ALT-C 2007: beyond control

Programme and Abstracts

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Welcome to ALT-C 2007

We are delighted to be holding the conference at the East Midlands Conference Centre, University of Nottingham.

This year there is a full and varied programme of research papers, short papers, demonstrations, workshops and symposia from a wide cross-section of the ALT and e-learning communities. We are very fortunate in having three distinguished, internationally recognised keynote speakers: **Dr Michelle Selinger**, Education Strategist, Cisco Systems; **Dr Peter Norvig**, Director of Research, Google; and **Professor Dylan Wiliam**, Deputy Director of the Institute of Education; and there will be a welcoming keynote from **Professor Sir Colin Campbell**, Vice-Chancellor of the University of Nottingham.

The programme is organised under four themes:

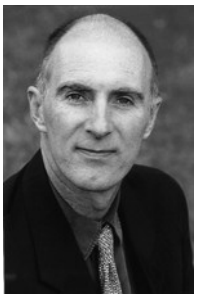
- **Learning technology for the social network generation:** learning with blogs, wikis and multiplayer games, new cultures of learning, integrating formal and informal learning
- **Designing learning spaces:** mobile, pervasive and embedded technologies for learning, technology-enhanced learning spaces
- **Large-scale implementation:** distance learning, networked learning, policy and infrastructure for technology-enhanced learning
- **Learning and internationalism:** learning across cultures, learning technology for a multicultural society

Each theme is led by specialists in the field – **Tim Rudd**, **Frank Rennie**, **Hans-Peter Baumeister** and **Marion Miller** – who will introduce the issues of the theme in the opening plenary session. On the last day of the conference the Theme Speakers will help us to conclude the debate with discussions about what has been achieved and learnt in each theme.

This year we also have a full **ALT Strand** where delegates can meet the ALT editors, learn about the projects ALT has been involved with over the past year and how to get more involved with ALT and our accreditation scheme.

The Programme Committee has worked hard to create coherent themes and to ensure an impressive array of submissions giving coverage of the emerging issues across the field. This year we have included more 60-minute sessions (with shuffle time) in response to delegate requests for a looser programme. We hope you enjoy the conference, learn from it and especially that you participate fully and play an active part in its success. Your continued support and passion for learning technology keeps ALT-C at the top of the conference agenda in the UK.

Finally, many thanks to all those who submitted papers to the conference, and to the Programme Committee, especially Isobel Falconer, Ian Smith, Steve Wheeler and Nicola Whitton for their sterling work in putting together the research proceedings and abstracts. Thanks must also go to the organising team, whose experience and understanding of what it takes to organise a conference like ALT-C are absolutely key to its success.



Professor Mike Sharples
University of Nottingham

Sharon Waller
Anglia Ruskin University

Co-Chairs, ALT-C 2007 Programme Committee

Department for **Innovation, Universities** & **Skills**

Statement of Support from Bill Rammell MP, Minister of State for Lifelong Learning, Further and Higher Education

ALT members are largely responsible for the **innovative** use of ICT in our **universities** and colleges to help develop and extend the **skills** and knowledge of the nation. As Minister in the new Department for Innovation, Universities and Skills I am therefore pleased to support this year's conference and emphasise the vital part role technology must play in helping my Department and its sister, the Department for Children Families and Schools achieve our objectives across the whole education and learning sector - and not least in higher education.

As an economy, our competitive edge depends on the speed with which we are able to innovate by building on our world-class research base and creating new products and markets. That is equally true for our part of the economy – universities and colleges – and continuing to invest in ICT and apply it in innovative ways is key both to maintaining the world-class success of our universities and to the way higher education supports the wider economy.

Technology already pervades our universities and is already transforming the way in which they teach and carry out research. It has helped ensure Britain is one of the best places in the world for science, research and innovation. But in today's world we cannot rest on our laurels and we must continue to invest and innovate just to stand still.

From supporting cutting edge research to facilitating the effective modularisation and work-based learning that is key to meeting employer's needs; from helping us widen our student base by extending learning to those who cannot easily access, it to its use in reaching out to those who don't think that higher education is really for them, technology plays a key role across the breadth of a 21st century university's mission.

But technology is equally important outside of universities. It can make subjects come alive, make information and advice more accessible, engage the unmotivated and change the way problems are solved and challenges met. We want to use technology to transform teaching and learning and help improve outcomes for children, young people and all those who are continuing to learn.

The role of your members is vital to this, by ensuring technology is applied and utilised in appropriate ways - not only by being prepared helping to meet the increasing ICT demands of the digital natives of the social networking generation, but also through the help and support you give to those less familiar with the digital world, by making using computers simple and straightforward for them as they pursue their own learning pathways.

I'm sure that your conference will generate debate, enthusiasm and action about how technology can be harnessed to deliver the future for all learners, enabling them to deliver the future for our country.

Bill Rammell.

Bill Rammell MP

The ALT-C organising team

Here is the team who have been organising arrangements for ALT-C 2007:

Melanie Fox
Assistant Administrator

Sue Garrett
Administration Officer

Alex Miles
Assistant Administrator

Rhonda Riachi
Director

Marion Samler
Operations Manager

Seb Schmoller
Chief Executive

Hayley Willis
Events Administrator

We look forward to meeting you and hope you enjoy your time at ALT-C 2007.

Rhonda Riachi
Director

ALT-C 2007 Programme Committee

Co-Chairs: Professor Mike Sharples, University of Nottingham, and **Sharon Waller,** Anglia Ruskin University.

Research proceedings editors: Steve Wheeler, University of Plymouth, and **Nicola Whitton,** Manchester Metropolitan University.

Abstracts editors: Ian Smith, Napier University, and **Isobel Falconer,** Glasgow Caledonian Academy.

Committee members

Philip Barker, University of Teesside
David Beards, Scottish Funding Council
Frances Bell, University of Salford
Liz Bennett, University of Huddersfield
Haydn Blackey, University of Glamorgan
Tom Boyle, London Metropolitan University
Tony Burgess, Learning and Skills Council
Margaret Cairns, Stow College
Julian Clayton, John Wiley & Sons
John Cook, Reusable Learning Objects
Sarah Cornelius, University of Aberdeen
Linda Creanor, Glasgow Caledonian University
Rod Cullen, Manchester Metropolitan University
Adele Cushing, South Nottingham College
Mike Dobson, Simon Fraser University
Kevin Donovan, Self-employed Consultant
Tom Franklin, Franklin Consulting
Laurence Habib, Oslo University College
Bob Harrison, Toshiba
Stylianos Hatzipanagos, King's College London
Robert Harding, Independent consultant
Patrick James, University of South Australia
Sally Joy, Monash University, Australia
Linzi Kemp, Empire State College, State University of New York
Sabine Little, University of Sheffield
Grace Lynch, RMIT University
Lina Markauskaite, University of Sydney
Liz Masterman, Oxford University Computing Services
Terry Mayes, Glasgow Caledonian University
Maggie McPherson, University of Leeds
Shailey Minocha, The Open University
Dick Moore
Elaine Pearson, University of Teesside
John Phelps, Goldsmiths University
Andy Powell, Eduserv Foundation
Simon Rae, The Open University
Mohamed Riffi, Islamic University of Gaza
George Roberts, Oxford Brookes University
Albert Sangra, Universitat Oberta de Catalunya
Julie-Ann Sime, Lancaster University
John Thompson, Buffalo State College
John Traxler, University of Wolverhampton
Steven Warburton, King's College London
Craig Wentworth, JISC
Heather Wharrad, University of Nottingham
Denise Whitelock, The Open University
Chris Yapp, Microsoft

Major sponsors

The organisers of ALT-C 2007 wish to express their gratitude to all those who have provided sponsorship for the conference.

Adobe

Becta

Blackboard

The British Council

Desire2Learn

Eduserv

Elluminate

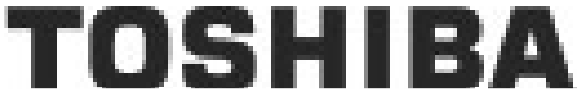
The Higher Education Academy

The Joint Information Systems Committee

Positive Internet Company Ltd

Scottish Funding Council

JISC TechDis



Toshiba Information Systems (UK) Ltd

Ufi/Learndirect

University of Nottingham

Wimba

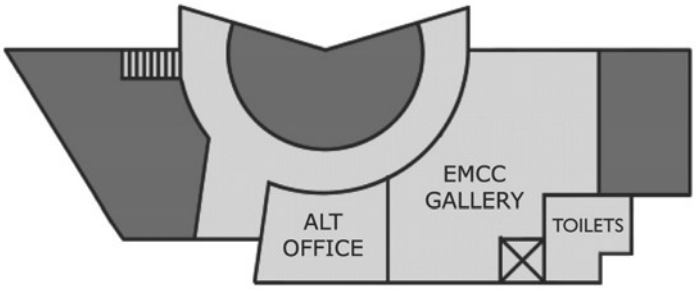
In addition to general support, sponsorship has been provided for the following specific aspects of the conference.

Wednesday New Members' Lunch	**Taylor & Francis (Routledge**)
Laptops for Computer Lab	**Toshiba**

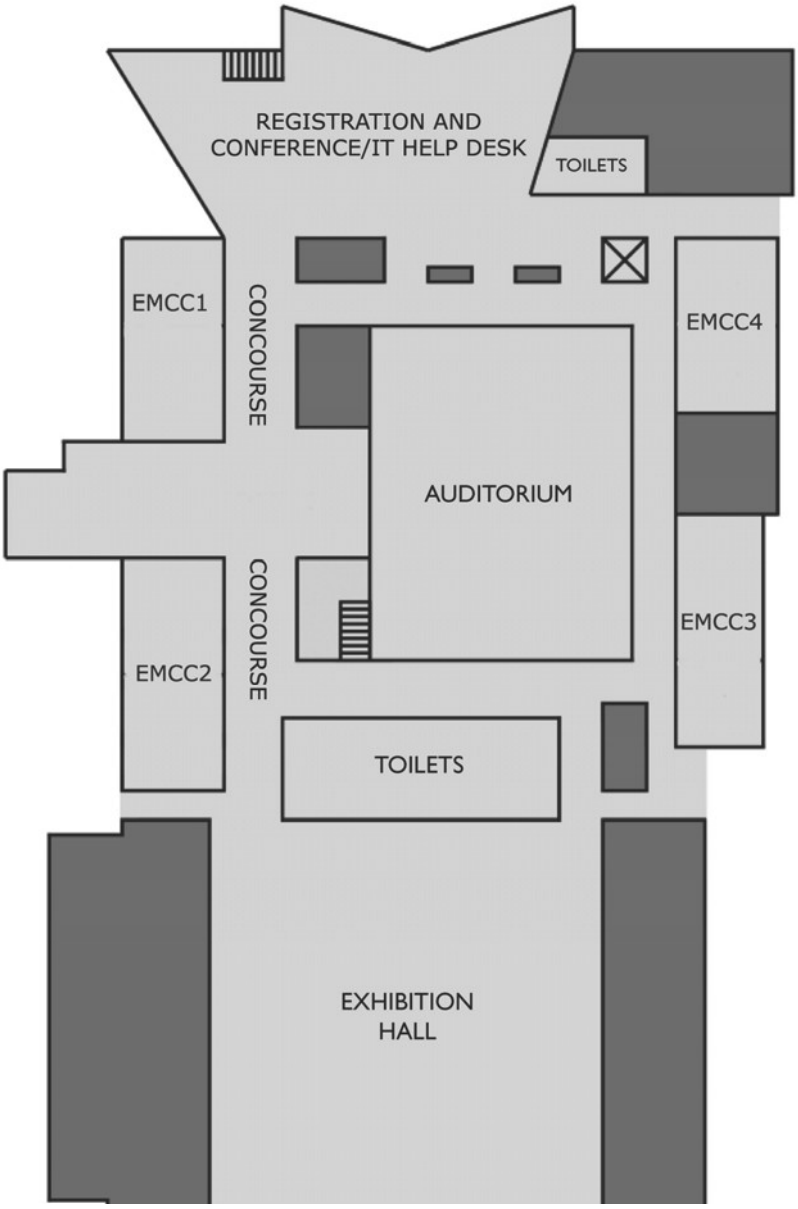
Thank you to all our sponsors for their continued support.

East Midlands Conference Centre

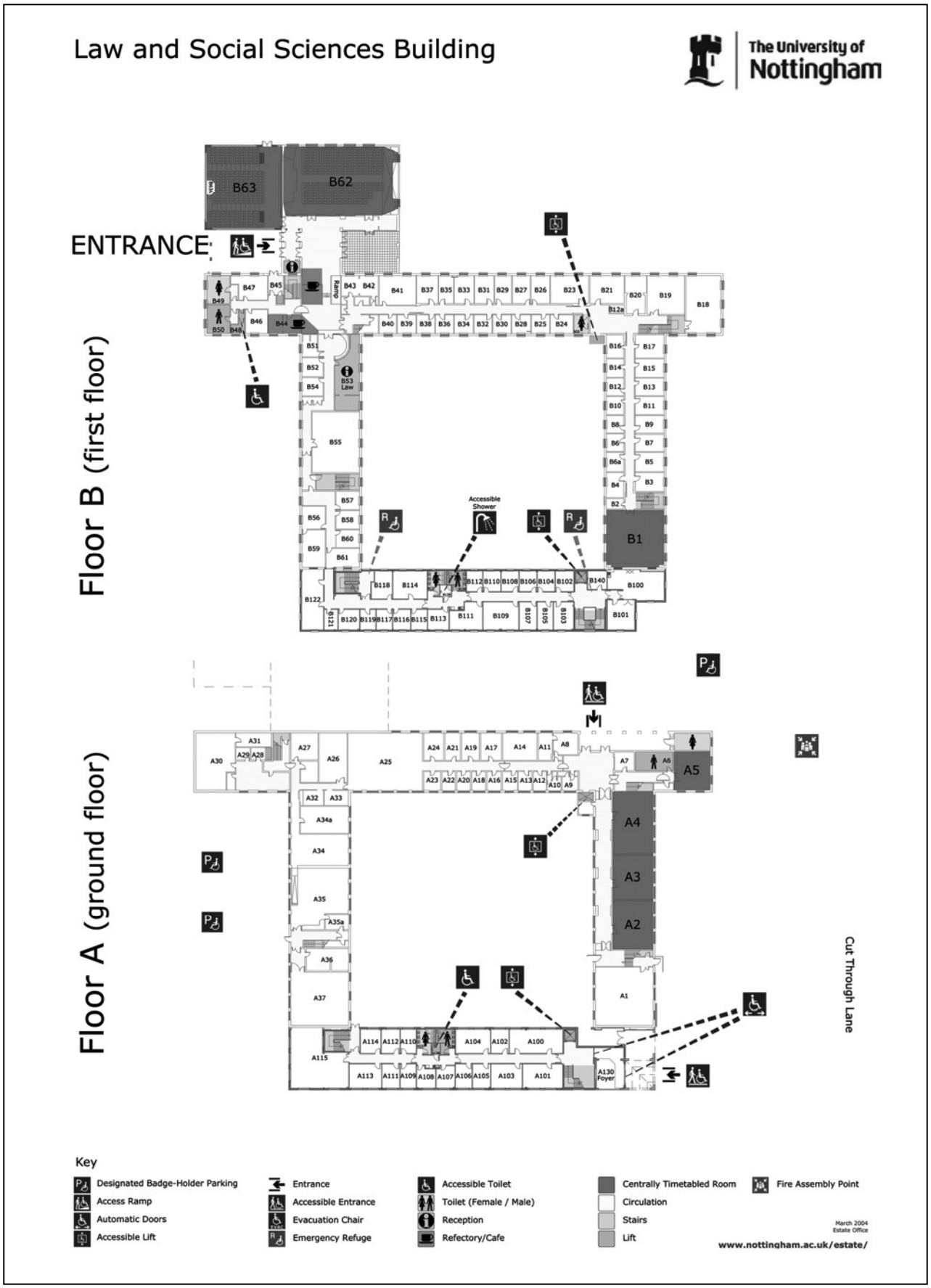
First floor



Ground floor



Map of the Law & Social Science Building for breakout sessions



Conference information

Conference registration
As you enter the East Midlands Conference Centre (EMCC) at the main entrance, registration desks will be provided.

Help desk & enquiries
All other enquiries should be directed to the ALT Conference Help Desk also located within the foyer of the main entrance on the ground floor. An IT help desk will also be provided in this area to help with any IT or wireless Internet-related questions.

We have a team of conference helpers. They are all familiar with the East Midlands Conference Centre and its environs and are identifiable by white ALT-C T-shirts. There will also be a member of the ALT staff in each of the main areas during conference sessions.

For emergency use, the telephone numbers for EMCC's Customer Support desk are 0115 9513640 or 0115 9515011.

Printing & photocopying
This can be provided (at cost) through the EMCC's Customer Support desk in the foyer by the main entrance on the ground floor. If you require assistance in organising this, please contact the ALT Conference Help Desk.

Email and access to the Internet

The Computer Lab
A PC Lab is available to all delegates in Conference Suite 4. The PC Lab will be open from 08.00 till 18.00, Monday, Tuesday and Wednesday, and will close at 13.00 on Thursday. It will not be accessible whilst in use for programmed sessions. We aim to have a conference helper posted in this room to help delegates, however if not, a telephone will be available so that you can ring the ALT Conference Help Desk.

Wireless Networking
East Midlands Conference Centre is equipped with Wi-Fi approved access points to provide a wireless LAN or "hotspot". The coverage is available in the whole of the building. For those who have requested it at the time of booking a wireless network login and password has been provided, at no additional charge, for the duration of the conference. Technical assistance will be available from the IT Helpdesk.

Residential Delegates
Internet connection in bedrooms is free. It is a fixed internet point (not wireless), so you will need an ethernet data cable to connect. The username and password to log on to this is alt2007.

