attitude towards their English learning programme by Internet which provided them with more interactive learning opportunities to communicate with English native speakers; their learning interests and English proficiency were examined in this study.

Abstract:

This is a presentation of a study that I carried out at Chung-Jen College of Nursing Science and Management in Taiwan. The main purpose of the study was to examine "affective learning" in an English curriculum for the English as foreign language (EFL) learners. Affective learning takes place when the facts and skills that students learn are directly or indirectly relevant to their life experiences (Hsu, 2002). The project proposed to investigate the impact of a meaningful learning environment through modern developments in technology such as Internet access. By building up an interactive learning campus via Internet access, the students' interests and proficiency in the learning of the English language could be examined.

The development of the learning environment was based on the main programme "Professional Foreign Language Teaching Experiment", which includes three sections: "foreign language teaching policy of Ministry of Education", "English test and after-school teaching", and "multi-media learning laboratory". According to European perspectives of affective education, English learning is efficient if teaching materials can be relevant to students' belief, attitudes, and faith of life (Lang 1998). Hence, to develop an affective curriculum of the English language, the project was carried out in a sequence of three phases within both the formal and hidden curricula so as to realize the following goals:

Phase I:	a. To establish the English Teaching Resource Center
	b. To carry out the professional oral training programme
Phase II:	c. To build up an English learning corner
	d. To start English satellite television time
	e. To start an English air classroom
	f. To build up the English self-learning Center
	g. To invite guest speakers from different cultural backgrounds
Phase III:	h. English proficiency test and questionnaire survey to investigate
	students' attitude toward their learning and conduct the final report

The study was undertaken in the period 2008–09 and it was sponsored fully by the Ministry of Education (MOE 2007). The English curriculum was developed to provide students with new learning experiences. For example, the students could communicate with English native speakers through English learning websites. The approach of case study was used as the main methodology (Yin, 1994). Online classroom observation, students' workbooks, and a questionnaire survey were employed to investigate their learning outcomes and to validate the findings for generalization (Robson 2000). The main research group comprised around 100 students aged 15 to 16. The findings

showed that students were not only motivated to speak English, but also improved their English proficiency.

Given the evidence of the data, the study concluded that the EFL learners can improve students' learning interests and proficiency through the Internet. Students learnt the English language not only by using textbooks but also through real experiences of their use of English websites. This study showed that the adoption of modern technology indeed offered students more opportunities to use English. The study examined students' attitude to learning and their English proficiency through a newly designed English programme. The study was not sufficient to generalize the many aspects of modern technology which were applied to teaching and learning. More research is needed to validate and extend the present findings, and to focus on aspects of topics that could not be explored in this study.

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81 Matt Mawer; Reflections on Researching Virtual Worlds as an Educational Space

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Short biography of the author: Matt Mawer is a PhD student in the Learning Innovation Applied Research Group, Coventry University. His doctorate focuses on students' perspectives on participation in virtual worlds within UK higher education.

Keywords & Précis: **methodology; pedagogic research; virtual worlds**

This paper will share reflections on methods of data gathering in a multi-sited, multi-method PhD research project exploring students' perspectives and experiences of participating in educational applications of virtual worlds. In doing so the paper will explore how the chosen methods functioned, the types of data they yielded, and how this relates to traditional models of those processes. By presenting a practical review of several aspects of data gathering practice I aspire to share insights that many aid the audience in future explorations of educational virtual world spaces.

Abstract:

In novel educational spaces, reflection upon methodology is an essential vehicle for ensuring our research into pedagogic issues is effective. The degree to which research practice must differ (or remain the same) in order to yield trustworthy data about students' experiences or pedagogic implementations is key to reliably gauging concepts such as "impact". In this paper, I present reflections upon the methodology employed to research student perspectives and experiences of one such genre of novel educational space: virtual worlds.

Virtual worlds have become increasingly popular as pedagogic spaces within UK higher education, and reports on recent activity suggest that almost all UK universities are employing a virtual world platform in some manner (Kirriemuir 2009). Their unusual aesthetic and multi-modal qualities have attracted a host of teaching applications and subsequent pedagogic research (e.g. Daniels Lee 2009, Jarmon 2010). As 3D virtual spaces that provide for embodied interaction, these educational platforms are notably different from the contexts in which we might ordinarily conduct education research. Educational research texts can offer us effective frameworks for exploring pedagogy and learning, but these often (necessarily) lack sensitivity to the myriad of educational contexts in which their methodological guidance may be employed (e.g. Cousin 2009, Cresswell 2007). Research texts have offered insights into how methods might be adapted to explore internet communicative technologies as sites or tools for data gathering (e.g. Hine 2000), but the literature on such adaptation in the context of virtual worlds is limited. It is perhaps unsurprising then that a host of disparate methods has been employed in exploring aspects of education in virtual world spaces, including ethnographies (Gillen 2009), interviewing (Mount et al. 2009), meta-analysis (Jarmon 2010) and surveys (Daniels Lee 2009). As a consequence, we now have a more fully developed literature regarding the pedagogic value and usage of virtual worlds, but limited reflection upon the modes of research employed.

This paper will share reflections on methods of data gathering in a multi-sited, multi-method PhD research project exploring students' perspectives and experiences of participating in educational applications of virtual worlds. In doing so the paper will explore how the chosen methods functioned, the types of data they yielded, and how this relates to traditional models of those processes. Through presenting a practical review of several aspects of data gathering practice I aspire to share insights that many aid the audience in future explorations of educational virtual world spaces.

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82 Clair Looby; Back to Basics: Understanding workbased tutors' pedagogical constructs

Author Institution: Middlesex University, United Kingdom

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Format: oral

Programme Slot: Wednesday 15 September 2010, 14:00-15:00, Room 1.4

Short biography of the author: Clair works as a senior tutor in the Institute for Work Based Learning at Middlesex University, United Kingdom.

Keywords & Précis: work-based learning; pedagogy

Pedagogical discourses on work-based learning are largely absent from the literature on the subject. This case study examines university tutors' pedagogical constructs in relation to the context of practice and the field of work-based learning.

Abstract:

Pedagogical discourses on work-based learning are largely absent from the literature on the subject. Discourses on work-based learning tend to focus on the triadic relationship between the university, the employer and the student, or on the knowledge which is created in the workplace (Siebert et al. 2009, Boud 2001, Costley 2000). This case study examines university tutors' pedagogical constructs in relation to the context of practice and the field of work-based learning. Using semi-structured interviews, a qualitative research framework is employed to identify how tutors conceptualize and approach teaching and learning and the alignment between this and the broader pedagogical values of their institution. The research is situated within a constructivist paradigm, and an interpretivist theoretical framework is applied to show the meaning these tutors ascribe to their experiences and their understanding of their own actions (Travers 2001).

The study identifies a number of factors, for example: a) teaching and learning approaches appear to be influenced by prior teaching experiences; and b) work-based tutors employ a combination of teaching and learning approaches which appear to be teacher-led and learner-centred in focus. It is not clear to what extent the aforementioned approaches align with the pedagogical values of the institution. Moreover the precise work-based pedagogies adopted at an institutional level remain unclear. The study has also yielded further data in the form of concerns about the roles and identities of academics and the way the production and dissemination of knowledge is perceived to be increasingly legitimated in terms of its usability and relevance to corporations. (Winter 2009, Deem et al. 2008, Peters and Roberts 2000) This study concludes with a number of recommendations including the need for further dialogue and research to determine appropriate pedagogies for work-based learning and to build knowledge in this area.

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83 Wendy Smeets and Rebecca Westrup, How to Measure the Impact of Writing Support?

Author Institution: Liverpool Hope University, United Kingdom

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Format: oral

Programme Slot: Wednesday 15 September 2010, 11:30-13:00, Room 1.8

Short biography of the authors: Wendy Smeets is a Writing Specialist with the Write Now CETL at Liverpool Hope University. Her research interests are the use of hybrid reading and writing tasks, the influence of epistemological beliefs, writing assessment, peer tutoring and writing for publications. Dr Rebecca Westrup is a Writing Specialist with the Write Now CETL at Liverpool Hope University. Her research interests include undergraduate students' identities in relation to transitions to university, essay writing, assessment and tutor feedback. In particular she is interested in exploring students' possible opportunities for exercising agency and developing this with the aim to help develop student and staff understandings of essay writing in Higher Education.

Keywords & Précis: embedded writing support; case studies; referencing; academic reading

This paper will discuss a number of case studies that explored different forms of embedding writing support and possible ways of evaluating their impact. One such case study is based on a seminar component that was evaluated in terms of student and tutor satisfaction as well as impact on grades. A second case study is based on a referencing intervention that was evaluated through interviews and focus groups with students and staff

Abstract

Although the importance of academic writing seems undisputed and is in fact seen as one of the most important skills required of graduates (Torrance et al., 1999), measuring the impact of academic writing support has been an elusive matter. Impact has been measured amongst others in terms of grades (Lerner 1997, 2003), self efficacy (see Pajares, 2003), retention (Lerner, 1997), graduate attributes (Torrance et al, 1999), employability (Drew, 1998), communication skills and "transformative attributes such as critique and synthesis" (Harvey et al. 1997:3 in Drew, 1998).

As part of the work of the Write Now CETL, we have explored different ways in which to evaluate embedded writing support. This paper will discuss a number of case studies that explored different forms of embedding writing support and possible ways of evaluating their impact.

One such case study will discuss a 14-hour seminar component on academic reading and writing designed conjointly by Faculty of Education staff and staff at the WriteNow CETL.

This component was evaluated using a paper-and-pencil questionnaire as well as focus groups with students to assess student satisfaction and perceived impact. Student responses related they found the materials challenging but useful. A need was indicated for further support on structural as well as conceptual scaffolding. Interviews were conducted with seminar leaders to collect their feedback with a view to redesigning the component for next year. Finally, grades for the students' first written assignment from last year's cohort, who did not receive any embedded writing support, and this year's cohort were compared. Initial indications are that there has been some improvement in standards of submission (an average increase of 6%) but issues relating to consistent engagement with and delivery of materials, transferability of skills, student perception of task and linkage of readings to the first assignment have also been evident.

Drawing on another case study, Marks+ we will discuss the design and evaluation of a referencing intervention which was developed to help students to avoid unintentional plagiarism. This pilot aims to help students understand how and when to use reference sources appropriately through the opportunity to formatively discuss their tutor feedback, referencing, writing skills and future essays. Central to these aims were a referencing workshop and a new marking process whereby tutors were asked to identify predetermined referencing errors in students' essay writing. Students were then given the opportunity to attend a tutorial to discuss these and their writing generally, engage with feedback, think about future assignments and gain 5%. Underlined by Vygotsky's (1978) zone of proximal development, this process gives students and tutors an insight into the students' positions regarding referencing and we can then help students to engage in dialogue to improve their understanding and authorship of their writing.

This pilot was evaluated by analysing key themes which emerged from focus group and interview data with students and staff. Preliminary findings suggest the intervention has had a positive impact on students' understandings but issues relating to studentship need to be further addressed.

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84 Anthony Kent and Greg Messiah; The Influence of the Physical Environment on Student Sense-making: A widening participation perspective

Author Institution: University of the Arts London, United Kingdom

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Format: oral

Programme Slot: Wednesday 15 September 2010, 14:00-15:00, Room 1.2

Short biography of the authors: Tony Kent is Reader in Marketing at the University of the Arts London; his research lies in the interface between design and marketing, and his current interests are in two fields – experiential marketing and design management. He is Course Director for MA Design Management. Greg Messiah is Senior Lecturer in Design, and Course Director for BA Interior Design at the London College of Communication, University of the Arts London.

Keywords & Précis: physical environment; research methodology; visual methods

The aim of this exploratory research is to understand how the physical environment encountered by first-year students influences their experience of the university. The research was undertaken using an autodriven photo-elicitation method, and the findings demonstrate the importance of specific places and spaces and the journeys that students undertake and their implications for the learning environment and course organization.

Abstract:

The aim of this exploratory research is to understand how the physical environment encountered by first-year students influences their experience and perceptions of the university. In particular it seeks to assess the environment and its impact on undergraduate students from a "widening-participation" background. This group has been actively recruited in recent years and its response to an unfamiliar university environment represents an appropriate focus for this study. The literature review takes an overview of environmental research and the ways in which people are connected to or are part of our surroundings (Hiss 1990), the emotional and functional impact of the environment (Kaplan and Kaplan 1978), and acknowledges that supportive environments provide people with choices, and engage with their perspectives and feelings (Cziksentmihalyi and Hermanson 1995). In an educational context, environmental psychology proposes that all learning appears to be inextricably bound to the environment in which it occurs (Strange and Banning 2001). Campus spaces engender positive responses in a number of senses including community, territory, as a place to call one's own, and wayfinding. In addition, internal environments provide messages of support and non-support signalling a sense of belonging, sense of safety, feeling of being welcomed, sense of role, worth and value (Banning and Bartels 1993).

The research methodology was determined by a constructivist epistemology and a qualitative research approach. The research was undertaken using a photo-elicitation method (Zaltman 1996, Pink 2006) in order to surface meanings from the student participants. Photo-elicitation itself is based on the simple idea of inserting a photograph into a research interview. The respondent is enabled to set the agenda and images evoke information, feelings, and memories arising from the photograph's particular form of representation (Harper 2002). Emmison and Smith (2000) characterize the benefits of photo-elicitation as averting the strangeness of interview situation, providing less hesitant responses, with more direct responses by interviewees to photographs than to an interviewer. Explicitness is achieved through the detail in the personal constructs (Ziller 1990). This study used autodriven photo-elicitation interviews, "autophotography", where the respondent takes the photographs as an active respondent, rather than as an observed subject, and these formed the basis of the subsequent interviews. A sample of fifteen students was purposively selected from the University of the Arts London's widening participation admissions. The elicitations resulted in the photos being sorted into elements which were analysed using a modified repertory grid process, and subsequently into montages which were used for discussion. The findings concerned journeys through the anonymous walkways, that link the spaces and *specific* places within the College and people, allowing constant "grazing" within a space that's full of people, but creating a feeling of loneliness. An important part of this research was to identify aspects of the building and environment that the students did not photograph or discuss. Signage and formal points of communication were largely absent. Staff scarcely feature in these photographs; more surprisingly ICT was unrepresented.