Food and refreshments
All food and refreshment during the day is included in the cost of registration (with the exception of the Wednesday conference dinner), and for those staying in halls of residence breakfast is also included. Breakfast will be served from between 07.00 to 09.00 in the Dining Room of the hall in which you are staying. There is a choice of continental or full cooked English breakfast.

In the scheduled breaks tea, coffee, juice, water and biscuits will be available in the Exhibition Hall (EMCC). Outside of the scheduled breaks refreshments can be purchased from a general store which can be found in the Portland Building. A varied menu for lunch will be served from the Exhibition Hall, where some seating will be provided, with additional seating in the concourse.

For those who have made prior bookings a pre-conference reception buffet will be provided on the Monday night in the exhibition area of EMCC. On Tuesday evening dinner will be served from 19.00hrs until 20.00hrs in Halls of Residence. If you are not a residential delegate, you will be

requested to go to Rutland Hall for dinner. The Conference dinner on Wednesday evening is at the Colwick Hall Hotel and coaches will be provided. Tickets will be supplied with your delegate badge when registering at the conference. Please ensure that you have your ticket with you at each event you attend, as you will asked for these.

Special dietary requirements have been catered for according to the information given when registering on the conference. Please make yourself known to the serving staff if you have requested a special diet.

Cloakroom / left luggage
A cloakroom is available in the foyer of EMCC near the Customer Support Desk and will be staffed as follows:

Monday 4 September	12.00 – 18.00
Tuesday 5 September	08.30 – 18.00
Wednesday 6 September	08.30 – 18.00
Thursday 7 September	08.30 – 14.00

You may leave your luggage at the cloakroom during the conference and you will be issued with a ticket. Please collect items at least ten minutes before closing time. All luggage must be collected before 14.00 on Thursday. Use of the cloakroom is at owners' risk. Please do not leave valuables or laptops.

Fire, medical and other emergencies
When the fire alarm sounds, please evacuate the building immediately via the nearest fire exit. Please wait to be given the "all clear" before re-entering. Please familiarise yourself with the fire procedure posted around the conference centre and accommodation blocks. If you fall ill during your stay, EMCC's Customer Support desk can arrange medical assistance if required. The Cripps Health Centre is located on Park Campus, situated off Cripps Hill. The telephone number is (0115) 846 888. Nottingham also has its own University Hospital, the Queen's Medical Centre, located near the Park campus over the A52.

Health and safety
Accidents, security breaches and other incidents occurring on University premises during your stay must be reported immediately to the EMCC's Customer Support desk, where an accident/ incident form should be completed.

Mobility or other requirements
EMCC is easily accessible by wheelchairs users. If you have not previously notified us of any mobility, sensory or access requirements, please contact a member of the Conference Team as soon as possible so that we can make your stay as comfortable as possible. A number of breakout sessions will be held in the Law and Social Sciences Building (LSS) which is located at the rear of the EMCC and up a steep hill. If you are a wheelchair user, and you have not already notified us of this, and you need to attend a session in the LSS building, please contact a member of the Conference Team as soon as possible for assistance.

Car parking:
There are 300 car parking spaces available for delegates next to the EMCC. Further overflow spaces are available within a short distance from the conference centre.

Telephones:
Telephones that will take incoming calls are available in the residential blocks. NTL phone cards are available from the accommodation blocks reception for outgoing calls. A public pay phone is located behind customer support in the EMCC foyer.

Security
Delegates are requested to reduce the risk of thefts by not leaving valuables unattended on University premises. Subject to statutory rights, neither ALT nor EMCC will accept responsibility for accidents to delegates while on University property, or for damage to, or loss of, their personal property.

Security staff are on duty 24 hours a day. Campus Security Head Office can be contacted on (0115) 951 3013 or Emergencies on (0115) 951 8888. Please take sensible security precautions: keep valuables secure and out of sight (in particular satellite navigation holders in vehicles), and refrain from walking alone at night on campus. You are advised not to leave rooms unlocked or property unattended at any time.

Cash machine
The nearest cash machine can be found in the Portland Building. A footpath to the Portland Building runs from the back of the EMCC and through the Millennium Garden; it will take about 5–10 minutes' walk.

Useful telephone numbers

Taxis
Local taxis may be ordered from Cab-line (0115 922 6225), B+P (0115 925 0505) or Toton Taxis (0115 845 6991). The journey from the city centre takes around 15 minutes by taxi.

Bus information
The following Nottingham City Transport services pass near or through the campus and can be picked up from stops near the market square in the city centre. The location in brackets pin points where they stop near the University:

13/13c (University Boulevard)
33 (University Boulevard)
34 (Portland Hill in the Campus)
35/35A (Derby Road)
36 (Derby Road)

The 52 does not go from the city centre but does pass through Clifton, QMC, University and then Beeston. Catch one of the following Trent and Barton buses to get to Broadmarsh bus station which is about 250 metres walk from the railway station:

Rainbow 5a (North and West Entrances to the University)
Rainbow 5, 5b, 18, 32 (East, South and West Entrances)

Other useful numbers include:

National Rail Enquiries:	08457 48 49 50
Nottingham East Midlands Airport:	0871 919 9000
National Express:	020 7529 2000
Stagecoach:	0871 200 22 33

Social Programme

Monday evening - pre-conference buffet
At the opening of the exhibition a drinks reception and buffet will be provided for delegates and exhibitors at 19.30 in the Exhibition Hall, EMCC.

Tuesday evening – advance booking required

Ceilidh on campus with private bar
For those who stripped the willow with us last September, you'll not need reminding of the fun that was had by all! Kilter, Glasgow's upbeat 4-piece ceilidh band, will be returning to ALT-C with reels and jigs to entertain all in attendance. To get a feel for the celtic sound listen to a 7MB, 6 minute MP3 of Kilter which can be found on ALT's website at: http://www.alt.ac.uk/altc2007/social.html. An evening meal on campus **will** be provided prior to this social event.

For those who would prefer to explore what Nottingham has on offer, then the city is open all hours. From bowling and the cinema, to live music and the theatre, there are venues to suit all tastes and ages. The Cornerhouse, the Broadway, Nottingham Arena, The Royal Centre, and Nottingham Playhouse are right in the city centre, hosting concerts, shows, live film and music. If you love music there's World class symphony orchestras, musicals, superstar DJs and the coolest rock bands play; from Halle to Gatecrasher. Please note that for delegates who choose this social option an evening meal **will** be provided. Please refer to further information provided above. However, it is the delegate's responsibility to arrange transport to and from the campus.

Wednesday lunchtime - New Members' Lunch
The Annual 'New Members Lunch', sponsored by Taylor & Francis (Routledge), will take place at 12.30 in the Gallery Area of EMCC, after a short presentation by the ALT Chief Executive. Members of the ALT Executive Committees will also be there to talk informally about ALT's plans for the future and especially to hear what you would like from the Association or how you could get more involved in some of ALT's activities or committees.

Wednesday evening - Conference dinner
A drinks reception and splendid three-course dinner with wine will be served at the Colwick Hall Hotel. This grand palladian style Georgian country house mansion nestles in over sixty acres of parkland; a historic building dating back to Saxon times and once the ancestral home of Lord Byron. Colwick Hall is a grade II* listed manor with a grand entrance overlooking Nottingham racecourse. ALT's evening will be held in the Lakeside Pavilion - a grand marquee within the grounds of Colwick Hall, set alongside the lake overlooking the country park. With an accompaniment of jazz piano to create a welcoming, vibrant atmosphere, the evening we can assure will be a 'high class affair'! Transport to and from this social event will be provided - from EMCC to Colwick Hall Hotel.

Thursday lunch - close of Conference
A buffet lunch (from 13.00hrs) is provided to those who have selected this option when booking on the conference.

ALT events and meetings

Monday 3 September

1800 – 1830	ALT-C Session Chairs Meeting	EMCC 2

Tuesday 4 September

18.00 – 19.00	Special Interest Groups	EMCC Suites 1 to 3
	ALT-J Editorial Board Meeting	The Gallery, EMCC

Wednesday 5 September

12.30 – 13.30	New Members' Lunch	The Gallery, EMCC
12.00 – 12.30	**14th ALT Annual General Meeting**	Main Auditorium, EMCC
	All Members are warmly invited to this brief but important annual meeting.	
17.30 – 18.30	ALT-C Session Chairs and Theme Leaders Meeting	EMCC Suite 2
	ALT CX convening meeting	The Gallery, EMCC

Pre & post-conference workshops

Delegates who have booked to attend a pre or post-conference workshop should refer to the information supplied by the presenters on booking for further details.

Monday 3 September 2007 – Pre- conference workshops:

NCSL's tools for elearning – an interactive workshop.
To be held at the NCSL's Learning and Conference Centre
Time: 12:30 – 16:00

Designing learning spaces: visions, issues and practices
To be held at the Learning Sciences Research Institute, University of Nottingham, Jubilee Campus
Time: 10:00 -16:30, with registration form 09:30.

Rapid Creation and Deployment of Advanced e-Assessments using QuickTrl
Room A2 - LSS
Time: 14:00

Generative Learning Objects in the making
Conference Suite 1, EMCC
Time: 14:00

Introduction to ePortfolio with PebblePad
PC Lab, Suite 4, EMCC
Time: 14:00

Thursday 6 September 2007 – Post-conference workshops:

JISC's User Innovation & Development Model (UIDM): an overview of the next Stages
Conference Suite 3, EMCC
Time: 14:00

Keynote Speakers

Dr Peter Norvig
Director of Research, Google

Peter Norvig is the Director of Research at Google Inc, where he has been since 2001. From 2002-2005 he was Director of Search Quality. He is a Fellow of the American Association for Artificial Intelligence and the Association for Computing Machinery and co-author of Artificial Intelligence: A Modern Approach, the leading textbook in the field (with 94% market share). Previously he was the head of the Computational Sciences Division at NASA Ames Research Center , where he received the NASA Exceptional Achievement Award in 2001. He has served as an assistant professor at the University of Southern California and a research faculty member at the University of California at Berkeley Computer Science Department, from which he received a Ph.D. in 1986 and the distinguished alumni award in 2006. He has over fifty publications in Computer Science, concentrating on Artificial Intelligence, Natural Language Processing and Software Engineering. He is also the author of the Gettysburg Powerpoint Presentation and the world's longest palindromic sentence.

'Learning in an Open World'
What happens in a world where students have instant access to trillions of words of information (and disinformation), without need of a teacher as an intermediary? What roles do the student, teacher, and other citizens play in this world? We'll soon find out...

http://www.norvig.com/bio.html

Dr Michelle Selinger
Education Strategist, Cisco Systems

Dr Michelle Selinger joined Cisco in 2001 where she is currently the Global Education Strategist for Corporate Affairs as well as an adviser for technology in education across the company. She has worked with a number of governments through Cisco's social investment programmes in education and also running visioning workshops on the future of technology-enabled education. She has a strong background in education and immediately prior to joining Cisco she was the director of a research centre for new technology in education at the University of Warwick.

Michelle is Chair of the Academic Advisory Board for the World Economic Forum's Global Education Initiative. She sat on the steering group for the European Commission's e-learning conference in 2005 and was a member of the advisory group for e-Europe 2005 which informed the European Commission's i2010 initiative. She has led a number of evaluation projects on technology-enabled learning and has published widely on many aspects of ICT in education.

'You can't cross a chasm in two small jumps'
In the 21st century gaps in many facets of our lives are quickly becoming vast chasms: chasms between cultures; chasms between what learners do with technology informally and what formal education allows them to do; and chasms between learners widened by the opportunities that the new technology affords those that have it and can use it. The lifelong learning agenda assumes smooth transitions between school, college, university and the work place, yet the changes in learning paradigms in these institutions are so variable that the chasms between them are widening too. David Lloyd George (1863-1945) said, "Don't be afraid to take a big step if one is

indicated; you can't cross a chasm in two small jumps". It is now 2007. Isn't it time we bit the bullet and made some bold changes to our formal learning systems: changes that really take advantage of what technology can help us do to improve the quality and richness of the learning experience?

http://www.selinger.co.uk/michelle/

Dylan Wiliam
Deputy Director, Institute of Education

Dylan Wiliam is Deputy Director of the Institute of Education,University of London. In a varied career, he has taught in inner-city schools, directed a large-scale testing programme, trained teachers,served a number of roles in university administration, including Dean of a School of Education, and pursued several research projects focused on supporting teachers to develop their use of assessment in support of learning. From 2003 to 2006 he was Senior Research Director at the Educational Testing Service, Princeton, NJ, USA.

'Assessment, learning and technology: prospects at the periphery of control'
Dylan Wiliam will explore some of the ways in which technology will change how learners are assessed. The technology or scoring multiple-choice items has been in widespread use for well over half a century, but more recently it has become possible to score automatically short-answer constructed-response items, graphs, and even essays with the same accuracy achieved by humans (although this feat is less impressive when it is realized how poor the agreement between humans can be). These changes will lower the cost of large-scale authentic assessments, thus improving the validity of the assessment of student learning. More significantly, however, recent developments in classroom aggregation technologies suggest that it will be possible to use automated scoring of student responses to allow teachers to make real-time instructional decisions, thus increasing student engagement in learning, and the responsiveness of instruction to student needs.

http://ioewebserver.ioe.ac.uk/ioe/cms/get.asp?cid=6063&6063_0=14354

There will also be a welcoming keynote from **Professor Sir Colin Campbell, Vice-Chancellor of the University of Nottingham.**

http://www.nottingham.ac.uk/vice-chancellor/vc.html

Theme Speakers

Dr Hans-Peter Baumeister

Director of the ESB-Research Institute;
Lecturer in International Studies at the European School of Business, Reutlingen University

Theme: Learning and internationalism

Hans-Peter researches in the field of innovation for knowledge societies and regional clustering processes ("learning regions") with particular emphasis on the role of universities. He has extensive knowledge of developments in distance education, e-learning and methodologies, as well as the major fields of application and organisation. He has experience in trans-national joint course development as well as implementation in single and mixed mode institutions, and works on the design of virtual teaching/learning environments and the running of international e-learning programmes.

Hans-Peter lectures on European Integration, European Identity and Globalisation. He analyses various R&D/educational systems and also conducts a range of professional training programmes. In 1994 and 1996 he worked with members of the Chinese National Audit Office (CNAO), evaluating their learning video production, and assisted European experts in Higher Education between 1998 and 2001. He co-ordinated the evaluation of the EU-Phare Multi-Country Programme in Distance Education between 1999 and 2001, and is also an EU expert for Technology Enhanced Learning (5th, 6th and 7th Framework Programme).

http://www.knowledge-economy.de/scientific-committee/Dr_Baumeister_ESB.pdf

Marion Miller

Manager, JISC Regional Support Centre for Yorkshire and Humber, University of Leeds

Theme: Learning technology for the social network generation

Marion joined the University of Leeds in 2002 to manage the JISC Regional Support Centre for Yorkshire and Humber. The centre provides e-learning strategy and implementation support to 6th Form, further education, specialist and higher education colleges; work-based learning providers; and local authorities in the region. The centre is well known for its innovative approaches and their challenging summer conferences which make full use of new and emerging technologies.

Originally a mathematics teacher in a comprehensive school, Marion studied for an MSc in Computing at University of Bradford part time after moving into Further Education to lecture in computing at Dewsbury College. In 2002 Marion received a Becta National ICT in Practice award for 'Management of ICT in FE' and has presented at a number of National and Regional Conferences. Marion is a member of the National Delivery Group for the DfES Harnessing Technology e-strategy.

http://www.rsc-yh.ac.uk/

Dr Frank Rennie

Head of Research and Post Graduate Development at Lews Castle College;
Course Leader of the MSc in Managing Sustainable Rural Development at the UHI Millennium Institute in the Highlands and Islands of Scotland

Theme: Large scale implementation

Frank's research interests lie in the general areas of rural and community development, especially in community based approaches to integrated sustainable development.

Recent work has been on new approaches to online education and distributed learning on and in rural communities. He is an advisor to several government programmes and committees and is a Fellow of a number of learned societies.

Frank has been involved in developing and delivering various combinations of distributed learning solutions (with a particular emphasis on networked solutions for rural areas) with colleges and university partners in Europe, Amazonia, Asia, and New Zealand. He has published a wide range of materials related to rural issues and is a regular keynote speaker at international conferences.

http://www.lews.uhi.ac.uk/about/research/staffrec1.htm

Tim Rudd

Senior Researcher, Futurelab

Theme: Designing learning spaces

Tim is Senior Researcher in Futurelab's learning team, working and advising on a range of research projects, written outputs and events. Prior to this he was head of evidence and research at Becta, where he worked on a range of policy-related projects and programmes relating to research into ICT and education.

Tim's work and writing has covered areas such as the digital divide, home-school-community links, personalisation and learner voice. Previously he gained his doctorate whilst studying at the University of Bristol, focusing on ICT and the reproduction of social inequalities.

http://www.futurelab.org.uk/

ALT-C 2007 programme

Monday 3 September 2007

1000	**Pre-conference Workshop: NCSL's Tools for eLearning - an interactive workshop (12:30 - 16:00)**		**Pre-conference Workshop: Designing learning spaces: visions, issues and practices (10:00 - 16:30)**
1400	**Registration opens. Welcome to the University of Nottingham, East Midlands Conference Centre**		
1400	**Pre-conference Workshop: Rapid creation and deployment of advanced e-assessments using QuickTrl (Starts 14:00)**	**Pre-conference Workshop: Generative Learning Objects in the making (Starts 14:00)**	**Pre-conference Workshop: Introduction to ePortfolio with PebblePad (Starts 14:00)**
1800	**Session Chairs Meeting, East Midlands Conference Centre**		
1930	**Reception and buffet in the East Midlands Conference Centre Opening of exhibition and poster displays**		

Tuesday 4 September 2007

	Designing learning spaces			Large-scale implementation		Learning and internationalism	LT for the social network generation			ALT strand
0930	**Opening Plenary, EMCC Lecture Theatre: Welcome from Professor Sir Colin Campbell, Vice-Chancellor, University of Nottingham Welcome from the President of ALT, Dr Jane Seale**									
0940 1030	**Keynote 1: Dr Michelle Selinger, Cisco Introduction to the themes: Tim Rudd, Frank Rennie, Hans-Peter Baumeister, Marion Miller**									
1100	**Refreshments in Exhibition area**									
1130	90mins	Short Papers	Workshop	Symposium	Research Papers (60 mins)	Workshop	Workshop	Symposium	Demonstrations	Research Papers (60 mins)	Speed networking WS 1368
1300	**Lunch in Exhibition area & Posters in Concourse**									
1415	60mins	Short Papers	Short Papers	Short Papers	Demonstrations	Short Papers	Short Papers	Short Papers	Short Papers	Research Papers	Becta/ALT research SYM 1363
1515	**Refreshments in Exhibition area**									
1545	60mins	Research Papers	Short Papers	Short Papers	Demonstrations	Demonstrations	Short Papers	Short Papers	Short Papers	Short Papers	CMALT accreditation WS 1369
1645	**Shuffle time**									
1700	60mins	Short Papers	Research Papers	Short Papers	Research Paper	Short Papers	Largescale: Workshop	Short Papers	Short Papers	Research Papers	Meet the ALT-C & ALT-J Editors
1800	**Special Interest Group (SIG) meeting: EMERGE**					**ALT-J Editorial Board Meeting, EMCC Gallery**					
1900 2000	**Dinner in Halls of Residence Ceilidh in the Plenary Theatre, EMCC Lecture Theatre**									

ALT-C 2007 programme

Wednesday 5 September 2007

	Designing learning spaces			**Large-scale implementation**		**Learning and internationalism**	**LT for the social network generation**			**ALT strand**
0900	Workshop	Demonstrations (60 mins)	Workshop	Workshop	Symposium	Demonstration, Research Paper	Workshop	Short Papers	Workshop	**SYM 1282 (CAMEL) EMCC Gallery**
1030	**Refreshments in Exhibition area, EMCC**									
1100 1200	**Keynote 2: Prof Dylan Wiliam, Institute of Education** **14th ALT Annual General Meeting** **EMCC Lecture Theatre**									
1230	**Lunch in Exhibition area, EMCC**					**New Members' Lunch, 1st Floor Gallery, EMCC**				
1330	Short Papers	Short Papers	Mixed themes Research Paper, Short Paper	Demonstrations	Short Papers	Short Papers	Short Papers	Demonstrations	Largescale: Short Papers	**EMERGE workshop 1251**
1430	Posters in Concourse, EMCC			Sponsored session Desire2Learn		Sponsored session Blackboard	Sponsored session Adobe		Sponsored session TechDis	
1530	**Refreshments in Exhibition area, EMCC**									
1600	Workshop	Workshop	Symposium	Symposium	Symposium	Largescale: Short Papers (60 mins)	Workshop	Short Papers	Largescale: Short Papers	**Learning Objects Showcase ID 1371**
1730	ALT CX Convening Meeting (new) EMCC Gallery					Session Chairs Meeting with Theme Leaders				
1830	**Coaches leave for Conference Dinner**									
1900 to 2300	**Reception & Conference Dinner at the Colwick Hall Hotel, Nottingham** **Presentation of Learning Object and Learning Technologist of the Year Awards and Best Poster prizes** Music and bar open									

ALT-C 2007 programme

Thursday 6 September 2007

	Designing learning spaces			**Large-scale implementation**		**Learning and internationalism**	**LT for the social network generation**		
0900	Short Papers	Research Papers	Short Papers	Short Papers	Short Papers	Short Papers	Short Papers	Research Paper, Short Paper	Short Papers
1000	**Refreshments in Exhibition area, EMCC**								
1030	Theme Speaker's Summary **Designing learning spaces** **Tim Rudd**		Theme Speaker's Summary **Large-scale implementation** **Frank Rennie**		Theme Speaker's Summary **Learning and internationalism** **Hans-Peter Baumeister**		Theme Speaker's Summary **Learning technology for the social network generation** **Marion Miller**		
1110	Discussion Panel		Discussion Panel		Discussion Panel		Discussion Panel		
1130	**Shuffle time**								
1145	**Keynote 3: Dr Peter Norvig, Director of Research, Google** **EMCC Lecture Theatre**								
1245	**Closing remarks & preview of ALT-C 2008**								
1300	**Lunch in Exhibition area, EMCC**								
1400	**Post-conference Workshops**					**Post-conference Workshops**			

Session lengths

Demonstration – 30 mins
Poster – 15 min rolling sessions
Research paper – 20 mins plus 10 discussion, i.e. 3 in 90 mins
Short paper – 15 mins plus 5 discussion, i.e. 3 in 60 mins
Symposium – 90 mins
Workshop – 90 mins

ALT-C 2007 Poster Board Plan

Please note: Poster boards are 2m x 1m (h x w) and will be located in the concourse at EMCC. Each poster board will have a sign indicating the paper number (ID), and stand number. The position of stands on this diagram shows approximate locations only.

Location of Posters by theme

Theme: ALT strand

Stand Number	*Paper ID*	*Paper title*
1	n/a	ALT and CMALT display

Theme: Designing learning spaces

Stand Number	*Paper ID*	*Paper title*
2	1120	Documentit - a simple referencing tool
3	1154	The use of interactive on-line quizzes in Maths
4	1198	Scripware: a web-based package for teaching dispensing
5	1232	The use of practitioners' concepts of inclusivity to inform the planning of learning activities
6	1240	Developing and evaluating an online PhD
7	1262	Transformational engagement
8	1287	Environments to promote engagement, interaction and enquiry
9	1328	SceDer and COML: toolsets to facilitate collaborative learning for one-to-one technology classroom

Theme: Large-scale implementation

Stand Number	*Paper ID*	*Paper title*
10	1047	Virtual Learning Environments: the students' perspective
11	1131	Factors affecting the adoption of faculty-developed academic software: a study of five projects
12	1191	'How many?!': Reducing staff stress levels with an innovative approach to Life Science sessions.
13	1196	Starting academics out on the right foot with e-learning: e-learning starter packs
14	1197	Mapping expectations of online assignment submission and online feedback
15	1222	Calculations for nursing practice
16	1256	E-learning in Schools Survey 2006
17	1257	Authoring IMS Learning Design
18	1350	Recording the student learning that takes place during clinical placements

Theme: Learning and internationalism

Stand Number	*Paper ID*	*Paper title*
19	1171	Culturally-situated Japanese language online tutorials
20	1184	Identifying cultural differences in the barriers to online learning: validity and reliability studies of a tool tested in Taiwan and the UK

Theme: Learning technology for the social network generation

Stand Number	*Paper ID*	*Paper title*
21	1092	Using digital repositories to store e-learning material for mobile devices
22	1115	Phoebe: Web 2.0 technology to support innovation and collaboration among teachers
23	1121	Video Interactions - socially constructed analyses of video in an online environment.
24	1122	Using Skype: learning with Voice Over Internet
25	1128	Social software to support collaborative processes of undergraduate learning: early observations and emerging research requirements
26	1139	Podcasting exercise physiology - enhancing the student experience

Stand Number	*Paper ID*	*Paper title*
27	1152	Cultural capital and community development in the pursuit of dragon slaying (massively multiplayer guild culture as a model for sociable elearning)
28	1157	How to support part-time tutors' professional development needs by using Wikis and Blogs
29	1170	Podcasting as a social network tool is it a student reality? Findings fror a cross-institutional survey.
30	1181	Reflecting through digital storytelling
31	1189	Directed and undirected computer-assisted language learning, collaboration, and lifelong learning
32	1215	Cascading Newsfilm Online across the disciplines
33	1245	Tales from the bleeding edge: dangerous developments at RLO-CETL
34	1247	The role of technology in psychology learning and teaching
35	1264	Technology bundles - gathering staff and student experiences of using mobile technologies in learning, teaching and assessment
36	1266	Encouraging diversity in the use of the wiki tool: a staff development model
37	1316	Wikiversity - a complex space for collaborative learning
38	1322	M-learning in action – a hands-on approach

Abstracts

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Abstract layout

The abstracts are listed by session time and are grouped within their 60 or 90 minute theme slots in alphabetical order: ALT strand; Designing learning spaces; Large-scale implementation; Learning and internationalism; Learning technology for the social network generation. Please refer to the indexes at the end of the abstracts to search by title, author or ID number.

Each abstract is displayed as shown below.

Abstract title
Day *Conference theme*
Time

Author Text of abstract.
Author's affiliation

ID number Session type *keywords:*

Rooms and buildings

Conference sessions will take place in the lecture theatres and seminar rooms of the East Midlands Conference Centre and the Law & Social Sciences Building. Hands-on workshops and some demonstrations will take place in the PC Lab in the East Midlands Conference Centre, Suite 4. Posters will be displayed in the Concourse of the East Midlands Conference Centre.

Rooms for each session will be shown on the final timetable which will be given to all delegates on arrival.

Speed networking workshop

Tuesday
11:30

ALT strand

Ms Rhonda Riachi
ALT

Mr Tom Franklin
Franklin Consulting

1368 Speed Networking

This workshop is a lively session to help you to meet people and make new contacts at ALT-C. Bring plenty of business cards with you and prepare for a boost to your contact list!

keywords: meeting people / making contacts

Orchestration with the interactive whiteboard: provisionality and permanence

Tuesday
11:30

Designing learning spaces

Dr Julia Gillen
Prof Karen Littleton
Mrs Alison Twiner
The Open University

Ms Judith Kleine Staarman
Prof Neil Mercer
University of Cambridge

1049 Short Paper

The Interactive Whiteboard (IWB) is the first Information and Communication Technology (ICT) tool primarily well-designed for whole-class interaction. It is now in regular use in most British primary schools. As with the introduction of other technological tools into the classroom, strong claims have been made that the IWB will have a revolutionary effect on pedagogy. We problematise these claims through taking a sociocultural approach to teachers' use of the IWB, viewing it as a relatively new tool within their existing and evolving teaching practices. Research, including our own, has already revealed that the IWB can aid teachers in planning and orchestrating lessons using a wide range of multimodal resources.

In this paper we explore specifically how the teacher's management of the IWB can support both a constant and a changing resource, as a reminder or provider of information, whilst also being the backdrop for the cumulative, co-operative development of understanding. Our UK Economic and Social Research Council (ESRC) funded project has focussed on use of the IWB within four classes of children aged 7-11 years, at the upper end of primary education. Each class was video recorded during two sequences of two lessons, providing 16 lessons overall. Teachers were also interviewed to discover how they account for their use of IWBs within their teaching and learning.

Within our observations, the IWB enabled the teacher to create clear but provisional structure, as well as providing the opportunity to modify representations in a number of ways. Different tools, those created by the teacher and those within the IWB functionalities, were utilised to support gradual revealing of information or instruction. These were felt to offset pupil overload of information, allowed for discussion of developing understanding, and enabled teachers to control the pace of the lesson more easily. Teachers also made use of commercial software and scanned photographs and images, which pupils annotated during lessons in the creation of key points or recognition and use of key terms.

Instances of use explored in this paper demonstrate how the IWB can be applied by competent teachers as a tool to structure and adapt their learning material to the immediate and future needs of their class, within the context of overall lesson objectives. Our conclusions are that successful use of the IWB may be characterised as a skilful balance between its use as a facilitator of a pre-structured, well-resourced lesson format with the flexibility of affording more improvisational and spontaneous teaching.

keywords: interactive whiteboard / sociocultural approach / multimodal resources / provisionality / structure

Beyond control: designing space for effective learning and teaching of digital media in higher education

Tuesday
11:30

Designing learning spaces

Mrs Gaynor Cavanagh
Dr Eileen Webb
University of Teesside

Much of the research into technology enabled learning has concentrated on technology to support online learning as part of a blended or distance learning model. In this paper it is argued that the design of the physical learning space is at least as important as that of the virtual.

We describe a project to redesign the computer laboratories used in the delivery of multimedia courses within the School of Computing at the University of Teesside. Although the specifications of the computing equipment in the laboratories had been improved and upgraded on a regular basis over the years, the physical environment of the rooms had changed little since their inception. Due to the rigid layout and cramped conditions they have been referred to as “battery hen” computer laboratories.

The project consisted of two phases. Phase One concentrated on a redesign of the room layout. This involved a consultation of the literature, student and staff focus groups to inform a requirements analysis and the implementation of the infrastructure and hardware based on this. Phase Two concentrated mainly on the information and communication technology (ICT) requirements and effective pedagogical use of the space. Prior to Phase Two an intermediate evaluation was conducted. This consisted of a questionnaire to students, designed to elicit their opinions on the new laboratory infrastructure and included comparisons with previous designs. Finally after the laboratory had been fully operational for a number of months, a final survey of staff and student opinion was conducted.

The most important concept to emerge as a result of the consultations was the need to facilitate communication and collaboration. In order for this to happen, it was important to move from the traditional rows of computers to a layout where students could more easily see and interact with each other and the tutor. The consultations resulted in a final design consisting of three hexagonal hubs arranged around the room. Each individual space having room for non-computer-based activities and collaboration. There were also two additional spaces with adjustable height tables for disabled access and another two spaces for specialist hardware. The room also included a breakout area with comfortable seating. The refurbishment immediately helped to create a group environment and promoted a more vibrant learning community.

The final evaluation involving staff and students indicated positive benefits as a result of the changes and an overall conclusion that the final design of the learning space met identified success criteria, removing the negative impact of the original environment and helping to promote more effective learning. Overall, the redesign of the laboratory has been a success. However, lessons have also been learnt. Ideally any learning space should be flexible, allowing furniture arrangement to be easily modified depending on the requirements of class groups and individuals. Due to the requirements for desktop computers and the hardwiring of the network structure, such an arrangement is currently impractical in many computer laboratories. In the near future however, this may not be the case as wireless networking technology predominates.

1323 Short Paper

keywords: physical learning space / design of computer laboratories / physical environment / battery hen computer laboratory

Relinquishing control: designing technology-enhanced learning spaces to support student ownership

Tuesday
11:30

Designing learning spaces

Ms Jacquie Kelly
JISC InfoNet

Mr Tom Hamilton
University of Sussex

There is currently considerable interest in how emerging digital technologies can be usefully integrated within learning spaces to enhance learning. This is part of a wider discussion into the suitability of our current educational estate for the 21st Century

A clear trend toward innovative learning space design is emerging across all educational sectors – particularly secondary, FE and HE – and is supported by recent Government policy and funding. It is vital that the design of these new spaces should be learning, rather than technology, led - with the technology used to engage learners and facilitate learning, rather than creating distractions and interference.

Learners in higher and further education are changing. Their attitude to technology and learning is changing. Key issues concerning the Web 2.0 generation are ownership, access and flexibility; How can they take control? Express their own individual personalities and preferences? Communicate, share and swap interesting information with their peers?

This workshop will draw on the specific experience of the InQbate project and the wider analysis of the JISC InfoKit on Designing for technology-rich spaces, to outline some of the emergent themes in technological and spatial design and to identify some of the theoretical and practical issues associated with these.

Grounding all activity in solid principles of learning and creativity theory, the workshop will outline key points of underlying theory, effective approaches to successful 'user-centred' design and 'top tips', before encouraging participants to explore the space design process for themselves. A facilitated design process will ensure a focus on practical design and process skills that can be implemented in a variety of setting to maximise success.

After an initial presentation of relevant theory and experience, participants will undertake an example design. Experiencing a cut-down version of the design process will enable them to see the overview of the process, to encounter common issue areas and consider how spatial and technological design can be used most effectively to support learner needs.

Facilitated individual and group reflection will enable participants to consider how technology will shape learning in the future consolidate their learning at the 'big picture' level and identify how they might apply it practically within their own institutions.

As a result of the workshop, participants will acquire a deeper understanding of how space and technology influence behaviour, of relevant learning and creativity theory, and current trends in learning space design. They will acquire an understanding of good design principles, particularly the value of a user-centred approach and a strategic, rather than reactive, approach to design. They will also gain a practical insight into some of the potential issues to be expected within the design process and some techniques to minimize the risks that these might generate.

1200 Workshop

keywords: technology-enhanced learning spaces / user-centred design / pervasive computing / flexibility / creativity

Tensions between personal space and social space in mobile learning

Tuesday
11:30

Designing learning spaces

Professor Tom Boyle
Dr John Cook
London Metropolitan University

Dr Agnes Kukulska-Hulme
The Open University

Mr John Traxler
Wolverhampton University

It is claimed that learning with mobile devices is suited to both individualized and collaborative learning. Depending on context of use, researchers emphasize one aspect over the other. For example, Pehkonen and Turunen (2003) say that 'the obvious potential of mobile learning lies in supporting social contacts and collaborative learning', whilst Dan and XinMeng (2006) note that 'mobile learners, who are typically distance learners, usually work individually without external support'. As we move towards the 'third phase' in mobile learning evolution – contextual, ambient, mixed reality learning (Pearshouse, 2006), the design of learning spaces will increasingly need to take account of tensions between learning based on a personal device, and the social, contextual affordances of current technologies and software. Are learners finding themselves under constant pressure to share their learning with others? Are those who want to share being frustrated by the person who is only interested in protecting their personal space? Are current evaluation strategies up to the job of detecting these tensions and illuminating whether they are a hindrance, or a creative force?