The research concludes that the university site is, firstly, a social environment, that students identify with "their room", and that initial friendships can be enduring through the year and provide an incentive to stay on the course. Secondly, the built environment can empower students and contains references to restrictions and freedom in a variety of ways. Staff should consider the effect of teaching rooms, open access learning rooms, and the spatial configuration of the building on students. Thirdly, the site did not appear to be a very creative place: the photo-elicitation did not provide many inspiring moments, as students explained their themes through photographs of the main entrance, corridors, staircases, and teaching rooms.

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85 Muhammad Munir Kayani, Anisa Kayani and Saima Parveen; Effectiveness of a Pre-Service Professional Development Programme: An analysis

Author Institutions: Muhammad Munir Kayani – Coventry University, United Kingdom; Anisa Kayani – Department of Education, Govt. of Punjab, Pakistan;
Saima Parveen – International Islamic University, Islamabad, Pakistan

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Format: oral

Programme Slot: Thursday 16 September 2010, 13:30-15:00, Room 1.2

Short biography of the authors: Dr. Muhammad Munir Kayani has been working as Visiting Research Fellow and conducting Post-Doctoral Research at the E-Learning Unit, Coventry University, United Kingdom. He has a wide experience of supervising and teaching at the Higher Education level in Pakistan. Dr. Anisa Kayani has been working in the Department of Education, Govt. of Punjab, Pakistan. She has conducted many research studies in the field of Teacher Education. Ms. Saima Parveen is a Post-Graduate student at the International Islamic University, Islamabad, Pakistan.

Keywords & Précis: professional development programme; teacher training

This study considered the "Effectiveness" of a pre-service professional development programme. A questionnaire was designed and conveyed (by post) to the graduate students of two universities, and there were 52 responses. Interviews were also conducted with 10 teachers. Percentages and a chi-square test were used to analyse the data. The findings of the study are that: most teachers and students of the M.Ed programme agreed that the objectives of the M.Ed programme and course contents are achieved; most of the teachers are not using modern techniques in teaching the M.Ed Programmes; and students are not satisfied with the competencies of teachers. The recommendations are that in-service professional training for the teaching staff may be designed to train them to use modern techniques for teaching to enhance the quality of the professional development programme.

Abstract:

Teacher education remains a vital sphere for every country. According to Aggarwal (1998), "Teacher education is not teaching the teacher how to teach. It is kindling his initiative to keep it alive, to minimize the evils of the 'hit' and 'miss' process and to save time, money, energy and trouble of the teachers and taught."

Every country faces challenges in providing well-prepared and effective teachers for teaching (Cochran-Smith 2004). Teacher preparation programmes are designed to prepare the best teachers (Rieg and Wilson 2009).

Teaching is an important part of the educational process. Its function is to impart knowledge and to develop understanding and skills. It is a relationship which has three aspects: teacher, student and subject matter. Through teaching, the teacher intervenes between the student and the subject matter to create understanding among the students. The teacher has to be qualified for this purpose because he or she has to perform a very delicate and difficult function. To become a successful teacher specific training is required for efficient and effective teaching.

Pakistan is a developing country and currently focusing on the quality of teacher education (Govt. of Pakistan 2009). In 2009, the National Accreditation Council was established in Pakistan to recognize the teacher training institutions' programmes.

This study is aimed at investigating the "effectiveness" of a pre-service professional development programme. The M.Ed programme is a pre-service professional development programme and the teachers are trained to teach grades 9 to 12. The objectives of the study are to find out the opinions of teachers and students regarding the effectiveness of the M.Ed programmes at the International Islamic University (IIUI) and the National University of Modern Languages Islamabad, Pakistan (NUML), and to identify the problems of M.Ed students.

Keeping in view the objectives of the research, the questionnaire was designed and administered (by post) to 30 graduate students of the IIUI and 40 graduate students of NUML, receiving 23 responses from IIUI and 29 responses from NUML, hence a total response of 52 from both universities.

Interviews were conducted with five teachers of IIUI and five teachers of NUML, who were involved in teaching the M.Ed programme.

For analysis of the data, percentages of responses were worked out and further analysed by using a chi-square test.

The findings of the study were that most teachers and students of the M.Ed programmes agreed that the objectives of programmes and course contents are achieved.

Most of the teachers are not using modern techniques in teaching M.Ed programmes and students are not satisfied with the competencies of teachers.

The following recommendations have been suggested: in-service professional training of the teaching staff may be designed, keeping in view the needs of students and institutions, and teachers may be trained to use modern teaching techniques to enhance the quality of the professional development programme.

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88 Nigel Ecclesfield and Fred Garnett; The Open Context Model of Learning and the Craft of Teaching

Author Institution: Learner-Generated Contexts Group, United Kingdom

Corresponding author: neecullompton@aol.com

Format: Workshop/Debate

Programme Slot: Wednesday 15 September 2010, 15:30–16:30, Room 1.3

Short biography of the authors: Nigel Ecclesfield currently works for Becta as a research manager. Fred Garnett is a Visiting Research Associate at the London Knowledge Lab. Both authors are members of the Learner-Generated Contexts Group and have worked in community, further and higher education settings as practitioners and researchers.

Keywords & Précis: **Learner Generated Contexts; collaboration in learning; PAH continuum; craft**

Having introduced the Open Context Model of learning at iPED 2009, the authors will explore recent developments in theory, current research and practitioner narratives that demonstrate the application of the model in practice. The concept of teaching as a craft will be explored in this context.

Abstract:

At iPED 2009, the authors presented an introduction to the work of the Learner Generated Contexts Group which provides a framework through which more effective use of technology to support learning can be identified. We focused on the theoretical grounding of both a set of organizing principles for designing learning processes and a means of exploring the nature of institutional practices in developing learning practice.

Currently we are exploring the implications of the Open Context Model of Learning Luckin et al. (2010) for practitioners in post-compulsory contexts. In this paper we draw on this and work by Wesch (2008), Andrews and Haythornthwaite (2007) and Luckin (2010), along with recent findings on the use and implementation of technology for learning in England and other European countries.

Our overarching question is how learning contributes to students' lives in terms of their ability to contribute to their own self-development and their attendant personal, social and political environments. For practitioners we will explore:

How might we know that our teaching makes a difference and meets the needs of students in different contexts?

What practical examples of Learner Generated Contexts exist and how might they be applied in wider contexts?

How might practitioners engage learners in ways that move beyond their being consumers of information and specific curricula?

How can technology change participant relationships in higher education and enhance innovation in learning and teaching?

How might it be possible to demonstrate knowledge exchange between institutions and wider society?

The Craft of Teaching

Sennett (2008) demonstrates that craft skills require 10,000 hours of practice. Furthermore, in an LSDA workshop on Innovations in Learning in 2009, teachers who had achieved "Star" awards identified successful teaching as being cumulatively based on subject mastery and classroom management before allowing students to drive their learning. They saw learning this "craft" as taking 3–5 years to acquire. The Open Context Model provides a framework for understanding this practitioner model of craft-based teaching through the PAH Continuum:

Pedagogy: presenting the subject matter of learning in a way that enables learner understanding

Andragogy: supporting the collaborative processes of a learning group so that communications around shared work amplifies their understanding of the subject and can produce group work for formative assessment

Heutagogy: enabling the development of original responses to learning and the creation of learning opportunities so that work can be presented for summative assessment.