Agnes Kukulska-Hulme and John Traxler have been challenging existing evaluation practices, examining their alignment with the aims of mobile learning. They have argued that personalized learning on mobile and wireless technologies differs dramatically from personalized learning on desktop computers; for example, mobile personalization can deliver on the basis of who else is learning nearby. Tom Boyle is working on transferring the design of learning resources from the desktop to mobile phones where the aim is to retain rich functionality, yet his work recognizes that episodes of m-learning are likely to be fragmented and open to disruption in the context of use. John Cook has argued that mobile devices are heralding a disruptive shift away form formal learning: tertiary education is slow to adopt ubiquitous technologies, which leads to 'hidden' disruption where some learners choose to use their mobile devices to develop informal learning networks.

A scenario will be presented in which mobile technologies should be used to meet the objectives of a learning task involving an investigation in a city centre. The scenario will introduce the issue of tensions between private and social space. Participants will then be asked to join one of two sets – individualists, or social learners. The sets will consider: (a) how they will use mobile technologies to achieve the task objectives; (b) why their individualist or social approach is more advantageous in meeting the objectives of the task. An exchange of views from the two sets will fuel a debate exploring factors such as privacy, mobile etiquette and social capital. This will lead to consideration of how an evaluation could capture salient aspects of personal and social space, and any tensions between them.

Participants will gain a fuller understanding of personal and social space in mobile learning. They will be able to take a more active stance in defining requirements for an evaluation of a mobile learning task.

1216 Symposium

keywords: mobile learning / portable devices / collaboration / social learning / city centre learning scenario

Investigating university students' prior experiences of technology and their expectations of using technology in their studies

Tuesday
11:30

Large-scale implementation

Mrs Amanda Jefferies
Professor Diana Kornbrot
Ms Nuz Quadri
University of Hertfordshire

Who are the university students of the 21st Century and what characteristics do they have in terms of their interest in using technology for learning? They have been called, for instance, 'the iPOD generation' from the high number of sales to this age group of one of the technology icons of the early 21st century. Another nickname is 'The Net generation' from the apparent ease with which students use the Internet to support their leisure, study and lifestyles and apparently move seamlessly from one medium to another.

This paper presents the findings from an investigation into prior experiences of technology use in the study and leisure activities of students at the start of their university careers, at a popular new university with a strong track record for providing high quality technology for learning. The investigation also considered the students' expectations of using technology in their studies and the perceived barriers which students anticipated in using technology for studying. An initial enquiry was carried out via an online survey and a later extension to the study used a paper based questionnaire format to deliver the same questions to students in a lecture room. Students were invited to take part in a series of focus groups to determine how far the initial responses and results were confirmed by their spoken opinions. Over 600 students starting at university took part in the initial survey and the participants came from a cross section of the university's faculties and departments, including students who have traditionally embraced technology and those who are typically less keen to use technology.

1077 Research Paper

keywords: student expectations / e-learning environments / net generation / student experience / supporting learning

Lecture recordings: extending access for students with disabilities

Tuesday
11:30

Large-scale implementation

Mr Michael Fardon
Ms Jocasta Williams
University of Western Australia

The introduction of a lecture recording system at many universities has received considerable endorsement from advocates of accessibility, with students with disabilities and/or medical conditions being identified as major beneficiaries of this resource. To gain a better understanding of the perceived benefits and shortcomings of recording lectures for this group of students, and potential directions and applications for the future, a research project was recently conducted at one university into this topic. This research acts as the basis for this paper; the presentation will briefly overview the project and share key research findings.

1113 Research Paper

keywords: recording lectures / students with disabilities / accessibility and flexibility

Developing a contextualised approach to accessible e-learning: a framework for planning and developing institutional responses to accessibility

Tuesday
11:30

Large-scale implementation

Dr Jane Seale
School of Education

Until quite recently, the traditional approach to promoting accessible online material and resources has been to advise individuals and the institutions they work in to rigidly follow the Web Content Accessibility Guidelines (WCAG) developed by the Web Accessibility Initiative (WAI), in isolation from the context in which the resource is to be used (e.g. a higher or further education Institute) or its intended purpose (e.g. e-learning). This approach has had limited success and led to growing calls for more flexible solutions to accessibility to be developed that are capable or variation and adaptation depending on the situation or context.

The overarching aim of this workshop therefore is to offer participants a framework within which they can evaluate and explore institutional approaches to accessibility that takes into account the context in which institutions are operating and offers flexibility in terms of the approaches or solutions that may be developed.

The related objectives of the workshop are to:
- Outline a new contextualised model of accessible e-learning practice that takes into account the context in which higher and further education institutions operate;
- Illustrate the potential of the model through some key examples;
- Demonstrate and evaluate the application of the model to participants' own practice through the exploration and discussion of key mediating factors that can contribute to the success or failure of contextualised, institutional accessibility initiatives.

The framework offered in this workshop is based on a newly developed contextualised model of accessible e-learning practice, which focuses attention on the stakeholders within an institution (student, lecturers, learning technologists, staff developers, support services, senior managers) and the local, contextualised accessibility practices that they might develop in response to a range of accessibility drivers and mediators.

Each stakeholder will respond to external drivers for accessibility such as legislation, guidelines and standards in different ways. These responses will be mediated by their views and positions regarding a number of key issues such as disability, inclusion, duty & responsibility; teams and community as well as autonomy and compliance. The accessible e-learning practices that develop out of these responses will vary depending on the stakeholders and the context in which they are operating but essentially centres on taking ownership and control as well as developing personal (or institutional) meaning. What the contextualised model of accessible e-learning practice stresses therefore, is that there is no direct causal relationship or connection between drivers for accessibility and accessible e-learning material and resources. The gap between drivers and outcome needs to be filled by accessible e-learning practices and the stakeholders within a higher or further education institution help to bridge that gap.

1090 Workshop

keywords: accessibility / disability / service provision / student support / institutional responses

The use of audio haptics in distance learning

Tuesday
11:30

Learning and internationalism

Mrs Elaine Edwards
Mrs Shirley Evans
Mr Chris Stevenson
RNC

'E- learning has the potential to progress people with disabilities from the outer edges of educational opportunities to the leading edge of educational innovation,' (O'Connor, 2000).

During their lifetime people who are visually impaired are entitled to have an equality of access to education and training. Individual needs should be taken into account and information, training and education should be fully accessible. It should be recognized that it may be difficult to address individual needs in wide scale distance learning. Sales, Evans, Musgrove and Homfray (2006) state that, 'due to the individual needs of students it is important that they and their teachers have access to a range of assistive technologies. These tools may vary according to the task as well as to the learner.' A high level of expertise is needed by the teacher to exploit the potential of the technology, Douglas (2001). This may be exacerbated in a distance-learning situation.

AHVITED (Audio Haptics for Visually Impaired Education and Training at a Distance) is a European project, funded under Socrates. The project involves carrying out research into the problems associated with delivering graphical learning materials to learners with a visual impairment and learners studying by distance learning. This will result in the development of accessible materials and software, primarily using 'talking tactile technology'.

This project will provide an innovative method of delivering visual graphics to people who are visually impaired by the way of touch and sound using tactile diagrams with integrated sound files. This project will be specifically directed at supporting such individuals in a distance-learning environment. The main activities will be the development of systems currently used in the classroom for wider application in distance learning courses and the creation of three sets of pilot course materials to evaluate the proposed methodology. The outcomes will be an operating system, pilot course materials and a training manual.

Outline of Workshop:
- Introduction to audio haptics
- Outline of developments with the European project
- Hands-on experience of talking tactile technology
- Plenary discussion on how participants might incorporate the technology to widen participation.

Participants will:-
- Gain an understanding of what audio haptics are and their application in distance learning.
- Begin to evaluate the benefits and the issues of audio haptics in distance learning
- Learn about the European project and how RNC is working with international organisations to take forward audio haptics to widen participation.
- Gain hands on experience in the use talking tactile technology and an introduction creation and authoring of materials.
- Consider how they might incorporate audio haptics in their learning and teaching.

Douglas, G., (2001), 'ICT, Education, and Visual Impairment,' The British Journal of Educational Technology, Vol. 32, No.3, pp 353-364
O' Connor, B., (2000), 'E-learning and students with disabilities; from outer edge to leading edge,' Keynote Speech presented at Networking 2000,

http://www.griffith.edu.au/ins/webdev/accessibility/resources/ac01m01_BarrieOConnor_Elearning.doc, last accessed 16th December 2006
Sales, A.S., Evans, S., Musgrove, N., and Homfray, R., (in press), 'Full-screen magnification on a budget: Using a hardware-based multi-display graphics card as a screen-magnifier,' The British Journal of Visual Impairment, September 2006

1308 Workshop

keywords: audio haptics / sensory impairment / accessibility / widening participation

Finding the balance: learning technology for multiple generations

Tuesday
11:30

Learning technology for the social network generation

Mr Keith Beechener
Dr Hilary Cunningham-Atkins
Mr John Woodthorpe
The Open University

The UK Open University (OU) offers a wide range of distance learning courses. Around 75% of OU students combine work and study. Many work full-time, have family commitments and study multiple courses. Students come from diverse cultures and backgrounds with ages ranging from under 18 to over 80. Average student age in 2005 was 34, with around 20% coming from what is hailed as 'the social network generation'.

The challenge is to use innovative practice based on the theory of learning and technology whilst providing a balanced teaching provision that will cater for the full spectrum of student requirements from 'the social network generation' through to the technologically challenged.

This symposium will discuss the issues involved in meeting this challenge, drawing on the knowledge of a team of experienced e-learning practitioners from the Open University who have been involved in course development, online teaching and moderating, and recent experience of online study including use of social networking tools.

An online Level 1 technology course (T171 'You, Your Computer and the Net') offered by the OU between 1999 and 2005 attracted record numbers of students and was taught entirely through electronic media. This was succeeded by an ICT course (T175 'Networked Living') which uses a blend of traditional and online media, and continues to attract high student numbers. Advances in technology together with feedback from tutors and students mean that the course is constantly evaluated and updated.

Building upon this success the OU has developed a wide ranging suite of courses across disciplines with varying degrees of online content. Online working opportunities continue to be explored through use of Web 2.0 technologies to enhance communications between tutors and students.

The presenters hold differing views on the value of social networking tools and delegates will be invited to join discussion of the advantages and disadvantages of using social networking tools for multiple generation learners. Key issues to be explored:
- Is 'the social network generation' defined by age or ability?
- Does use of social networking tools enhance or hinder learning?
- Can social networking content become assessed material?
- Do social network practitioners really want to formalize use of this technology?
- Will students use the technology if it is provided?
- Are participants able to use the technology?
- Should use of technology be compulsory?
- What costs, and who bears the cost?
- Should students be provided with what they want, or with what is proven pedagogically?

- Who will provide the content for social networks?
- Are educational study networks an artificial form of social networks?

The symposium's aim is to share collective experience of online and traditional learning in a discussion about whether social software can be used to effectively support and evaluate learning.
Participants can expect to gain a holistic view of the issues involved with the introduction of learning technology into higher education courses presented to a diverse range of students.

1135 Symposium

keywords: social networking / learning technology / student learning / distance learning / Web 2.0 technologies

A demonstration of Wikiversity, an educational wiki

Tuesday
11:30

Learning technology for the social network generation

Mr Cormac Lawler
University of Manchester

This demonstration is about Wikiversity, a collaborative, wiki-based website around the production of free-content learning materials, activities, and communities, using a MediaWiki-powered wiki, as part of the Wikimedia family of projects. The demonstration will be supplemented by a poster of how Wikiversity works and sits within the wider context of education. It will also correspond to a tutorial on Wikiversity (and wikis), which will be available on Wikiversity by the time of the demonstration.

I will demonstrate basics of how a wiki works by editing a page, creating a user account, and using a “talk”, or “discussion” page. I will also demonstrate the nature of wikis through tracking recent changes to the wiki, page histories, and personal recent changes (known as “watchlists”). A central feature to a wiki is the collaborative, community-oriented nature of its development, and I want to show examples of this in progress.

However, I want to go beyond a demonstration of the technical and social structure of a wiki to discuss what this medium means in the context of education (and theories of collaborative learning). I will show examples of work done on Wikiversity (like courses, individual resources, educational templates, MediaWiki extensions, community discussions) – and from these examples, I will highlight the way that wikis can facilitate the promoting of educational experiences – and also outline the problems that some participants have expressed. I also want to use this to examine the nature of educational resources, and how they are produced on a wiki - as well as showing the overlaps and distinctions between Wikiversity and other similar projects.

Intended outcomes are to gain a deeper understanding of the (educational) utilisation of MediaWiki, and the implications of its educational use, as well as to offer a space for educators to use in their own practice.

1318 Demo

keywords: wikis / collaborative learning / communities of practice / open educational resources

Phoebe: a wiki-based pedagogic planner to promote innovative practice in Design for Learning

Tuesday
11:30

Learning technology for the social network generation

Dr Liz Masterman
OUCS, University of Oxford

Ms Marion Manton
TALL, University of Oxford

Design for Learning provides an alternative perspective on practices traditionally referred to as course and lesson planning. It emphasises active learning through the appropriate use of technology and the creation of learning experiences that are motivating, enjoyable and productive (cf. Beetham and Sharpe, 2007). For teachers, this may mean going back to the drawing board to plan their lessons in depth. Many institutions provide training opportunities for teachers to engage with e-learning (e.g. Sharpe et al., 2006), and these initiatives are being supported by the emergent genre of pedagogic planner tools. In this demonstration we present the prototype of one such tool: Phoebe.

A project within the JISC-funded Design for Learning programme, Phoebe is being developed in close association with the practitioner community. It serves a dual function as a reference source and planning tool, bringing together the key components of a lesson plan and prompting users' thinking with examples designed to inspire them as they plan an individual learning session. An online tool built on wiki technology, Phoebe is also intended to support mentoring and collaborative planning.

The demonstration will comprise an overview of the Phoebe project and an introduction to the tool in the context of planning a hypothetical lesson. Depending on the availability of Internet access, participants will be able try the tool themselves. We envisage the following outcomes for the audience:

- Appreciation of the aims of design for learning.
- Appreciation of Web 2.0 software as "learning" technologies for teachers.
- Understanding of how pedagogic planner tools can help to innovate practice.

The demonstration will be complemented by a poster presenting the theoretical and methodological aspects of the design.

Beetham, H., & Sharpe, R. (2007). Introduction. In H. Beetham & R. Sharpe (Eds.), Rethinking Pedagogy for a Digital Age: Designing and delivering e-learning (pp. 1–10). London: Routledge.
Sharpe, R., Benfield, G., & Francis, R. (2006). Implementing a university e-learning strategy: levers for change within academic schools. ALT-J, 14(2), 135–151.

1114 Demo

keywords: pedagogic planner / design for learning

Assessing the usefulness of mini-games as educational resources

Tuesday
11:30

Learning technology for the social network generation

David Argles
Mr Alex Frazer
Gary Wills
University of Southampton

Interest in educational gaming is on the rise once again, and particular interest has started to peak in the area of lightweight educational mini-games. These games are often distributed virally by users of Internet forums and social networking sites, thanks to their self-contained nature and ability to offer a few minutes of intense fun. But are these games really as useful as people suggest, or are they simply too shallow to convey sufficient pedagogical meaning? And how do we assess how well these games measure up as educational resources? This paper first generates a “conclusive” list of educational requirements from a structured review of other researchers’

proposed requirements. It then presents details of the three most interesting educational mini-games taken from an investigation of around thirty. Whilst some games were able to offer immersive, curiosity-provoking experiences full of relevant information, many of the games were shallow, formulaic, and lacking in information. Finally, conclusions and future work are proposed, including the packaging of mini-games into compendia to add depth, the use of mini-games in blended learning scenarios, and mechanisms to harvest the relatively simple player interactions to assist learner assessment. These findings aim to help educators make a more informed decision as to whether these games are right for their educational aims.

1140 Research Paper

keywords: minigames / requirements for educational resources

Knowledge creation processes of students as producers of audio learning objects

Tuesday
11:30

Learning technology for the social network generation

Professor Catherine McLoughlin
Australian Catholic University

Mr Anthony Chan
Mr Mark J W Lee
Charles Stuart University

This paper reports on a study aimed at investigating the learning and knowledge construction processes of volunteer university students tasked with producing short, talkback radio-style educational audio learning objects (Middleton and McCarter, 2006; Cebeci and Tekdal, 2006), to be distributed to cohorts of other students through podcasting technology. The study used focus group interviewing to analyse the cognitive and social interaction that occurred as students engaged in developing the joint objects of activity. The findings indicate that both individual and collective advances were achieved through collaborative dialogue and peer-to-peer interaction. In addition, the metacognitive processes of planning, self-monitoring and reflection were evidenced in the student-producers' discourse.

1145 Research Paper

keywords: podcasting / knowledge building / knowledge construction / digital audio learning objects / Web 2.0

Expand the boundaries: digital repository solutions

Tuesday
11:30

Learning technology for the social network generation

Mr Chris Jones
The Learning Edge International

This will be a demonstration, with interactive questions from the audience, of Equella, a Learning Object Repository from Australia, using real life customer examples.

Equella has been built by The Learning Edge, a software company from Hobart in Tasmania. Over half the universities in Australia now use the product and it has recently been selected, through rigorous evaluations, by Aston, Coventry, Nottingham and other universities in the UK.

It has also been selected for large-scale implementations by Florida Distance Learning (4 million students) and Education Queensland (490,000 students). Each implementation involves numerous challenges that affect the institutions' ability to successfully deploy infrastructure for technology-enhanced learning. The demonstration will include details of these two large implementations as well as some of the UK university selection requirements. These include Copyright Licensing Agency (CLA) compliance, rich VLE integrations, library metadata and workflow requirements and data migrations & bulk importing of content.

Equella also supports the integrating of formal and informal learning that is crucial to the social network generation, via its support of PDAs and iPods. Equella has a PDA interface for an educator to use on a hand held device, allowing for searches and displaying of records. Additionally, users are able to add resources stored within the digital repository to their iPod using RSS feeds. The demonstration will indicate Australian schools that are using Equella in these areas.

In addition, the demonstration will show the built in content authoring of Equella. This enables educators to create their own rich and interactive courseware, including sound and video. Advanced users can generate SCORM or IMS conformant content using this authoring tool.

1238 Demo

keywords: digital or learning object repository / learning content management systems / technology-enhanced learning

Becta's research programme: learning technology in and out of school (joint session with ALT research committee)

Tuesday
14:15

ALT strand

Ms Vanessa Pittard
Becta

Prof Robin Mason
Open University

What do we know about how technology is supporting learning for school-aged learners? This session draws together a range of existing research and statistical evidence and reports on Becta's recent national studies to offer a high-level picture of the nature and impact of technology for learners in this sector, discussing related challenges and issues.

A key focus is the role of technology in supporting raised attainment in core subjects. There are differences in the strength of the 'technology effect' between subjects, but an overall positive picture. There are also technology-specific effects which suggest impact through different models of learning at different ages. Though 'impact' evidence can be mixed, there is an increasingly clear picture of the factors relating to positive impact. In particular these relate to aspects of overall institutional 'e-maturity' and learner information literacy.

A further issue is that of the relationship between home and school use of technology to support learning. Evidence suggests both are important, and that home use of technology is a key predictor of improved attainment in key subjects. Critically, there is a relationship between the two, whereby use of technology to support learning in school is a key determinant of effectiveness in supporting learning at home.

Finally, the issue of 'personalising' learning with technology is discussed, drawing key messages from Becta's 2007 study of the links between 'e-maturity', personalisation and learning outcomes. The implications of the evidence are discussed, including the challenge of developing practice effectively to meet the needs of learners, management of change in building overall institutional 'e-maturity' and implications for school education of the use of technology to support learning beyond the school.

1363 Symposium

keywords: learning technology research / personalisation / e-maturity / information literacy / schools

Seven days in the life of a 'net generation' student – e-learning opportunities and social networking beyond the classroom

Tuesday
14:15

Designing learning spaces

Professor Peter Bullen
Mrs Amanda Jefferies
Ms Nuz Quadri
University of Hertfordshire

Professor Diana Kornbrot
University of Hertfordshire

With easy access to the Internet 24/7 for most students, established through recent studies, what are the students' attitudes to the provision of their online learning and how does this connect with their well documented use (e.g. Oblinger *inter alia*) of technologies for social networking? As learning and teaching extend beyond the traditional pattern of a five day working week the researchers wished to revisit (three years after their initial study) how students were using the latest version of the MLE with special consideration of the online social facilities provided.

This paper presents the results from the qualitative analysis of 7 days of 13 student video-diaries and audio logs. Students recorded each day, according to a set of directed questions, their personal reflections of the learning environment and how they used technologies to support their learning. Students were invited to comment on the use by academics of the e-learning environment and how changes to pedagogy might promote the student learning experience.

With a strong record of providing excellent blended learning facilities via a campus-wide MLE, this UK University has previously researched extensively into students' experiences of e-learning. This project was conducted in February 2007 jointly with our Students Union and recruited volunteers from across the student body. It acted as a preliminary study for the JISC funded Learners' Journeys project which was awarded in February 2007 jointly to the University of Hertfordshire and Hertford Regional College.

Four main themes emerged from qualitative analysis of the transcriptions of the diary material
- Resources and use of the university MLE in learning and teaching
- Communicating with staff at the University
- Lecturers influence on the students' learning
- Students' studying behaviours

The conference presentation will include material from the students' reflections on their use of e-learning and indications of how they combined online learning with social networking.

The session will provide an opportunity for discussion with colleagues both of the pros and cons of the use of video diaries to capture student opinions and the specific project outcomes. An opportunity to reflect on the wider issues encountered from extending student learning beyond the control of the classroom will be afforded.

1095 Short Paper

keywords: student experience / reflection / learning technologies / accessing learning 24/7 / video diaries

Collaborative working: wiki and the creation of a sense of community

Tuesday
14:15

Designing learning spaces

Ms Martina A. Doolan
University of Hertfordshire

This paper reports on the effectiveness of Wiki technology for creating a sense of community amongst 96 second year computing undergraduates engaged in group based assessment activities.

This is part of an ongoing programme of research which aims to produce pedagogical guidance for academics. This includes collaboration and communication tools and techniques for building an online learning community to complement traditional face-to-face teaching in higher education.

Preparatory work by the academic is a key critical success factor, involving their role as tutor to create an engaging online learning environment to encourage collaborative task driven student-student interactions.

This paper therefore, reports on the student experience, their attitudes and feedback relating to the use of a Wiki over a one-year period at the University of Hertfordshire, using pre and post test questionnaires.

In addition to the questionnaires, student reflections were captured using a Blog, with entries about their understanding of the purpose of the community, rationale, and how the Wiki influenced and supported their undertaking of the group based assessment activities in a social constructivist blended learning environment.

Results from the reflective blogs demonstrate that learners perceived that the community had a purpose and that purpose was to support them in undertaking their learning together both to support them as 'people' and the 'tasks' set for the group based assessment. Learners equally valued the communicative aspects of Wiki: the opportunity to co-create content, to learn together, to work together, to help each other, to discuss, and share ideas. An interesting finding is students felt 'comforted' by each other.

Results from the pre and post test questionnaire demonstrates a 17% increase in learner confidence in using the Wiki and a 26% increase in learner perceptions that Wiki technology can support group work, helping learners to develop a sense of community.

1127 Research Paper

keywords: collaborative learning / blended learning / wiki technology / community / online learning

Online discussions, the student experience: a study of a blended learning non-medical prescribing course

Tuesday
14:15

Designing learning spaces

Mrs Marion Waite
Oxford Brookes University

This small-scale study took a grounded theory approach to explore the motivation of learners to participate in online discussions. The context is a higher education institute and the participants were enrolled on a post-qualifying blended non-medical prescribing course. A number of factors have led to a creative approach to deliver the curriculum. This includes blended learning, which incorporates online discussions. A myriad of factors are driving learning technologies forward within higher education (Sharpe et al, 2006). There is a need to evaluate this impact in order to establish good models of practice. The purpose of this study was to evaluate what learners

gained by participation in online discussions and what can be learned to embed into future learning strategies.

A grounded theory approach refers to methods of data collection and analysis. This includes the collection of many sources of data within the context of the participants and the study. It is important to capture the voices of the people being studied (Leedy and Omerod, 2005). It was felt that analysis of completed coursework, which related to the online discussions and in-depth interviews with these learners were the best sources for obtaining rich data.

The focus for this study was in relation to one online learning activity, which involved discussion. This was because most students on the course at the time had joined in. This discussion had led to vigorous debate and several of the participants had presented evidence of their contribution and reflection within written coursework. Five main themes emerged from the data, evidence of learning, progression to a prescribing role, equality of participation, online socialisation and blending into the face-to-face environment.

Learners will be motivated to join online discussions in order to contribute to and fulfil course assessment. Well thought out learning activities, which relate to the development of professional practice will encourage participation and construction of knowledge. This will promote constructive alignment between the face-to-face and online environment.Lack of participation by some learners will lead to disappointment for others. Scaffolding to promote online socialisation at an early stage of the course and clarifying a clearer connection between online learning activities and course assessment may minimise this.

Themes, which emerged from the data were based on the experiences of six learners, therefore their views may not be representative of the wider cohort who undertook the course. Findings may not be generalisable to other learners but the study does add to a growing body of evidence about blended learning and online discussions, in particular the value of well though-out learning activities. This study has impacted on teaching practice within this context and further exploration is required to promote constructive alignment. The educational practitioner who wishes to utilise learning technologies needs to be prepared for the expectations of learners who will readily utilise resources to further their learning. Their feedback can guide practice to improve the learner experience.

1312 Short Paper

keywords: motivation of learners to join online discussions / evaluation of learning from online discussions / constructive alignment and course design / expectations of online learners / implications for embedding learning technologies

Extending the scope of learning objects with XML

Tuesday
14:15

Designing learning spaces

Dr Bill Tait
The Open University

Reusable Learning Objects are widely available on the Internet and many of them provide viable learning spaces. However, there remain some difficulties associated with their reuse. One is the problem related to contextual pedagogy and another is the lack of compatibility with emerging technologies, such as mobile devices. This paper describes a project to examine the potential of eXtensible Markup Language technology, or XML, to resolve these problems, by developing and testing eXtensible Learning Objects, or XLO.

The discussion first outlines the benefits of reusability then reviews the pedagogical problems that can prevent these from being realised. The aim here is to categorise the pedagogies in some systematic way in order to deal

with the problems. To this end, the principles of object-oriented programming theory are invoked to identify three major pedagogies which can be related to the learning object properties of abstraction, encapsulation and implementation.

It is then shown that XLO may be designed to separate the content of a learning object from its presentation software. The content defines the learning method and can be edited by local tutors thereby allowing the pedagogy to be adapted. Alternatively, the presentation template itself can be replaced, allowing the same content to be reused with a range of delivery systems. Some XLO have been developed for use as online tutorials in a first year undergraduate course on computing. These are illustrated for both personal computers and mobile devices. They have been deployed on a website and made available to tutors and students and the results are reported here.

The overall conclusion, as indicated by usage statistics and personal feedback, is that XLO can be useful in extending both the pedagogical and technological scope of learning objects and other resource-based learning spaces.

1178 Short Paper

keywords: learning objects / reusable learning objects / extensible markup language / pedagogy / extensible learning objects

Community dimensions of learning object repositories

Tuesday
14:15

Designing learning spaces

Prof Allison Littlejohn
Dr Anoush Margaryan
Glasgow Caledonian University

Dr Peter Douglas
Intrallect

Dr Colin Milligan
University of Strathclyde

This paper describes a set of structured guidelines for the implementation and evaluation of learning object repositories that were developed as part of the JISC-funded project CD-LOR (Community Dimensions of Learning Object Repositories). CD-LOR was a 2-year project which set out to investigate enablers and barriers to successfully embedding learning object repositories (LORs) within a diverse range of communities. Such communities included those based in individual and federated institutions and those that exists across institutions (regionally, nationally and internationally), e.g. discipline-based communities.

The hypothesis underlying the CD-LOR project and, hence, the structured guidelines is that the issues which impact upon the successful uptake and functioning of a LOR can be related to key dimensions of the community or communities it aims to serve, as well as key dimensions of the repository itself. For example, the potential problems facing an institutional, multi-disciplinary repository serving several communities will differ from those of an international, single-discipline repository serving one community. CD-LOR worked with several partners to identify specific issues affecting the uptake and use of their repositories. These issues can be grouped around the following broad groups: organisational, socio-cultural, pedagogic and technological.

So far much of the emphasis in the development of learning object repositories has been primarily on technological issues and solutions, while the former three groups of issues have been largely ignored. The research however, has shown that these factors are critical in the implementation and use of repositories. The guidelines are innovative in that they are focused on the organisational, cultural and pedagogic needs and contexts of the end users. After a prioritisation process some of those issues were taken forward and developed into use cases which describe functionality intended to address the original issue. These use cases and the findings from their evaluations are used throughout the structured guidelines as practical examples to illustrate

specific barriers and enablers to LOR usage.

The guidelines are aimed at managers and LOR curators and they take the user through a series of questions regarding the LOR and the communities that will use it. The questions relate to a range of key community and repository dimensions. The community dimensions are Purpose, Composition, Dialogue, Roles and Responsibilities, Coherence, Context and Pedagogy. The repository dimensions are Purpose, Subject Discipline, Scope, Sector, Contributors and Business Model.

The guidelines have gone through an extensive peer review and evaluation. The findings of the evaluation will be presented. The structured guidelines could be a useful tool to guide future developments of effective LORs. They can also be a continually-developing resource as others contribute their experiences of implementing LORs with their own communities.

1263 Short Paper

keywords: learning object repositories / learning communities / repository implementation and evaluation / structured guidelines / barriers and enablers

Connecting learning object repositories – how can federations of repositories combine with other technologies?

Tuesday
14:15

Designing learning spaces

Sarah Currier
Dr Peter Douglas
Dr Charles Duncan
Dr Martin Morrey
Intrallect Ltd

This paper provides an overview of the existing and emerging technologies supporting connections between federations of learning object repositories and between these repositories and other tools, particularly those relevant to social networking and designing your own learning spaces (e.g. RSS, Yahoo Pipes, Web service based search and retrieve) . However, the paper does not focus on the technologies but on the impact these technologies can have on educational approaches.

The review is an imaginative look at the potential that is now emerging from three loosely related developments:
1. Increasing numbers of learning object repositories with the capability to pass and receive information through machine-to-machine interfaces
2. Emerging tools which offer the promise of designing flexible personalized system (whether these are called Web 2.0, mashups or some other buzzword)
3. The standards that underpin these developments including the recently established IMS federated Architectures group and the JISC Deposit API group filling gaps in the essential standards and metadata standards such as Dublin Core's Education application profile.

To offer a firm foundation for anticipating how the convergence of these developments will emerge, a review will be provided of how the need to share and reuse educational resources has led to the current state of repositories. This naturally leads to the forces that are driving today's and tomorrow's developments. Finally, some scenarios will be presented which will illustrate the enhanced learning environments, in the loosest sense of the word, which could be constructed through federated networks of learning object repositories and the associated technologies which can exploit them through queries, links and data transformation.

1297 Short Paper

keywords: repositories / standards / mashups / federated / connect

Transformative learning through the use of blended learning and peer learning in teacher-education

Tuesday
14:15

Designing learning spaces

Professor Mike Keppell
Hong Kong Institute of Education

The purpose of this design-based research project was to investigate teacher-educator and student perceptions of blended learning which uses a specific learning design of peer learning within a teacher-education institution in Hong Kong. Blended learning is a pedagogical approach that combines face-to-face teaching and learning with online learning. Peer learning promotes the learning outcomes of: working with others; critical enquiry and reflection; communication and articulation of knowledge, understanding and skills; managing learning how to learn and self and peer assessment (Boud, Cohen & Simpson, 2001).

The research project used a multi-case study approach to the project and used a variety of methods to examine each of the five cases. The methods included:
- Pre-module and post-module video-interviews with teacher-educators
- Video-focus groups with students from each module
- Analysis of online discussion in each module
- Student questionnaire

In this study the coding, clustering and data summaries of the interviews, focus groups and online discussion was undertaken using NVIVO 7. The focus groups, interviews and online discussion transcripts provided a means of triangulating and contextualising blended and peer learning which enabled the researcher to generate meaning from the data.

The main purpose of this project was to encourage academics to examine their own beliefs about teaching and learning by participating in the design-based research project. The project allowed the academics to examine their current practice through the redesign of a module using blended learning and peer learning, the articulation of their ideas through video-interviews and an examination of their students' perceptions in the focus groups. This process may allow critical reflection and a transformation of their current practice to integrate the use of blended and peer learning.

The analysis of the data is in-progress and the following represents a few key themes that appear to be emerging throughout the interviews and focus groups. There is a general acceptance from the five academics that peer learning is a useful teaching and learning strategy for encouraging critical enquiry, communication and articulation of knowledge. The use of blended learning allowed students to interact in both a face-to-face setting and virtual setting. One academic suggested that: The advantage of peer learning may include that it can promote the dynamic interactions among the peers so that it will stimulate their thoughts and also encourage them to talk more about the topics. However, it appears that students have varying perceptions of peer learning. One of the challenges for peer learning within this project involved the concept of credibility of information. Students who are traditionally reliant on the authority of the teacher may find it difficult to accept the opinions of other class members. Students are unsure whether their classmates are "right or wrong" in relation to the task. This suggests that peer learning tasks need to be carefully formulated within this context.

The teacher-educators within this project were immersed in a critical examination of their beliefs in relation to teaching and learning as they implemented blended learning and peer learning. All academics suggested that they would continue to use blended learning in their future teaching. The design of effective peer learning activities needs to be carefully formulated to emphasise the learning benefits for students.

1112 Short Paper

keywords: blended learning / peer learning / design-based research

Reflections on a community of practice in e-learning: the JISC eLIDA CAMEL project

Tuesday
14:15

Designing learning spaces

Dr Jill Jameson
Mr Malcolm Ryan
Mr Simon Walker
The University of Greenwich

The process of reflection is an intrinsic, important part of the work involved in building a community of practice (CoP) in e-learning. This short paper considers the value and role of professional reflection in a community of e-learning practice, analysing and summarising online participant comments captured during and after workshop sessions of the eLIDA CAMEL (e-Learning Independent Design Activities for Collaborative Approaches to the Management of e-Learning) project collected during 2006-07.

This Design for Learning (DfL) UK project is building a post-16/HE practitioner-based community of practice amongst teaching participants from selected UK further/adult education colleges, a sixth form and a university. Participants are producing and evaluating the use of design for learning (DfL) sequences in LAMS and Moodle, building on results gained in 2005-06 from two prior successful e-learning projects: the JISC eLISA DeL lifelong learning and HEFCE/LGM-funded JISC infoNet CAMEL. The eLIDA CAMEL addresses JISC's aim to implement and evaluate learning design tools in the JISC DfL programme by trialling design for learning sequences with practitioners, complemented by project work in a collaborative online Moodle and in quarterly face-to-face visits to partners using the CAMEL JISC infoNet model.

The project collects a series of individual and collaborative case studies on the implementation and evaluation of tools and systems to support design for learning activity sequences and processes being used by practitioners in the 'CAMEL' framework of a collaborative e-learning community organised with JISC infoNet, supported by ALT. Practitioner reflections have commented on, evaluated and enriched the results of the project, contributing to national and international developments in learning design within a community of practice. This paper reports a 'snapshot' of practitioner reflections for the benefit of those seeking to develop a community of practice in design for learning.