By using the Open Context Model of Learning practically, the craft of teaching becomes the ability to use the framing device of subject delivery to encourage participative group communications whilst offering the possibility of new ways of presenting learning for assessment.

We believe that this works best as the basis of CPD (Continuing Professional Development), roughly three years into professional practice and also provides criteria by which CPD can be evaluated. This can be elaborated from the elements of the PAH Continuum, which we will explore through practitioner and learner narratives.

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89 Gemma Tombs; Using Technology to Innovate Practice: The case of virtual worlds

Author Institution: Coventry University, United Kingdom

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Format: PhD Work in Progress report

Programme Slot: Thursday 16 September 2010, 11:00-12:30, Room 1.4

Short biography of the author: I am a second-year PhD student based at Coventry University, in the Learning Innovation Applied Research Group. My research focuses upon the use of virtual worlds such as Second Life® in UK higher education, and I am currently exploring the impact of "innovation" discourses in HE upon virtual world pedagogical practices.

Keywords & Précis: virtual worlds; innovation; Second Life

This paper seeks to question critically discourses of "innovation" in higher education, drawing upon current PhD research. It will explore the contextual meanings of innovation in reference to virtual worlds, and asks how their positioning as "innovative" technologies will impact pedagogical practices when such discourses no longer surround virtual worlds.

Abstract:

The iPED 2010 conference, "Conceptualising Impact: Exploring the effectiveness of practice through pedagogic research", is reflective of calls to demonstrate excellence and innovation in higher education. Practitioners are encouraged to "innovate" on a regular basis (Hannan and Silver 2000), yet such examples of excellence and innovation are difficult to define (Taylor 2007) and therefore difficult to recognize. Calls to innovate pedagogical practices are thus shown to be problematic and easily contested, yet I suggest that this also offers a kind of freedom in developing practices. If innovation is not easily defined, who is to say what is *not* innovative?

This paper will explore the use of technologies as ways to innovate practices in higher education, and in particular virtual world technologies. The use of virtual worlds such as Second Life extends across the whole of the UK higher education sector, although it is important to note that these uses are not necessarily educational and may extend to marketing, advertising and business uses (Kirriemuir 2009). Virtual worlds have often been depicted as "innovative" both within the media and in a growing body of literature which seeks to explore virtual world practices (e.g. Salmon 2009), including various speciality journals dedicated to the topic (e.g. *Journal of Virtual Worlds*). They have been described as enabling the facilitation of innovative pedagogical practices, and as being included in innovative courses and modules. In short, it could be argued that virtual worlds are generally (and currently) perceived as innovative educational technologies.

Drawing upon current PhD research, this paper presents an exploration of virtual world practices in higher education, concurrent with a critical analysis of the literature and research surrounding this topic. It will question the implications of their depiction as innovative technologies, and alongside this is the question of the values we attribute to virtual world pedagogical practices that are termed as "innovative". This paper will explore how this might impact their place and growth within UK higher education, suggesting that the use of the term "innovative" in relation to these technologies might have significant impact upon institutional and departmental support, the amount of funding availability to support virtual world practices, and the types of pedagogies employed within virtual worlds. Yet at some point these technologies and practices inevitably lose their "innovative" edge, and this could have significant implications for their sustainability in higher education. This paper will conclude by raising questions highly pertinent to the question of innovating practice in higher education: what are the implications for pedagogical practices when technologies such as virtual worlds are no longer considered to be innovative?

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90 Ian Wilson and Steve Martin; Applying Lean in Education: Reducing assessment workload by rethinking curriculum design

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Format: oral

Programme Slot: Thursday 16 September 2010, 11:00-12:30, Room 1.2

Short biography of lead author: Ian is an engineering lecturer with a passion for business improvement techniques and teaching adult learners. His research interest stems from professional practice, and in particular, the manufacturing industry where he applied lean manufacturing tools to improve performance. Ian became involved in continuous improvement projects identifying waste and developing solutions. His research activity joins this knowledge with that of education. Ian's dissertation tested the lean theories traditionally associated with cellular manufacturing by applying them to education. This brought a reduction in assessment workload and improved curriculum design as well as moving lean thinking from back office activities to teaching practice.

Keywords & Précis: **assessment load; King's cluster methodology; group technology; manufacturing techniques**

Assessment workload has become a key topic for discussion within education along with making processes more efficient. This inquiry examines precisely these points by putting traditional manufacturing methods to the test using active research. This brings together experts through focus groups specifically designed to apply and test the King's Cluster Methodology to a HNC level programme. These experts bring valuable insights and the collective wisdom tests whether the knowledge of cellular manufacturing practice is actually transferable to an educational context.

Abstract:

Assessment workload has become a key topic for discussion within education along with making processes more efficient. For many years manufacturing has applied a variety of lean tools and techniques to continually improve operations and processes. These methods have begun to form a dialect within the language heard in education, especially in institutions that engage with employers. The term "lean" has infiltrated but little seems to be known about the ways in which the Kings Cluster Methodology can be applied to Unit Learning Outcomes which exist across programmes, to curriculum design or even the output that would result from applying this concept outside of manufacturing.

This inquiry examines precisely these points by putting traditional manufacturing methods to the test using active research. This brings together experts through focus groups specifically designed to apply and test the Kings Cluster Methodology to a HNC level programme. These experts bring valuable insights and the collective wisdom tests whether the knowledge of cellular manufacturing practice is actually transferrable to an educational context.

All Programmes and Units contain Learning Outcomes that students need to achieve to be awarded a qualification. Until now, a mapping exercise using the Kings Cluster Methodology as a lean processing tool has not been done within further or higher education. There doesn't appear to be an easy system that can be applied to identify whether a Unit Learning Outcome is being covered elsewhere across the multiple units that make up a programme of study. Very little exists to prove or disprove the myth that learning outcomes are duplicated and repeated within programme design. Group Technology demonstrates that this is not a myth but that learning outcomes, once split, can be regrouped to form new ways of designing the curriculum that reduce assessment workload for lecturing staff and students.

This revelation exposes that not all Units have Learning Outcomes that cross over and that making assumptions based on descriptive names given to Units can easily lead to flawed judgements. Testing the appliance of the Kings Cluster Methodology and Group Technology shows that knowledge is transferrable from a manufacturing environment to education opening up an opportunity that has the potential to change and challenge the way in which future educators will plan their curriculum and the assess student learning. The results show a 26% reduction in the number of learning outcomes to be assessed and reveal that this becomes possible through accrediting prior learning.

Until now, this knowledge has not been transferred to enhance the educational process of curriculum design or to reducing assessment workloads. The results provide an interesting challenging to traditional ways of thinking!

94 Biljana Stojakovic and Goran Malcic; A Multimedia-Based Interactive Table of English Verb Tenses: Initial results of its power as a teaching tool

Author Institution: Polytechnic of Zagreb, Croatia

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Format: oral

Programme Slot: Thursday 16 September 2010, 11:00-12:30, Room 1.8

Short biography of the authors: Biljana Stojakovic is a senior lecturer at Zagreb Polytechnic, specializing in the teaching of English and French. Her research interests centre on languages in contact. Goran Malcic is a senior lecturer in industrial process computers at Zagreb Polytechnic with a special interest in applying an Engineering approach to learning English as a second language.