1254 Short Paper

keywords: community of e-learning practice / design for learning / post-16 and HE institutions / professional reflection on practice / e-learning

Weblogging and teacher professional development: getting the most out of online social networking technologies

Tuesday
14:15

Designing learning spaces

Mr Christopher Sessums
University of Florida

This paper shares the findings of an action research project that focused on the design considerations for supporting an online community of inquiry. The study examines an online social network (http://csi.uflearn.org/) designed to facilitate communication, collaboration, knowledge creation, and the aggregation of content and artefacts between a set of educators hired to facilitate action research projects across a large geographic area.

Using Bannan-Ritland's (2003) integrative learning design (ILD) framework, the project's researchers were able to learn more about constructing an effective learning environment which permitted educators to create, construct, and collaborate in a measurable and meaningful way. Combined with an action research model, the ILD framework provided a broad context within which to map the designed-based research processes.

After a period of informed exploration, the Centre for School Improvement (CSI) community site was designed to have the look and feel of a collaborative weblog where participants were given individual blogging and file space for responding to a set of prompts developed to guide their work as facilitators of action research projects. The site also included a communal space where the community's lead facilitator could provide news and information, leave reminders, and provide organizational assistance to the facilitators. A set of prompts and due dates were developed before the site was launched to provide participants with topics to write about that centred around the steps involved in action research and facilitating action research.

During the enactment phase participants initially reported the site to be helpful and easy to use. However, after the first month actual engagement with the site and between participants dropped precipitously. Researchers then scheduled a face-to-face local impact evaluation meeting with participants to determine if the site's design was impeding adoption and use. This meeting provided time to interview participants to gather valuable feedback that helped inform the design of the site.

After local impact evaluation meeting and additional participant follow up via email, personal interviews, and surveys, project researchers were able to develop additional site design features that led to increased engagement among participants.

The CSI community site was developed as an add-on to an action research facilitation project that was already in place. As an add-on, adoption and engagement by participants developed quite slowly with some participants rarely engaging others through the site. As a result of this research, a number of findings surfaced that the project researchers believe can assist others in designing online professional development networks. These findings include the need to clearly articulate the value of a collaborative networking environment; clearly defining what collaboration looks like, establishing participant trust and comfort with technology, and creating a clear set of operational definitions and guidelines for participation. Given the need for continued support for action research facilitation, the CSI site will be used in the coming year which also permits additional study of both the design and its impact on teaching and learning.

Bannan-Ritland, B. (2003). The role of design in research: The integrative learning design framework. Educational Researcher, 32(1): 21-24.

keywords: professional development / action research / social networking / teaching and learning / design-based research

1307 Short Paper

Six steps to effective evaluation – a GEM of an idea

Tuesday
14:15

Large-scale implementation

Ms Veronica Adamson
Dr Jane Plenderleith
Glenaffric Ltd

Glenaffric Ltd is an independent consultancy specialising in the evaluation of e-learning and ICT-related development initiatives in UK further and higher education. Originally developed for the JISC Capital Programme, the Six Steps to Effective Evaluation handbook has been produced as a guide for project and programme managers. It draws on key theories of evaluation including logic modelling and theory of change, and practical experience of project and programme evaluation in various developmental contexts across the sector over a number of years.

GEM – the Glenaffric Evaluation Matrix – is a Moodle environment developed to support a variety of evaluation initiatives including the Six Steps to Effective Evaluation model. This session will offer an overview of the six step process and a demonstration of the use of GEM to support planning and implementing an evaluation framework for a development project or programme.

Participants will be invited to log on to a project in GEM and review materials created specifically for this conference session. The demonstration will provide an opportunity to discuss the choice of Moodle as the platform to support evaluation, the contextualisation of Moodle for GEM (including global vocabulary changes from course, teacher and student to project, facilitator and participant), roles, security and rights access issues. The session will also provide a forum for discussing the role of evaluation in recognising and supporting professional development and capacity building through engaging with project activities and development programmes, and the role of an online environment in support. All development activity is fundamentally a learning experience. GEM presents a framework for surfacing the internal logic inherent in this activity and enhancing its value through a social constructivist approach.

1101 Demo

keywords: evaluation / reflective practice / capacity building / valuing learning experience of development project / Moodle

Informs: the new generation

Tuesday
14:15

Large-scale implementation

Lisa Charnock
Ms Diana Massam
Intute Executive, MIMAS

Ms Emily Shields
Manchester Metropolitan University

Informs was developed as a flexible, adaptive tool for the creation of interactive and instructional online tutorials. Initially conceived as a result of JISC (Joint Information Systems Committee) funded projects in 2001-03, it has now been remodelled as part of the Intute portfolio of resources for the educational community.

The 'new generation' Informs is a re-incarnation of the original concept incorporating improved design and functionality. It also has a thriving user community committed to the concept of shared content and collaboration.

Informs facilitates self-paced learning through the integration of instructional materials with live resources such as websites and online databases. The tutorials open in two windows; the main window containing the live resource and the 'guide on the side' containing the instructions. It is suited to large scale implementation where users can benefit from individual on-screen support. The software is adaptive to many contexts and can be embedded within online modules, websites etc. It requires no html or technical skills.

The demonstration will give participants an overview of Informs with a focus on recent developments. We will demonstrate the software interface, both from a student and a tutor point of view. This will be followed by a practical example of the use of Informs in learning and teaching within Library Information Skills packages and a Virtual Learning Environment at Manchester Metropolitan University. Following the demonstration, participants will be given a hands-on opportunity to create their own Informs tutorial.

At the end of the demonstration, participants will have:
- Gained a familiarity with Informs and become aware of the changes that have taken place as part of the move to Intute
- Gained knowledge about how Informs is used in one particular higher education context
- Created their own Informs tutorial to assess how it could be used in their own institutions

1231 Demo

keywords: interactive online tutorials / thriving user community / embedding / self-paced learning

Undertaking the large-scale introduction of an electronic voting system across a university

Tuesday
14:15

Mr Paul Burt
Ms Vicki Simpson
University of Surrey

Large-scale implementation

This paper will report on the findings of an action-research project, initiated to inform the introduction and support of electronic voting systems (EVS) into teaching across the University of Surrey from September 2007.

EVS are increasingly being used to introduce 'active learning' approaches (Bonwell and Eison, 1991) into the lecture environment, offering additional benefits beyond non-technical approaches. As with many technologies, the extent to which these benefits are realised depend on the way EVS is used and various pedagogical frameworks and models of practice have been proposed. Most of the literature in this field focuses on individual case studies involving a particular cohort of students and an enthusiastic staff member who is aware of the research.

The key challenges faced by the University of Surrey to introduce EVS institution-wide are:
- When working with staff who are not well versed in the literature, how can an informed approach be encouraged and superficial usage be avoided?
- How can educational development be designed to support quality use on a large-scale?
- Evidence suggests that it can require three years of use, experimentation and reflection for staff to master the methods required for an active learning approach using EVS (Beatty, Leonard, Gerace and Dufresne, 2006) – how can the university shortcut this process?
- How can a limited resource (the numbers of student handsets) be managed effectively to support widespread usage?

Working with a pilot group of nine academic staff over a period of eight months we have been seeking to learn lessons to inform the large-scale rollout in September 2007. Varieties in class size, academic level, subject, session length, and staff level of experience have been embraced in the pilot. Some staff have used EVS for particular sessions, whilst others have used it regularly throughout their module: the latter allowing greater depth of involvement and a more iterative process of engagement, reflection and development.

Prior to use, staff were engaged in dialogue to explore possibilities of use and make explicit their approach. Sessions were observed and relevant and timely feedback provided to the lecturer, encouraging reflective discussion of their practice. A variety of models of handset management were trialled, with records made regarding ease and effectiveness of each method.

Full evaluation will be completed by May 2007 but early indications have shown the combination of observation, feedback and dialogue has been well received and very effective in helping staff to develop their practice. However this process is time-intensive and potentially unsustainable for the scheduled large-scale rollout. Planned developments include:
- Refinement of the observation/feedback process to ensure usable and actionable feedback
- Production of video case study materials to disseminate best practice
- Development of support materials

It has been notable how other factors impact upon the implementation, including differences in the physical environment, the existing teaching style of the lecturer involved, the 'classroom culture' and the expectations of the students.

1273 Short Paper

keywords: electronic voting system / personal response system / audience response system / lecture theatre technology / academic development

projectBluetooth - delivering large-scale content and support to the mobile generation

Tuesday
14:15

Large-scale implementation

Dr Christopher Dennett
Mr John Traxler
University of Wolverhampton

Cheap to implement, easy to install, free to run - Bluetooth technologies have considerable potential for local delivery of learning material, multimedia objects, pastoral support and attendance monitoring. The session will be valuable to innovators and adopters from all sectors and any subject

It is established that personal informal learning on mobile devices is a valuable tool and is more likely to take place on devices that users own and value (Kukulska-Hulme & Traxler 2005). The problem to be addressed, therefore, is how to get content on to student devices so that they can make use of it. Messaging technologies go some way to bridging this divide and have met with considerable success (Traxler, J. & Riordan, B. 2005), but SMS has limited capabilities and MMS is expensive. This paper focuses on another technology, Bluetooth, which is widely available on mobile devices, requires very little capital expenditure and has virtually no running costs.

projectBluetooth is designed to enhance the teaching experience through wireless communication from a lecturer controlled, Bluetooth 'Hub' to mobile phones, handhelds and laptops. The tool transmits files (ranging from text and picture files to PDF and MP3) to one, some or all of these devices and allows lecturers to manage user groups (e.g., students from different cohorts) and transmit to them asynchronously, so that members of the group are updated with new materials as soon as they come within range of the Hub. The hub therefore becomes a secondary point of contact between staff and student, extending contact time and acting as another dissemination tool.

The "Collaborative Mobile Learning using Bluetooth" Project is funded as part of a University initiative supported by its Graduate School and Centre of Excellence in Learning and Teaching. Students' author and reversion learning materials to reinforce and extend their understanding and engagement with

the concepts that they are learning as part of their course. They design these materials specifically for mobile devices and fellow students have instant access to this material to take away and use on their own mobile device via the hub.

The Information and Computer Sciences Subject Centre of the Higher Education Academy subsequently funded a further small project, "Bluetooth Support for Computing First Years ", to explore how the technology could be used to provide pastoral and organisational support. The system 'broadcasts' a variety of content, administrative and pastoral support, revision and study skills and evaluation and monitoring material. The content can be stored on students' devices indefinitely, facilitating opportunistic learning off-site.

The system has passed technical trials and is now being field tested to establish usability, performance and potential learning gains. The focus of the subsequent evaluation in spring 2007 will be the learner experience and will use techniques developed for the EU m-learning project designed to elicit authentic, timely and appropriate evaluation, in keeping with the ethos of the project. Issues of acceptance by staff and students will then be looked at, in the expectation that identified good practice will then become embedded.

Kukulska-Hulme, A. & Traxler, J (2005). Mobile Learning: A Handbook for Educators and Trainers (F. Lockwood, Series Ed.). London: Routledge.

Traxler, J. & Riordan, B. (2005). The Use of Targeted Bulk SMS Texting to Enhance Student Support, Inclusion and Retention

1228 Short Paper

keywords: Bluetooth / mobile

Social computing and the sustainable support of learning communities

Tuesday
14:15

Learning and internationalism

Mr Shakib Ahsan
Mr Edward Clement Bethal
Ms Alannah Fitzgerald
Concordia University

This paper will discuss issues in designing community and social spaces for NGO micro credit workers and interested parties who utilize information and communication technologies. A project environment, 'Overcoming Poverty', will be presented where the common learning goal is to access and engage with micro credit resources (experts, cases, resources) and tasks (reflective, interactive, and creative) designed to develop capacity building. A wider sense of the network that surrounds capacity building throughout different contexts will also be explored. In particular, this paper will be of interest to practitioners and researchers interested in designing constructivist learning environments, as well as managers who are involved in supporting, facilitating, and connecting learning communities.

As can be expected certain problems exist in developing training initiatives for capacity building. These include:
- Training personnel with varying organizational goals and epistemological beliefs about what is understood by poverty, development, and empowerment and what these understandings signify across different contexts
- Finding and maintaining development opportunities in resource depleted economies
- Educating those people currently living in poverty about quality of life as a means to scripting a more sustainable future for themselves

Supporting learning and performance through (a) informal non-training and (b) formal training solutions is at the core of the practice of educational technology. Through the emergence of pervasive social computing tools that feature in the 'Overcoming Poverty' project environment (for example, open source learning course management systems, blogging, vlogging and wiki

spaces), a third area is co-emerging: the creation, design, and sustainable support of learning communities. Moving beyond the usual vagaries of 'communities of practice', learning technologies for the social network generation bring about the existence of a portable collective identity that can be transferred from locality to locality, taking shape in different forms of volunteer activity across the divides of region, class, gender, and citizenship.

In designing and supporting learning communities, the emphasis is to support people in their self-chosen initiatives of learning and their building of new social networks while strengthening their existing ones. In one sense our project space is competing with other usenet (news) groups who maintain informal online communities of practice for volunteers working in the area of micro credit. However, we see our space as complementing existing spaces wherein resources for capacity building can be managed through the use of interconnected open source software with other volunteers in the greater learning community.

This paper will finish by showcasing learning examples, both successful and unsuccessful, from the 'Overcoming Poverty' network whereby learners have been repeatedly exposed to ambiguous and complex problems found in cases supplied by volunteers via text-based blogs and video-based vlogs. During case analysis, guiding questions found in the project environment encourage learners to face risks and move toward specific action enabling them to cope with the circumstances that may challenge them in their future practice as volunteers. Case-based reasoning which develops tolerance for ambiguity and the ability to make timely and effective decisions despite incomplete information, unclear problems, and uncertain consequences will also be presented.

1219 Short Paper

keywords: designing constructivist learning environments / social computing / case-based reasoning / capacity building

How can learning technology make a world of difference?

Tuesday
14:15

Learning and internationalism

Ms Frances Bell
Ms Karen Robinson
Salford Business School, University of Salford

"Information Technology (IT) makes a 'world of difference' in the sense that it is important in the contemporary world, but I hope that we can use IT to support a world of 'difference', where diversity is respected" (Walsham, 2001)

Virtual Learning Environments [VLEs] have become widespread among Higher Education Institutions [HEIs], in a context of increasing cultural diversity of students. Such diversity can enrich student experiences, and learning technologies can facilitate cross-cultural communication. However, the benefits of diversity are not guaranteed, raising the question "How Can VLEs be Chosen and Configured to Accommodate Cultural Differences of Students and Bring Value to their Learning Experience?"

This paper reports on the experiences of a culturally diverse group comprising British and international postgraduate students at a UK university. Two VLEs are used: Moodle, used for a non-assessed induction activity; and Blackboard used for most modules on their programme. Walsham's work on Information Technology (IT) in a global context, has provided an inspiration for this study, particularly two of his final observations: that 'there is a need for more in-depth interpretive case studies or action research projects on IT in a global context, in order to surface the rich human issues' [p. 247], and that 'the limited research on groupware in multicultural contexts tends to identify cultural differences as a 'problem'' [p. 249]. What constitutes a multi-cultural context is at issue: the class can become the site for cultural production (Hewling 2005).

Consistent with an interpretive study, qualitative data from student postings and interviews was collected, along with quantitative data from activity logs. A total of 32 interviews were done with postgraduate students [n=23] and module leaders [n = 9], November 2005 - May 2006. Interview questions were arranged under three broad categories, as follows: Cultural Background; Academic Background and Previous Online Learning Experience; and Current Studies and Online Experience on their current programme. One of the most significant aspects of the last category is to identify the interplay between data from the first two categories. Initial analysis revealed relationships between the arrangement of the VLE space, student interactions with it, and impact on their learning experiences. Blackboard is organised hierarchically, and some students used it only for assessed activities, finding it difficult to understand and time-consuming. In addition they found the design of space and the portal itself, to be poor; preferring to use other tools such as Instant Messaging and emails for communication, although in general they found that online was a more relaxed way of learning. In the absence of a translating feature in the VLE, students improvised and used multilingual word processing software to translate.

Hewling, Anne [2005]. Culture in the Online Class: Using Message Analysis to Look Beyond Nationality-Based Frames of Reference. Journal of Computer-Mediated Communication; 11:1; article 16. [Online] Available from: http://jcmc.indiana.edu/vol11/issue1/hewling.html [Accessed: 3rd February, 2006]
Walsham, G. 2001, 'Making a World of Difference: IT in a Global Context', John Wiley and Sons Ltd.

1319 Short Paper

keywords: internationalism / culture / learning / virtual learning environment

International social learning networks

Tuesday
14:15

Learning and internationalism

Mr George Roberts
Oxford Brookes University

Graham Attwell
Pontydysgu

Tore Hoel
Teria Project

Nick Kearney
Work and learning Together project

This paper interrogates three international social learning networks working in and through Web2.0 environments. The question we will discuss is if, and if so how, these networks are communities of practice.
- UK: Emerge, supporting the JISC Users and Innovation Programme
- Norway: TERIA, social software to enhance discourse on learning technologies
- Spain: Work and Learning Together Project

Communities exist on many scales and few communities can be called communities of practice (CoP) in the strict sense. Communities of practice are emergent organisations with tacit but recognisable signs of identity. The three networks discussed in this paper demonstrate their identity through:
- Shared goals: establishment and practice of new discourses in educational and learning technology development;
- Shared values: openness, mutual engagement, joint enterprise and a challenge to traditional forms;
- Shared symbolic artefacts: Web2.0 technologies applied to learning.

We start from the position that although it is commonplace to recognise CoPs, the processes underpinning their development are still poorly understood. The application of CoP theory in instrumental circumstances almost always presumes the pre-existence of groups sharing CoP attributes.