Keywords & Précis: multimedia; TESL; grammar; interactive table

Using multimedia in TESL (Teaching English as a Second Language) is becoming a *sine qua non* for teaching/learning grammar. We have developed a multimedia-based interactive table of the English verb tenses and have applied it in teaching the English grammar. It has proved to be a great teaching tool.

Abstract:

Using multimedia in TESL (Teaching English as a Second Language) is becoming a *sine qua non* for teaching and learning grammar. At the Polytechnic of Zagreb, we have developed our own multimedia-based interactive table of the English verb tenses and have used it in teaching English grammar. This work was underpinned by earlier research into computer-assisted language learning (for example, Garrett 1989; Chun and Plass, 1997; Armstrong and Yetter-Vassot 1994; Bond et al. 2002), grammar-teaching theory (Green and Hecht 1992), and the development of web-based TESL tools such as WILT (Lieberman and O'Connor DiVito n.d.).

We conducted a study to compare the level of acquisition of a particular grammar issue by two groups of students, one group teacher-directed, the other using our computer-based grammar instruction. We set out to establish if there was a difference in the acquisition of the English grammar tenses for students instructed in methodologically different ways. Our sample consisted of students who had spent between four and eight years learning English before they enrolled at our institution. Group 1 comprised 30 students (24 males, 6 females): 15 (10 males and 4 females) who were at an intermediate level and 15 (14 males and 2 females) at an upper-intermediate level of English instruction. Group 2 also comprised 30 students (21 males, 9 females): 15 (11 males and 4 females) at an intermediate level and 15 (14 male and 1 female) at an upper-intermediate level of English instruction. We tested the students twice: in their first week of instruction, as a pre-test, and again after a month of instruction. Both tests included items covering the Present Simple and the Present Continuous tense. They consisted of an end-test (with words to fill in proposed), and a multiple-choice test.

From this limited study into the level of students' acquisition of a particular grammar issue, we found that the computer-based grammar instruction methodology was more effective than the teacher-directed one. This supports the findings of other scholars (McEnery et al. 1995, Nagata 1996) who conducted research into second-language grammar teaching and found that computer-based grammar teaching was more effective than the traditional way of teaching. Our own analysis shows that the most significant difference between the teacher-directed group and the computer-based group's mean score is at the intermediate level: the computer-based group intermediate level students' mean score on the end-test was 3,40 (pre-test: 1,93). At the same time the teacher-directed group intermediate level students' mean score on the end-test was 2,67 (pre-test: 2,20).

The results of the research, limited as it was, reveal that students who were taught English tenses by means of this interactive multimedia table achieved better results than those taught in a traditional way. In a computer-based type of instruction the student is an active participant and enjoys the potential of multimedia applications which make learning English grammar easy and enjoyable. The potential of using multimedia in TESL is enormous and still to be explored.

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97 Katie Bryant-Moetele; Becoming a Researcher: Exploring the relationship between Botswana's research context and doctoral studies curriculum

Author Institution: McGill University and International Development Research Centre (IDRC), Canada

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Format: PhD Work in Progress report

Programme Slot: Thursday 16 September 2010, 13:30-15:00, Room 1.4

Short biography of the author: Katie Bryant-Moetele is a doctoral student in the Department of Integrated Studies in Education at McGill University, Montreal, Canada. She currently holds a Research Internship Award with Canada's International Development Research Centre (IDRC), which she is using to fund her doctoral research on issues related to research activities and doctoral programme development at the University of Botswana. Ms. Bryant-Moetele holds a master's degree in Applied Language Studies from Carleton University, Ottawa, Canada and has previously worked as a lecturer in this University's School of Linguistics and Language Studies as well as coordinator of this University's Writing Centre.

***Keywords & Précis:* doctoral education; rhetoric; higher education; university writing practices; southern Africa**

My presentation fits with iPED 2010's conference theme of Academic Writing, Research Strategies and Collaboration for Evidencing Impact. The presentation draws on a phenomenological study I am currently conducting on research and doctoral programme construction in Southern Africa, which is part of my doctoral research in Education. Using open-ended interviews, textual analyses, participant observations, and focus groups, I am constructing case studies to understand better these two phenomena as well as the relationship between them.

Abstract:

Although higher education researchers in North America, the United Kingdom and Australia have begun to research issues of doctoral education (e.g., Paré et al. 2006, Kamler and Thompson 2006, Lee and Kamler 2008), research on this phenomenon has, for the most part, ignored the African context. It is possible that the decrepit state of many African universities (see Teferra 2004) and donor institutions' previous disinterest in funding African higher education institutions (HEIs) (see Szanton and Manyika 2002) are two key reasons for this lack of research. Yet this level of higher education is beginning to require research as African HEIs are attracting interest from donor institutions and African governments. Their interests in doctoral education stem from the role they believe African universities and doctoral education, in particular, can serve in bringing African countries into the knowledge economy (Kotecha 2008, Sayed et al. 2008, Szanton and Manyika 2002).

As the University of Botswana (UB) develops doctoral programmes, the international, national, and institutional (i.e., university) research contexts in which these programmes are situated must be examined. A research context can consist of a country's research funding mechanisms; the country's and other institutions' reasons for engaging in and supporting research; a university's promotional structures; and so on. This type of examination is particularly important given the significant role research plays in constructing doctoral students' identities. Preliminary findings from this case study of UB illustrate potentially tenuous relationships between the different research contexts' support for, encouragement of, and/or engagement in research. For example, international institutions and the Botswana Government support research to address "developing" countries' development challenges; the university, as an institution, is beginning to support and encourage research to make UB a research-intensive university, specifically by supporting and encouraging university faculty to bring in research grants and publish their findings in internationally-recognized journals; and the individual researcher engages in research to respond to these higher-level contexts, yet often struggles to respond to either because of apparent tensions between these research contexts.

Therefore, given these preliminary findings, this presentation will report on further explorations of the tensions between these research contexts' support for, encouragement of, and/or engagement in research; the repercussions such tensions could have in terms of senior and novice researchers'

rhetorical outcomes; and the ways these tensions need to be addressed as UB continues to construct its doctoral programmes.

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98 Margo McKeever and Ben Ward; Addressing the Ethical Implications of Student Involvement in Research as Co-researchers

Author Institution: University of Northumbria, United Kingdom

Corresponding author: margo.mckeever@northumbria.ac.uk

Format: oral

Programme Slot: Wednesday 15 September 2010, 14:00-15:00, Room 1.2

Short biography of the authors: Margo McKeever is Programme Leader, Post-Graduate Diploma in Nursing Studies/RN programme and CETL associate at the University of Northumbria. Ben Ward is a final-year student on the Post-Graduate Diploma in Nursing Studies/RN Programme.

Keywords & Précis: research ethics; student involvement; trustworthiness

This paper discusses some of the ethical implications of involving students in pedagogical research as co-researchers. We discuss strategies used by our team to address not only the ethical principles of beneficence, respect for human dignity, and justice, but also the trustworthiness of our findings.

Abstract

The ethical implications to be discussed arise from a practice development initiative wherein a participatory action research (PAR) approach was undertaken to identify, explore and address a practice issue. Within the approach Hart and Bond's (1995) empowering typology is applied through Lewinian cycles. The tripartite of research, education, and action are omnipresent and reciprocal within these cycles.

The project now in the action phase of the second cycle (figure 1) aims to evaluate an assessment for learning strategy (AfL), *"feedback first",* from the perspective of both students and academic staff.

Figure 1 – **Showing the action cycle with the current phase in bold**

"*Feedback first"* was developed to enhance learning and the self-assessment ability of students undertaking a Post-Graduate Diploma in Nursing Studies/RN Programme. It was developed and implemented following the first phase of the cycle wherein in-depth qualitative interviews were undertaken with an earlier cohort of students. Briefly, students receive formal formative written feedback (feed-forward) on a draft of their first academic assignment five weeks prior to summative submission.

In keeping with an empowerment approach, the study subscribes to the notion of *"research with not on"*. Consequently students were given the opportunity to become more actively involved in the study by becoming co-researchers. Eleven students were recruited. It was envisaged that active involvement will provide these students with valuable "hands on" experience of doing research and provide the study with authentic data relating to the student perspective.

Student co-researchers are actively involved in the research process, contributing to the development of data collection methods, data collection, analysis of data and the dissemination of findings.

Some would argue that actively involving students as co-researchers is novel and innovative and is in itself an ethical approach to research. Clearly students will have much to gain from their involvement. However these participatory and empowering attributes also raise a number of other implications which are unique and require careful consideration. In particular the role of the co-researchers will be discussed in relation to the ethical principles of beneficence, non-maleficence, respect for human dignity, and justice.

Within conventional research there is a clear distinction between the roles of the researcher and participants of research; however, this is not the case in participatory action research. Indeed as Khanlou and Peter (2005) point out, within PAR the roles of researcher and participants are blurred. Since co-researchers will provide data to this study, they will in duality hold the position of both participant and researcher. This in turn raises issues not only relating to informed consent and confidentiality but also other issues including favourable benefit, authorship and dissemination of findings.

Strategies undertaken to address the ethical implications of this approach including the trustworthiness of the study will be discussed by a student and academic member of the research team.

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100 Sarah Wilson-Medhurst; Symposium on Activity Led Learning (ALL)

Author Institution: Coventry University, United Kingdom

Corresponding author: aa3881@coventry.ac.uk

Format: Symposium

Programme Slot: Wednesday 15 September 2010, 11:30-13:00, Room 1.4

Short biography of the author: Sarah Wilson-Medhurst is the symposium convenor, and is Teaching Development Fellow within the Faculty of Engineering and Computing. She is a researcher, educational developer and teaching practitioner in the areas of activity led learning, change management and personal development and e-Portfolio practice, active locally, nationally and internationally.

The symposium contributors are colleagues drawn from the faculty of Engineering and Computing who are also leading and developing the Activity Led Learning and related initiatives within the faculty and beyond.

Keywords & Précis: Activity Led Learning; engagement; evaluation; student experience

This symposium will bring together three key perspectives on the Activity Led Learning (ALL) initiative at Coventry University:

- Students Supporting Students: An innovative approach to improving student experience (Glendinning)

- Learning spaces to support ALL (Dunn, White, Farmer, Lawson, Wilson-Medhurst)

- Curriculum to support ALL (Farmer, White, Davies, Tabor, Wilson-Medhurst, Dunn, Lawson)

Abstract:

A faculty of Engineering and Computing (EC) is committed to enhancing its provision through an Activity Led Learning (ALL) pedagogy aligned to student-facing systems and processes, and to learning and teaching spaces that are fit for purpose (Wilson-Medhurst et al. 2008, Wilson-Medhurst and Glendinning 2009).

The initial phases of this work are reported in the recent Royal Academy of Engineering 'Engineering Graduates for Industry' report (Royal Academy of Engineering 2010). ALL is being developed and implemented through a continuous improvement change management process (Wilson-Medhurst et al. 2008). This began with modular level pilots and case studies of operation (see e.g. Booth and White 2008, Davis and Davies 2008, Lambert et al. 2008) and faculty-funded LTA projects, progressing to a more systematic review of the first-year experience of ALL at programme level in the Mechanical and Automotive Engineering (MAE) department (Green and Wilson-Medhurst 2009). In the 2009/10 session this was followed by a review of the first six weeks integrative ALL experiences across all of EC's first-year undergraduate programmes.

The key anticipated benefits of ALL include better engagement of students and staff in the learning experience, improved student retention and progression, increased graduate employment rates and greater staff and student satisfaction. Research to date indicates some progress in the above objectives in improved first-term retention and satisfaction, including improved satisfaction in "self confidence" and "how you are being taught" (Green and Wilson-Medhurst 2009). Two of the areas where satisfaction decreased were those related to teaching environment and class size; EC are aware of the need to enhance the physical spaces to support the ALL pedagogy, and the faculty will have a brand new learning facility in 2012 designed with ALL in mind (see e.g. Wilson-Medhurst and Glendinning 2009).

An ALL-aligned survey evaluation (Wilson-Medhurst 2010) of the ten separate first-six-weeks integrative experiences across the faculty from October to November 2009 indicated that the majority of students had a positive ALL experience, with the greatest gains being in the department running the six-week experience for the second time. This evaluation also indicated scope for development and refinement.

Initial findings from the student comments in the survey open questions and from student focus groups indicate "confidence building", "making friends", "the opportunity to put theory into practice" and "to make connections across modules" were some of the significant learning experiences (Fink

2003) that the students valued as a result of the six-week integrative ALL experience at the start of their first year. This echoed student feedback from the previous year's modular and MAE pilots. This therefore suggests the ALL initiatives are having a positive impact on the student experience for the majority and are meeting one of the declared aims of the ALL initiative, that of better engagement of students with the learning experience. This is also supported by other preliminary findings from, for example, the creative computing six-week experience (Shuttleworth et al. 2010).

Chaired by Sarah Wilson-Medhurst, this symposium will bring together three key perspectives on this ALL initiative:

- *Students Supporting Students: An innovative approach to improving student experience* (Glendinning)

- *Learning spaces to support Activity Led Learning* (Dunn, White, Farmer, Lawson, Wilson-Medhurst)

- *Curriculum to support Activity Led Learning* (Farmer, White, Davies, Tabor, Wilson-Medhurst, Dunn, Lawson)

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101 Irene Glendinning; Students Supporting Students: An innovative approach to improving student experience

Author Institution: **Coventry University, United Kingdom**

Corresponding author: ireneg@coventry.ac.uk

Format: Symposium Paper

Programme Slot: Wednesday 15 September 2010, 11:30-13:00, Room 1.4

Short biography of the author: Irene Glendinning is Academic Manager for Student Experience in the Faculty of Engineering and Computing at Coventry University, leading the Student Experience Enhancement Unit, which is substantially a team of student employees. She joined the University in 1990 as a lecturer in computer science after a career in industry and then in secondary education. She was appointed as course manager successively for undergraduate, international collaborations and then postgraduate programmes before she was appointed to this unique role in 2008. She has researched and published on many aspects of educational research, largely surrounding the concept of the "Student Journey" through higher education.