In the paper we will:
- Uncover local, community-specific goals, values and artefacts
- Identify common cross-cutting themes
- Expose and problematise what works

Communities of Practice?
The Emerge, community presence project was established to support the JISC's User and Innovation programme; 33 project teams applied to be a part of this experiment and have engaged in a programme of formal and informal structured learning events and semi-structured information sharing sessions within a community with a "semi-permeable" boundary. It is a complex social space with tasks designed to encourage characteristic interactions within CoPs: mutual engagement, joint enterprise collectively negotiated, and a shared repertoire developed over time (Wenger, 1988).

The TERIA network is an attempt to establish a CoP around the introduction of social software to enhance discourse on learning technologies. The TERIA project shows that new practices of information sharing and dissemination challenge established administrative and political cultures. It is easy to find, install and support software that facilitates advanced community practices. However, the cultural, social, administrative and political barriers to an open discourse on issues “owned” by vested interests persist.

The Work and Learning Together Project (WLT) was created with the objective of developing a model for facilitating and nurturing informal learning processes in SMEs, using the CoP as a framework. Given the emergent nature of CoPs, one of the paradoxes the project faced was the need for instrumental action to facilitate the development of CoP-like activity, which ran the risk of stifling the kinds of informal processes that needed to be cultivated. One of the chief objectives of the project was to find ways of balancing these requirements.

1166 Short Paper

keywords: communities of practice / social networks / jisc-emerge / teria / work and learning together

Podcasting exercise physiology - enhancing the student experience

Tuesday
14:15

Learning technology for the social network generation

Dr Grant Abt
Mr Timothy Barry
Dr Elizabeth Mallabon
St. Martin's College (University of Cumbria Aug 1)

Podcasts are an innovative use of the ubiquity of the Internet to provide another tool for the e-learning tutor. Recent studies examine the qualitative aspects of their use in e-learning, but less in known of quantitative measures in relation to desired learning outcomes. Across the university sector we see the recognition of the need to promote independent modes of study and increase learner autonomy. The aim of this current study is to examine whether students can enhance their learning of exercise physiology, leading to a quantitative improvement in exam scores. In conjunction with this quantitative approach we will seek to evaluate qualitative evidence of the effect using this technology has on student’s learning.

Our methodology includes 60 student volunteers from the first year sports science programme who were randomly allocated to either listen to six podcasts over four weeks (experimental group), or provided with material in print (control group). All participants undertake a pre and post formative test and data will be analysed using the effect size statistic and 90% confidence limit. Validated phenomenographic tools will analyse approaches to learning and questionnaires will identify student approaches to using mobile technology. We are interested in identifying learning strategies, cognitive and behavioural changes in relation to using podcasting in e- learning.

This paper contributes to our understanding of Web 2.0 technologies and provides details of a rigorous study into the use of podcasting within a higher education sports science programme in the UK. Its findings will contribute to the growing interest into the use of audio technology across the sector and is funded through a HEA Bioscience grant.

This study evaluates the use of e-learning in dynamic and creative ways to support a culture of deeper learning and enhance understanding in the biosciences. Rather than just expecting that using technology will enhance the student experience the research seeks to evaluate the "added value" of podcasting. We reflect on how consideration of course design, teaching and assessment are vital to integrate podcasting into the curriculum.

1138 Short Paper

keywords: podcast / exercise physiology / e-learning / mobile technology

Using informal podcasts to enhance students' collaborative learning

Tuesday
14:15

Learning technology for the social network generation

MS Libby Rothwell
Kingston University

Dr Ming Nie
University of Leicester

This paper takes a socio-cultural learning perspective which derives from the work of Vygotsky (1978) and perceives that learning takes place through social interaction. Fostering a Community of Practice (Wenger, 1998) between students, tutors and others through collaborative work can significantly contribute to students' learning (Taylor, 2003). This paper reports on an initiative at Kingston University which sought to integrate informal podcasts with formal face-to-face teaching to support such interaction. The study was conducted within the Higher Education Academy funded research project called IMPALA (Informal Mobile Podcasting And Learning Adaptation). IMPALA aims at delivering testable and transferable models of podcasting and developing subject-specific exemplars and user cases.

The study was conducted in 2006 within a level one core module in the English Language and Communication degree programme. Sixty-five students from Journalism, Literature, Creative Writing, French, Drama, Business and Sociology took the module, which embeds academic skills development activities within an introduction to the study of intercultural communication. The module was delivered in face-to-face lectures and seminars and assessed by portfolio tasks. Five trained student mentors from level three worked with staff to support students' learning throughout the module.

In order to encourage students from different subjects to learn from each other, six podcasts were developed. These podcasts were 10-minute audio files delivered via Blackboard VLE. Each podcast consisted of a variety of elements: staff summaries of key concepts, interviews with students, discussions and conversations on assessment tasks between students, mentors and tutors, top tips on presentation and research skills given by mentors, and local resources on personal development. One podcast was generated entirely by the mentors.

The impact of podcasts on students' learning experiences was captured through two focus groups with eight students, personal interviews with six students and an end of semester questionnaire with thirty-five students. The findings of the study indicate that both the content and the informal style of the podcasts appealed to students. Students commented that the topics of the podcasts were relevant and useful, and they helped students towards the assessment work they were doing. Students also felt that the podcasts helped them to learn easily because listening to the conversations and discussions between different parties was interesting and engaging. In particular, students highlighted how podcasts helped them to learn by drawing together different viewpoints from fellow students, mentors and tutors.

Podcasting as a vehicle for delivering content in educational settings has attracted much recent interest and debate. However, few studies have focused

on the impact of podcasting on the social and communicative dimensions of student learning. Findings of this study suggest that integrating informal podcasts with the formal educational setting can successfully facilitate learning by dialogue. Further studies will be needed to explore in more depth the ways in which new learners identify with the podcast dialogues and student-generated discussions. These insights may be of particular relevance in the design of podcasts to support students from different cultural contexts to learn from each other.

Taylor, J. (2003) Pedagogy in the mobile learning environment, Talk presented at Beyond the Classroom Computer Symposium: exploring the potential of novel interactions with innovative technologies in educational settings, 30 April 2003

Vygotsky, L. S. (1978) Mind in society: the development of higher psychological processes, Cambridge, MA, Harvard University Press

Wenger, E. (1998) Communities of practice: learning, meaning and identity Cambridge, Cambridge University Press

1179 Short Paper

keywords: podcasting / collaborative learning / integrating informal and formal learning / evaluation of student learning experience

Digital storytelling. Forging identity through voice and three-dimensional reflection.

Tuesday
14:15

Learning technology for the social network generation

Mr Christopher Murray
Dr John Sandars
University of Leeds

This paper examines the concept of digital storytelling as a method to engage students with the reflective process and as a means to strengthen and individualise reflective learning. This approach is especially suitable for the social network generation who prefer to have less formal control over their learning, learn collaboratively and use multimedia. Current methods of encouraging reflection have, to a large extent, emphasised 'control' in a text-based environment. However, digital storytelling utilises the concepts of 'voice' and 'identity' to strengthen the reflective process through the collection and usage of multimedia digital artefacts. The theory of digital storytelling enables the personality to dominate the presentation of the reflective process and encourages reflective learning to be situated in a biographical account. Can the process of 'reflection through image' contribute to the development of professional identity amongst students and assist in the transition from student to practitioner?

The JISC funded ELP2 project will utilise the use of blogging tools in learning and teaching and widening participation activities. Two of the activities will involve using digital storytelling for reflection with two distinct groups:
- Year 12 students thinking of applying to medicine
- Undergraduate medical students

Between September 2007 and December 2007 undergraduate medical students will undertake community patient visits as part of their Personal and Professional Development module. By utilising their reflective blogs over a period of 3 months the medical students will utilise digital storytelling to create and share stories about the lives of the patients they have come in contact with.

These stories will be shared with a group of Yr 12 students who, as part of an online module designed to increase their awareness of the skills required in

medicine, will utilise and comment on the patient narratives and absorb these accounts into their own digital stories focussing on their developing skills which will be necessary to apply to medicine.

The current developing theories and uses of digital storytelling will be outlined particularly in relation to the format's ability to engage and encourage reflection from a more personal and interactive angle.

By outlining the theoretical power of digital storytelling in the reflective process the paper will look more closely at how this reflection can be utilised. In particular the possibilities of creating and sharing digital stories to aid transition and develop identity as both an independent university learner and as a professional.

1091 Short Paper

keywords: digital storytelling / encouraging reflection / professional and personal identity

Video tagging and folksonomies: social software principles in educational development

Tuesday
14:15

Dr Rachel Scudamore
University of Nottingham

Learning technology for the social network generation

This paper demonstrates that social tagging of videos within a learning community can facilitate the construction of new understandings of teaching and learning for participants. To make this argument requires recognition of the value of video in teaching development, a positioning of social tagging within the educational development context, and evidence of participants applying new knowledge to their own working context.

The contribution of video in teaching development is allied to the value of observational learning in the acquisition of complex skills. The richness of video in capturing the teacher's actions (deliberate and unplanned) and the student reactions allows an in-depth insight, yet doesn't present a particular message, as each observer brings their own experience and motivations. Hence the use of video in teaching development moves away from any prescriptive best practice approach towards one based on selective observation and interpretation in relation to the viewer's own context.

This approach aligns well with the philosophy of social software where the impetus for organising information and objects comes from the viewer's understanding rather than from a professional or author perspective. The users' tagging of Internet bookmarks in services such as Del.icio.us or of images in Flickr asks for a definition in terms of a description or perceived value. People use their own vocabulary to describe something about which they may not be an expert, and to identify the value of a particular artefact to themselves.

In the educational development context this has two clear benefits. Firstly, participants don't need to learn jargon in order to be able to discuss their development. Indeed, a collective terminology (or folksonomy) arises from a group discussing the issues that concern them, in a language that is comfortable with their current level of expertise. The development of this folksonomy is itself an arena for negotiation of meaning as it allows individuals to conform (by using similar words) or actively break from the group's dominant view. The second benefit lies in viewing videos becoming an active, not passive, experience. Participants must seek value, thereby engaging with the material and using their motivations to focus their attention.

Using this paradigm, we developed a specially constructed learning environment to house the video-viewing and tagging areas, and to display the group results for participants to share. Each academic had a personal storage

area for notes and the action plan, whilst summaries were collated in the public spaces. Access to the online environment followed an opening workshop involving initial socialisation and video analysis exercises. In this blended learning experience the participants showed an openness to defining and negotiating appropriate terms for discussing teaching, a focussed viewing of videos of teaching in contexts similar and dissimilar to their own, and a clearly directed application of learning to their own teaching contexts through the development of realistic action plans.

The companion poster (submitted) shows further detail on the user experience and the interactive exercises, and provides extracts from participants' contributions and evaluations.

1119 Short Paper

keywords: video / tagging / educational development / folksonomy / constructivist approach

Digital inquiry and social networking

Tuesday
14:15

Dr Philippa Levy
Dr Sabine Little
University of Sheffield

Learning technology for the social network generation

This paper will report on a sub-set of the findings of an exploratory study that is examining arts and social sciences students' experiences of conducting inquiry in the digital environment, i.e. the ways in which students use technology to carry out research and inquiry both as part of their studies and in everyday life. The aim is to better understand, and model, the role that interaction with technology plays in the inquiry process in different disciplinary, pedagogical and social contexts, and the understandings and attitudes that students bring to this.

The study is being carried out by the Centre for Inquiry-based Learning in the Arts and Social Sciences (CILASS) at the University of Sheffield. It aims to contribute to the growing body of learning technology research that is focusing on the student experience. The project also has a specific developmental purpose in that it aims to inform the development of educational practice, and digital learning environments, for inquiry-based learning in the CILASS disciplines and institutional context. Inquiry-based learning is any approach to learning and teaching in which student-led exploration, investigation or research provide the central vehicle for learning. Inquiry approaches include case- and problem-based learning, experiential learning and research projects of different kinds. 'Digital inquiry', for the purposes of this study, is thus any approach to inquiry or research using digital technology – encompassing interaction and resource-sharing within social network environments as well as, for example, Web-based module work on case studies, online problem-based approaches, and students' engagement with digital information services and sources.

The project is adopting a participatory, qualitative research approach, using focus groups and one-to-one interviews to focus, initially, on the technology-supported inquiry experiences of students in the contrasting disciplines of Music and Law. Part of the purpose of the study is to explore the relationship between students' experiences of, and perspectives on; the use of technology to support inquiry within and outside of the formal university context. This paper will focus on those findings that illuminate this aspect of the study, and in particular on a) the way in which students perceive the relationship between digital technologies and practices used for formal and informal inquiry (including computer-mediated communication in online social environments); and b) students' attitudes towards, and ideas about, the development of formal digital learning environments resulting from their 'social networking' experience.

1275 Short Paper

keywords: inquiry-based learning / social networking / student experience

Student perceptions of podcasting to enhance learning and teaching in an information systems course

Tuesday
14:15

Learning technology for the social network generation

Dr Charlynn Miller
Mr Leon Newnham
University of Ballarat

Universities are challenged to seek methods to improve student learning. Leading edge technologies, such as podcasts, that put the focus on learner-chosen activities, may be one way to accomplish this. This study explored student perceptions of podcasting as a learning and teaching tool in a first semester information systems course within an Australian university. Students were provided with a short podcast to supplement face-to-face lectures. Students were then surveyed to determine their perceptions of the impact of this podcast on their learning. A high number of respondents agreed that they used the podcast, that it increased their understanding of the lecture material and that it assisted their learning in the unit overall. The findings in this preliminary study lend support to the concept that podcasting can enhance learning when used as a supplement to traditional teaching methods.

1160 Research Paper

keywords: technology enabled learning / learning technologies / podcasting / anytime/anywhere learning / e-learning 2.0

Podcasting at RMIT University: evaluating a faculty based trial

Tuesday
14:15

Learning technology for the social network generation

Ms Lyn Atkinson
Mr Andrew Buntine
Mr Rod McCrohan
RMIT University

This report describes a 2006 trial provision of lecture podcasts to students in seven business courses at RMIT University, Melbourne. Students were provided with three options for listening to the audio: directly from within the 'Blackboard' site, from a file downloaded to their computer or digital media player, or via an RSS ('really simple syndication') feed.
A survey administered in the final week of semester elicited a 25% response rate, with approximately half of respondents having accessed the podcasts. Reasons given for listening to the podcasts included revision, making up for missed classes, overcoming language difficulties and clarifying concepts.

1104 Research Paper

keywords: podcast / lecture audio / mp3 / evaluation / blackboard

Go forth and Scholar

Tuesday
15:34

Learning technology for the social network generation

Miss Kate Boardman
Mr Paul Pinkney
University of Teesside

Since October 2006 the University of Teesside's E-learning Team have been working with Blackboard™ on the development of a new Web 2.0 tool called Scholar. Scholar is a social bookmarking tool, much like del.icio.us, for educational use launched at the BbWorld Europe conference in February 2007.

Social bookmarking is more valuable than simply saving favourites/bookmarks on your own machine. The concept encourages users to bookmark useful Web resources, and share them with others. As well as individuals keeping track of the resources they have already viewed, it extends bookmarks with a description (contextual information around the background to finding or saving the resource, or why it would be useful to others) and 'tags' or keywords. For example a lecturer may tag an article on stem-cell research with 'stem cell', 'human' and 'biology'. These keywords

help to search and locate, or co-locate resources on similar topics later. But tagging resources, as used in blogs or other Web 2.0 social networking tools such as Flickr, extends functionality further by linking similar users or similar topics together within classes, institutions, countries and around the world.

When accessing Scholar from a Blackboard or WebCT institution, module and course data is pre-populated, so academic staff can maintain and monitor collections of Web-links for modules they are leading. Both staff and student users can create and edit 'streams' constructed using keywords that search bookmarks saved by other users via the 'tags' attached to the bookmarks. Saved streams will automatically update and grow as more users add more bookmarks that meet the search criteria specified in the stream. RSS feeds can be delivered directly to a student, via personal RSS reader or displayed dynamically-updated within module sites in a VLE.

When beginning to work with Blackboard to develop this service, the University of Teesside's E-learning Team carried out a series of surveys and focus groups with staff and students to establish the level of awareness of social networking tools, potential use and to identify the drivers in this development. This data informed the development of the Scholar service, and also illustrated the current perception of and experience in social networking and Web 2.0 tools on our campus. This in turn led to the creation of specific marketing strategies to spread the use of Scholar within the university, and has led to the successful implementation of social bookmarking, simultaneously creating a collaborative, user-driven collection of educationally-valuable Web resources.

Scholar is a free service searchable by all users and editable by users of Blackboard and WebCT. However the principles that underlie the functionality of the application and the research carried out provide an insight into the power of the social generation creating and evaluating shared resources, and how to harness that constantly-growing knowledge base within an educational setting.

1339 Short Paper

keywords: social bookmarking / social networking / Web 2.0 / sharing resources

Design for learning for the social network generation: themes from a LAMS evaluation project

Tuesday
15:34

Mr Ola Aiyegbayo
Dr Philippa Levy
Dr Sabine Little
University of Sheffield

Learning technology for the social network generation

Social networking - the use of Internet applications to connect people in communities of interest and resource exchange - has long been a central concept of 'networked learning' or 'computer-supported collaborative learning' approaches to the use of learning technology. However, it is only relatively recently that social networking tools and environments have become widely and freely accessible on the Web and that it has become possible to think in terms of the existence of a generation of learners for whom the practice and values of online social networking (with all that these imply about autonomy, participation, collaboration, democracy and so on) are central to their day-to-day interactions with technology.