Keywords & Précis: **student employment; student advocacy; student experience enhancement; employability; soft skills development; students supporting students**

This presentation describes a faculty-based innovation to employ students to supplement and enhance services to other students. The initiative is part of the Faculty's drive to improve the student experience. The symposium will explore the impact of this investment on the experience of students and staff in the Faculty.

Abstract:

A "community of learners" approach was seen as an essential requirement in the lead up to the adoption of Activity Led Learning (ALL) by Coventry University's Faculty of Engineering and Computing. In an associated drive to improve the overall student experience, the barriers between staff and students have already been eroded significantly because the Faculty employs students in various roles to enhance services and support to available to other students.

At the centre of this initiative is the Faculty's Student Experience Enhancement Unit (SEE-u), founded in September 2008 with the appointment of the first Student Advocates. The Faculty also employs postgraduate students as Graduate Interns, largely engaged at departmental level in teaching support duties. During 2008–09 a total of about seventy students were employed in the Faculty. The scale of the operation increased substantially from summer 2009, when the process began of appointing up to 150 student employees. Building on success to date, the scheme is being further developed and extended for the 2010–11 academic year.

The graduate interns provide a key resource for effective implementation of ALL in the Faculty, also supporting conventional teaching and learning activities. They are deployed as facilitators and subject consultants for small group activities and learning experiences. Student advocates supplement student support and administrative services in most parts of the Faculty, aimed at improving "customer" care in keeping with the Faculty's ambition for high student satisfaction. The employment of students allows the introduction of innovative support services including a one-to-one advocacy service for complex student queries. The advocates also conduct research into student experience aspects, including evaluation of ALL, and provide additional staffing at peak times during the year.

As the number of student employees grew and deployment was extended across the Faculty, the need became apparent for a more systematic approach to recruitment, appointment, training, supervision and management of student employees. Studies were conducted into the management of student employment schemes operating elsewhere. Particularly influential information was collected through visits to several universities in the USA, including Boston University, Pace University in New York City, and Northwest Missouri State University (McLain 2006, Sullivan 2008).

Contrary to some perceptions, this is not a cost-cutting exercise. The initiative was ambitious and required senior management trust and a significant initial investment, both in direct financial outlay and in resources. Now the investment must be on-going to ensure that the enhanced services already established can be maintained and further developed.

The many difficulties encountered through the Faculty's approach should not be under estimated; for example, the dual role of staff/student can be problematic particularly in some sensitive areas such as the assessments office. However such problems are substantially outweighed by the mostly positive impact of student support for students. Some benefits were expected, such as enhanced work-place skills for the student employees and more responsive and effective customer-focused services for the whole Faculty; in the event, several unanticipated benefits have emerged, for example the enhanced sense of loyalty in student employees has translated into improved retention and a very high rate of continuation in further studies.

Different aspects of the Faculty's strategy for enhancing student experience and lessons learned from implementation of SEE-u have been disseminated through conferences and workshops, as can be seen in the list of publications below. Further detailed information on related aspects is to be found in these recent publications.

Feedback from staff and students and evaluation about the perceived value to all stakeholders of the enhanced services is a regular requirement for SEE-u. Great progress has been made since the concept for SEE-u emerged in 2007. However this initiative is still very young and will evolve considerably in the next few years in line with the transition towards a true Community of Learners and the move to the purpose-built new faculty building in 2012.

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102 Ian Dunn, Peter White, Ray Farmer, Duncan Lawson and Sarah Wilson-Medhurst; Learning Spaces to Support Activity Led Learning

Author Institution: Coventry University, United Kingdom

Corresponding author: cex148@coventry.ac.uk

Format: Symposium Paper

Programme Slot: Wednesday 15 September 2010, 11:30-13:00, Room 1.4

Short biography of lead author: Ian Dunn is Acting Dean, Faculty of Engineering and Computing at Coventry University. He is passionate about providing the best educational experience for all students in the Faculty of Engineering and Computing. He is focused on transforming the way students learn and are taught and has travelled around the world to explore innovative methods developed in other universities. A champion of Activity Led Learning, in which students work together in teams to solve real problems brought to them from industry, he is also a keen advocate of the Faculty's move to an iconic new building in 2012. He believes it will act as a catalyst for changes in the way staff and students interact and provide a future template for technical education.

Keywords & Précis: learning spaces; learning communities; Activity Led Learning; engagement

This session presents work carried out by the Faculty of Engineering and Computing at Coventry University, in conjunction with Arup Associates, in designing spaces that are appropriate for high quality learning in an Activity Led Learning setting. It discusses the role of learning spaces on group formation and development and on learning community formation to support Activity Led Learning.

Abstract:

The aim of this session is to present work that has been done by a Faculty of Engineering and Computing, in conjunction with Arup Associates, in designing spaces that are appropriate for high quality learning in an Activity Led Learning setting. It builds on work presented at the International Research Symposium on Problem Based Learning held in December 2009 in Melbourne and other activities in the Faculty (Croft et al. 2008, Wilson-Medhurst 2009, Solomon et al. 2010). It is anticipated that the session will provoke discussion around the way in which space supports, or otherwise, the development of learning communities (Schmidt Bunkers 1999) that help motivate students to learn. As is clear from the serious shortage of literature on the subject (Temple 2008), little academic analysis of the spaces that we use for learning, teaching and assessment in higher education has been undertaken. The authors of this paper would argue that the environment within which the learning takes place should be supportive of the aims of the approach to learning, in that it should provide for the needs of the users, preferably without them thinking about the space; in its design the space embodies or symbolizes "active" learning values to help promote a sense of community (McMillan and Chavis 1986)

The university in question is currently investing heavily in its estate (Locke 2004), notably spending £55m on a new home for the Faculty of Engineering and Computing. This building will house a range of engineering, computer science and mathematics disciplines and will showcase the technologies that it supports. The building is designed in a highly sustainable manner, to incorporate such features as rainwater harvesting, solar thermal capture, biomass heating, IT server room heat capture and passive solar design. "It" will present data about how it is performing at any moment for general view and for experimental usage (Renee et al. 2008). Thus the building itself will be a learning resource and will explicitly display its technical performance. The session will briefly explain the design process and the research which underpins the decisions that have been taken to define types of space.

Activity Led Learning (ALL) (Wilson-Medhurst et al. 2008) is an umbrella term that has been chosen to represent the learning "philosophy" adopted by the Faculty of Engineering and Computing at Coventry. It adopts many of the defining characteristics of PBL but also leans heavily on industrially supported and led learning. Coventry University has a focus on developing high-quality graduates who have strong employability skills, and therefore a key focus for ALL is the development of professional skills: communication, project management, creativity, team working and so on. As a core part of this, we believe that we must develop communities of learners – students, academic staff, professional and technical staff all forming a part of that community. We believe strongly that the non-classroom-based, informal collective learning (Bunniss and Kelly 2008, Jankowska and Atlay 2008, Bryant et al. 2009, Paechter et al. 2001) that takes place between students working on live and real

projects is fundamental to developing the type of graduate that we believe industry and commerce are seeking, and that this collaborative learning is motivating in and of itself (Holtham 2003). This type of learning community does not develop without common objectives, desires and spaces, both real and virtual, in which to develop creative skills. It needs creative and motivating spaces in which to be nurtured and to develop (Edwards 2000).

This session will discuss the role of learning spaces on group formation and development and therefore in which learning communities develop. It presents the need for a space to be inspiring and to engage the learners and staff within it, all of this with a view to enhancing learning effectiveness.

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103 Ray Farmer, Peter White, John Davies, Jim Tabor, Sarah Wilson-Medhurst, Ian Dunn and Duncan Lawson; Curriculum to Support Activity Led Learning

Author Institution: Coventry University, United Kingdom

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Format: Symposium Paper

Programme Slot: Wednesday 15 September 2010, 11:30-13:00, Room 1.4

Short biography of lead author: Raymond Farmer is Associate Dean (Computing) in the Faculty of Engineering and Computing at Coventry University. His main areas of interest include Information Systems Development Methods, Object technology e.g. UML, Unified Process, Migration to Object Technology, Software Patterns and Real-time Methods. His teaching, research and consultancy activities reflect these interests.

Keywords & Précis: **Activity Led Learning; curriculum innovation; curriculum framework**

The aim of this session is to present work that is being done by a UK Faculty of Engineering and Computing in embedding a style of pedagogy, Activity Led Learning, in the curriculum. This session describes the curriculum framework that has been developed to guide further phases of implementation of activity led learning. It aims to provoke discussion around the way the framework could be adapted for other curriculum areas.

Abstract:

The aim of this session is to present work that is being done by a UK Faculty of Engineering and Computing in embedding a style of pedagogy, Activity Led Learning, in the curriculum. Activity Led Learning (ALL) is an approach to education based on providing stimulating activity that engages and enthuses students and creates challenge, relevance, integration, professional awareness and variety. An activity is a project, problem, scenario, case-study, enquiry, research question (or similar) in a class-room, in a laboratory, at work, or in any other educational context. Activities may cross subject boundaries, as activities within professional practice do (Wilson-Medhurst et al. 2008).

The Faculty has introduced integrative cross-curricular activities for the first six weeks of undergraduate programmes, providing students with a coherent and holistic view of their subject (White et al. 2009). These activities were group based and contributed to assessment outcomes for one or more modules in the students' programme of study. Early indications as regards the effectiveness of these integrative ALL activities for first-year entrants in 2009/10 are predominantly very positive (Wilson-Medhurst 2010). It is clear from student feedback that the majority would like similar patterns of delivery to enrich their learning experience at levels 2 and 3.

In determining how the curriculum should be structured to support ALL most effectively at all stages, there is a need to address not only the quality of the student experience but also timetabling and resource constraints. Many aspects of ALL can be implemented within standard modular structures, but ensuring that running integrative activities at all levels does not become a logistical nightmare necessitates a different approach. Integration across the curriculum can be achieved in several ways. Modules can be constructed that span several curriculum aspects, or assignments can be co-ordinated across the modules. The synchronization and co-ordination required to do this has underlined how modular design and content has to adjusted so that integrative cross-curricular activity is central to the learning outcomes and assessment strategy.

The Faculty conducted a detailed review of the first year integrative activities and identified those factors that contributed to the positive outcomes and those that did not (Wilson-Medhurst 2010). Using these findings as a starting point and the experience gained by module tutors and programme managers, a curriculum framework has been developed to guide further phases of ALL implementation. This session describes the development of this framework and will, it is hoped, provoke discussion around the way the framework could be adapted for other curriculum areas.

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105 Gurnam Singh and Glynis Cousin; Ethnicity and Comparative Attainment Levels

Author Institutions: Gurnam Singh – Coventry University, United Kingdom;

Glynis Cousin, – Wolverhampton University, United Kingdom

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Format: Debate

Programme Slot: Thursday 16 September 2010, 13:30-15:00, Room 1.3

Short biography of the authors:

Dr Gurnam Singh is Principal Lecturer in Social Work, Co-Director Applied Research Group in Social Inclusion in Social Care and National Teaching Fellow (2009). He gained his PhD from the University of Warwick in 2004, the focus of his thesis being the experiences of BME practice educators. His interest in social justice and pedagogy is reflected in much of his research and scholarly output. Over the past three years he has worked closely with the UK HEA (Higher Education Academy) on two different projects, "BME student attainment in HE" and "critical pedagogy and popular education".

Professor Glynis Cousin (NTF, 2009) is Director of the Institute for Learning Enhancement at Wolverhampton University. As senior adviser at the HEA, Glynis Cousin led the HEA partnership with the ECU, the final report and recommendations. She has also worked as an external adviser to the HEA for its follow-up work from this report. Cousin works in the fields of diversity and research methodology and has published extensively on both of these strands.

Keywords & Précis: **attainment; pedagogy; racism; ethnicity; race**

Whilst the last decade has seen a significant rise in the number of black and minority students entering higher education, there are serious concerns about differential attainments compared to white British students, the reasons for which are puzzling. Whilst recognizing that individual student attainment is the product of a multitude of factors, this workshop will seek to argue that racialized administrative and pedagogical practices are the primary reason for attainment gaps.

Abstract:

On the surface at least, the participation by British minority ethnic (BME) groups at UK universities is a success story. Numbers of BME students have been growing to the extent that participation rates are now higher than those for the white population. But this is just one element of a much more problematic picture. Once BME students enter HE, there is now a consistent body of evidence which indicates that they face inequality at all stages of their journey in and beyond HE: they are less likely to be satisfied with their student experience; more likely to leave early; are less likely to gain a good honours degree; and are more likely to struggle to secure graduate-level employment.

There are no simple explanations for why this might be, and, while unequal patterns of attainment between BME groups and white students have been evident for more than fifteen years, until recent times HE in the UK has been relatively slow to respond. As a result, the racial and ethnic dynamics of universities have, by and large, been concealed. Such a state of affairs was politically sustainable under conditions where HE was only accessed by a small and largely privileged section of the population – but under government policies of expansion, fair access and widening participation, things have dramatically changed.

As a consequence of greater scrutiny through such bodies as the Higher Education Funding Council (HEFCE), along with tighter statutory requirements, we have seen greater attention being focused on the BME student experience in HE. A report published last year (HESA 2009) confirmed that between 2003 and 2008 the BME student degree attainment gap compared to white students, measured in terms of comparisons for 1st and upper 2nd degree classifications, had remained pretty steady at around 17%.

The picture is clearly complex and the reasons why the degree attainment gap exists for any one individual student will be influenced by a wide range of social, economic, cultural and familial factors, but there is every reason to suspect that, in part, racism in the form of subtle individual and institutional mechanisms may act to produce and reproduce a sense of "otherness" amongst some students that do not apparently fit into a "mythical white British norm".

Against this backdrop, the workshop will seek to open up a debate about the ways in which racialized administrative and pedagogical practices are the primary reason for attainment gaps.

Reference

HESA (Higher Education Statistics Agency) (2009) "Equality in Higher Education: Statistical report 2009." Equality Challenge Unit, downloadable at <http://www.ecu.ac.uk/publications/equality-in-he-stats-09>.

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