As such, the Web 2.0 context throws into sharp relief some important questions about learner-focused uses of technology in formal teaching and learning contexts. Two such questions are: can e-learning tools that support design for learning, and the facilitation of learning, promote creative engagement with practices and values associated with the social networking context? Is it important that they do so?

This paper considers these questions from the perspective of a JISC-funded Design for Learning project that is exploring the use of an activity-focused e-learning tool - LAMS (Learning Activity Management System) - for inquiry-based learning. This pedagogical approach is grounded in principles of student-led exploration, investigation and research, often in collaborative settings. LAMS includes tools for communication and group-work, and enables the creation and orchestration of sequences of learning activity (e.g. small group discussion followed by Web research followed by sharing and discussion of the results and personal reflection) with associated content. The study includes an exploration of the impact of LAMS as a stimulus for new and innovative designs for learning; the 'fit' between the pedagogical model that underpins LAMS, and the purposes and values of inquiry-based learning in different contexts; the student experience in terms of autonomous engagement in inquiry. The aim is to contribute to current debate and theory about design for learning by providing a focused, in-depth analysis of the relationship between design for learning practice and pedagogical values and intent, and of the strengths and weaknesses of a specific learning design and reuse tool in relation to these and other contextual factors.

Adopting a primarily qualitative research approach, the project is examining the experiences and perspectives of academic staff, students and educational developers as LAMS users. Methods include pre- and post-implementation interviews with academic staff, feedback from student users, and monitoring of educational development (and technical support) issues. The paper will draw on these data to critically explore the relationship between activity-focused design for learning, as instantiated through LAMS, and principles, values and practices associated with inquiry-based learning for the 'social network generation'. The focus will be less on LAMS per se, than on broader theoretical issues that emerge from the research in relation to current debate about design for learning.

1274 Short Paper

keywords: design for learning / inquiry-based learning / LAMS

Collaborative learning: How an online competition brought learners together

Tuesday
15:34

Learning technology for the social network generation

Mrs Jane Harris
Nord Anglia e-learning

Collaborative learning moves forward at an ever increasing pace as students find themselves coming together formally and informally for both assessed and non-assessed projects. The online environment offers an effective platform for the development of collaborative learning. A well managed VLE, such as the Virtual-Workspace, offers the following benefits to learners:
- Active learning construction
- Dynamic frame of reference to work and socialise
- Live or asynchronous access to each other and to professional support
- Renders traditional barriers invisible
- Shared outcomes and successes
- Shared responsibilities
- Many different, interconnected levels of operation – school, class, subject, age, location

This short paper will present lessons learned from a competition to design learning materials. Last year two teams of students came together out of the large cohort of learners registered on the Virtual-Workspace, in response to a competition organized and run by Oracle. The competition, called ThinkQuest, aims to gather together student collaborations into a large, peer reviewed repository of educational websites.

Each member of the Virtual-Workspace teams was unknown to all of the others before the project – none of them attended the same school as one another. The first time they all met together was to receive their prize – a sight-seeing weekend in London. However, long before this the teams demonstrated a willingness to work together via their online forums and chat rooms to help each other plan, reach decisions, research, document, check, design, develop, deliver, review, challenge, inspire, encourage support and evaluate. In the spirit of collaboration, each team argued, fell-out, fell back in again, coped with emergencies, lost work, lost colleagues, even a lost coach in one instance! The end result of the teams' collaborative working over the span of twelve months was quite astonishing – two fully fledged, fully functioning websites offering challenging learning opportunities for students of their own age based around two rigorously researched science topics:
The Maiden Team
Project: Nanotechnology
– Purpose: to make nanotechnology accessible
The Paragon of Virtue Team
Project: Ethical Genetics
– Purpose: to explore the science of genetics from an ethical / philosophical standpoint

Each of these learning projects was student-centred, student-led and primarily focused on bringing educational benefit to other students.

As runners-up, students were invited to take their weekend in London as reward for their collaborative efforts, skills and dedication. It was only at this point that the online team coach learned that student x was such a disaffected student in school that his classroom teacher was not prepared to allow the student to take his prize, as it 'might send the wrong signals to other students.' The coach showed the teacher the amount of work, learning, development and team effort student x had produced in order to help his team mates reach their goals, and the classroom teacher was soon convinced that the prize was indeed well-deserved!

www.virtual-workspace.com, www.thinkquest.org, www.maiden.networcs.net, www.paragon.networcs.net

1088 Short Paper

keywords: collaborative learning / e-learning / cross-curricular learning / incentives for learning / student co-operation across UK and Europe

Cultural capital and community development in the pursuit of dragon slaying (Massively Multiplayer guild culture as a model for e-learning)

Tuesday
15:34

Learning technology for the social network generation

Mr David White
TALL (University of Oxford)

Mrs Deborah Goodbody
University of Oxford

This presentation is an evaluation of ethnographic field work conducted in and around the World of Warcraft MMO. The study focuses on the motivation of Guild members to construct communities of practice both to socialise and to learn. This suggests that the guilds can act as useful models for understanding how online social networks function and how they could influence the ideology of next generation e-learning services. Successful collaborative learning can only be sustained if the individuals involved feel part of a group or community in which they can trust. The most robust communities tend to be those that form via a collective aim or interest, their formation has a social underpinning and is not totally utilitarian.

If an aspiration of e-learning is to move away from simply providing online programmes of study, demarcated by subject, to increasingly fluid spaces in which students can build social networks then we need to understand how

contemporary collaborative and participatory environments encourage the formation of these types of groupings. Some of the most sophisticated examples of online community creation and management take place in and around Massively Multiplayer Online environments. The current apex of this field is the 'guild' system which suffuses the World of Warcraft MMO. Guilds are effectively goal-oriented clubs or societies many of which utilise the latest Web 2.0 type technologies out of game and multi-channel text chat and VOIP systems in game both to organise and to socialise. This paper is based on data collected over a period of six months from an ongoing ethnographic study comprising self-reflexive observation and semi-structured interviews conducted in World of Warcraft and face-to-face with guild members. This extends into a study of the social software used out-of-game by community members that act as a communication base for the guilds.

The data is evaluated considered using employing Wenger's notion of communities of practice, which highlights the interweaving of goal-orientated learning and the immersion of those participating in trusted social networks. This has the effect of generating and communicating what Baudelaire calls cultural capital, the lack of which often makes online learning a poor second to traditional face-to-face learning. The challenge here is how to abstract underpinning principles and practice that will be of value to e-learning away from the immediate goals or ideology of a particular MMO. This is not to suggest that killing dragons in collaborative groups is the future of e-learning. Instead it proposes that much can be gained from reflecting on the success of MMOs in motivating the formation of vibrant online communities and the ways in which these communities interweave socialising and learning.

The Short paper will be complemented by a poster.

1151 Short Paper

keywords: social learning / informal learning / massively multiplayer online environments / ethnography / communities of practice

CMALT accreditation workshop

Tuesday
15:45

ALT strand

Ms Rhonda Riachi
Mr Seb Schmoller
ALT

This workshop will be of most interest to people:
- With learning technology as a core part of their role;
- Who manage learning technologists;
- Who have organisational responsibility for training and development.

The workshop will be an introduction to CMALT. It will be suitable for people who have never thought about CMALT before, as well as for anyone who has already made a start on producing an application. The workshop will be run on open, participative lines, with plenty of opportunity for questions and discussion.

To achieve CMALT you submit a portfolio (using an eportfolio system or as a text-processed document), for assessment. The assessors are someone of your choice, who knows the work you do, and an existing CMALT holder, appointed by ALT. If you choose not to nominate an assessor, or if the assessor you nominate is not acceptable to ALT, we will appoint an additional existing CMALT holder instead.

Your portfolio covers 4 core areas:
- Operational issues
- Communication
- Teaching, learning and assessment processes
- The wider context

It also asks for evidence against at least one specialism. (There is an indicative list of possible specialisms in the CMALT prospectus, which you can access from http://www.alt.ac.uk/cmalt.html.)

For more information about CMALT, including details of our introductory offer for organisations that are members of ALT, go to http://www.alt.ac.uk/cmalt/.

1369 CMALT Accreditation

keywords: CMALT / professional development / learning technologists

The desires of digital students

Tuesday
15:45

Designing learning spaces

Mrs Diana Andone
Dr Jon Dron
Dr Lyn Pemberton
University of Brighton

Recent years have seen a new generation of 'digital students' emerging in the developed world. Digital students are young adults who have grown up with digital technologies integrated as an everyday feature of their lives. Digital students use technology differently from previous generations of students, fluidly and often simultaneously using instant messengers, mobile phones, the Web, MP3 players, online games and more. A study performed in a UK university was designed to identify and evaluate the use of new technologies, especially of social software, by digital students. The study is part of a research project which is investigating how the development of the e-learning spaces might be informed by digital students' attitudes. It was the first step taken towards the development and evaluation of a new learning environment for digital students.

1163 Research Paper

keywords: digital students / wiki / blog / IM / Skype

Evaluating ICT in education using the concept of mediation

Tuesday
15:45

Designing learning spaces

Dr Michael Morgan
Monash University

This paper proposes evaluating the cognitive impact on learners of Information and Communication Technology (ICT) based of the concept of 'mediation', Vygotsky (1980), as an alternative to the Conole and Dyke (2004 a and b) concept of 'affordances'. The generic affordances proposed by Conole and Dyke were critiqued by Boyle and Cook (2004), who asked; Can a description of affordances be used to improve the practice of educators? The cognitive impact of mediating artefacts is critical to understanding ICT in learning contexts, (Morgan et. al., 2006, a, b, c) and in analysing their role and efficacy in educational practice.

1076 Research Paper

keywords: evaluation of ICT / mediation, mediating artefacts and affordances

Designing mobile learning spaces for higher education

Tuesday
15:45

Designing learning spaces

Mr Richard Haynes
Mr Carl Smith
CETL for Reusable Learning Objects

Ms Claire Bradley

This talk will present work that has investigated issues surrounding the design of effective mobile learning spaces in higher education. The thrust of our work is on user generated contexts, a term used here to denote a hybrid use of learning objects, user generated content and mobile devices; and in particular to indicate that this combination enables novel forms of reuse and learning on

Dr John Cook
Learning Technology Research Institute

the move. In the talk we will focus on a selection of the theoretical and empirical issues presented below.

Our pedagogical vision draws on what Bakardjieva, in her book Internet Society, calls "technology-in-use-in-social-situations", and what we are terming user generated contexts. A user can be a tutor or a learner. Bakardjieva presents a theoretical framework which combines concepts from several schools of thought (social constructivism, critical theory, cultural studies and phenomenological sociology) in an attempt to overcome some of the limitations of these perspectives. We draw on the work of Bakardjieva to shape the work described below. In order to reify our perspective, this innovation has adopted the goal of investigating how the post-compulsory use of mobile devices can provide integration between these areas: (i) learners' informal/private 'space', and (ii) learners' formal education. Space here means a learner's mobile device and the social networking that surrounds it. In particular, we were interested in exploring the contexts for the appropriation of new mobile communications and content generation devices by self-motivated learners.

Recent empirical work has investigated the above perspectives. Working in groups, students visit an 'event' as part of an MA module called 'Events and Live Media Industries' to gather content for a multimedia presentation. Each of the 12 students were loaned a Nokia N91 smart-phone to help with the assignment, which came pre-loaded with a simple mobile learning object called 'events checklist'. The assignment task required the students not only to gather content in the form of video clips and photos using the N91s, but also to answer certain questions, i.e. to fill knowledge gaps, that were posed by the events checklist. We used a questionnaire to gather data. The results indicated that the students appropriated the devices to enhance inter-cultural understanding; students were very task focused; that the N91s acted as motivation to achieve high grades; that 73% of learners thought it was important to be able to learn at any time and in any place; that 64% of the learners thought that the events checklist was helpful; and that 74% of learners were positive about the university contacting them via mobile phone for learning purposes.

The talk will conclude by proposing that we should reconceptualise the challenge of designing effective learning spaces as one that enhances learner appropriation and user generated context. We will start the Q&A session rolling by presenting the following key questions. How can we strike the right balance between quality assurance and pedagogical creativity? How can mobile learning spaces be scaled up in a university sector that can sometimes be risk averse? What practical aspects, such as availability of technology or training, are involved? Can this approach be generalised to other sectors?

1168 Short Paper

keywords: mobile learning / pedagogical issues / user generated contexts

Student and practitioner satisfaction with the implementation of e-portfolios into higher education

Tuesday
15:45

Designing learning spaces

Mrs Kylie Lipczynski
Dr Derek Young
University of Stirling

Student and Practitioner satisfaction with the implementation of e-portfolios into higher education.

This paper evaluates current use and design of e-portfolios in higher education Teacher Training courses in the UK, in the process identifying practitioners' current views of the success and failure of implementing technology enhanced learning tools on a large scale. Barrett (2006) argues

that for e-portfolios to be successful they require a degree of inbuilt flexibility enabling learners to "express their own voice and leave their own mark in their portfolios". This concept of 'learner ownership' has, until now, been under-represented in the emerging literature and further research needs to be undertaken to gain a deeper understanding of learners' views.

All HEI's offering Teacher Training were invited to participate in a cross-sectional survey. Employed to collect both qualitative and quantitative data, the survey investigated:
- Existing e-portfolio packages and tools currently used in education;
- Current use of e-portfolios in teacher training;
- Current use of e-portfolios to support learner PDP.

The study undertook a detailed examination of e-portfolio software packages currently used in Teacher Training courses delivered in higher education institutions across the UK. This led to a critique of the individual tools most used and valued in current e-portfolio software packages to provide an understanding of the technical and operational functions of, and learner satisfaction with, existing packages. Individual tools within the e-portfolio framework were identified and evaluated for qualities of transferability leading from a learning environment to a practitioner environment, in the process eliciting learner views of the success of these components for learning. From the evaluation a model evolved of the current tools best suited to supporting the various roles e-portfolios in higher education currently have to fulfil including supporting the role as a learner and later as a practitioner through Continual Professional Development.

The current use of e-portfolios in teacher training in higher education is limited as a student centred tool and is primarily assessment driven (Ayala, 2006; Jafari, 2004), which has in turn limited the evaluation of tools currently used within e-portfolio software packages. This study has entered an area where there is very little documented research on the impact and influence of e-portfolios on teacher education. The study has produced a practical evaluation of a predominantly theory led area, in the process mapping new territory in the field of teacher training. The evaluation has specifically investigated the design of current e-portfolios as learning spaces and developed a model to support the implementation of a successful transferable e-portfolio software package.

The success of this project has been to provide an evaluation of current practice in Teacher Training and develop an effective model of transferability from the learner to the practitioner. There is however, clearly identifiable scope to develop the project further to showcase good practice of successful integration of e-portfolios into teacher education. In addition further development would contribute to the understanding of how practitioners are currently documenting and reflecting on their CPD.

Ayala, J. (2006) Electronic Portfolios for Whom? Retrieved February 2, 2006, from http://www.educause.edu/ir/library/pdf/eqm0613.pdf
Barrett, H. (2006) Using Electronic Portfolios for Classroom Assessment. Connected Newsletter. 13 (2), 4-6.
Jafari, A. (2004). "The Sticky e-Portfolio System: Tackling Challenges and Identifying Attributes." Educause Review (July/August 2004): 38-48.

1173 Short Paper

keywords: e-portfolios / teacher training / personal development planning

Online silence: a space for learning or antisocial?

Tuesday
15:45

Designing learning spaces

Ms Sue Rivers
University of Sheffield

Research into networked collaborative learning often concentrates on analysing the content of online conferences in order to assess what learning takes place online. This paper takes a socio-cultural and socio-linguistic approach to examining the significance for online learning of the silence between the postings and discussions.

This doctoral research at the University of Sheffield used virtual ethnography to explore the experiences of a group of academics, implementing e-learning in their institutions, who learned about e-learning by e-learning. The fieldwork involved spending 9 months as an online student living and learning with this group. Discourse analysis and metaphor analysis were used to consider what learners did and did not say.

Space for learning
Silence is a space for learning. Silence can exist without speech, but speech cannot exist without silence. Participants in online collaborative discussions do not verbalise all that they are learning; much learning occurs in the silence outside the discussions. Silence is associated with reflection, which enriches learning, particularly for adult professionals. Online learners need time to reflect on issues raised before making their own contribution and computer conferencing allows them time to think about arguments and synthesise ideas. Researchers need to interpret and understand the role of periods of apparent inactivity as well as observable activity, even if it is difficult to conceptualise the role of productive ambiguity (Littleton, 1999).

Is online silence anti-social?
Learning is a social experience and conversation a key social medium. Turn taking is normal in conversation; with the length of the silence between contributions being culturally-related (Sifianou, 1997). In computer-mediated exchanges, students may feel less obliged to respond; indeed, peripheral participation is seen as legitimate, for example to introduce new members into a group.

Effective learning communities share resources, knowledge and experience. Brookfield and Preskill (2005) imply that students are 'saying too little' only when it becomes a problem for their learning. This research asks whether remaining silent ('lurking') is fundamentally anti-social. Too much silence may mean that the group cannot benefit from the very sharing of diverse opinions that the authors extol. In a normal conversation, avoiding turn taking would break social convention; online students may be 'saying too little' when it becomes a problem for the learning of others.

Challenges and triumphs
Analysing silence is methodologically challenging! The content and frequency of postings and the length of silences in between was readily established, but content analysis alone revealed little about learning in the silence. Semi-structured interviews, using critical event recall, replicating the feel of online conversations, proved more successful.

This research shows the importance of silence in facilitating higher level online learning and the effect of lurking on collaboration. It will enable those designing and moderating online discussions to plan for and manage silence in order to enrich learning communities.

1169 Short Paper

Keywords: silence is a learning space / is lurking antisocial? / how to analyse silence / virtual ethnography

Developing borderless learning spaces: interactive Teaching and Learning Observatories

Tuesday
15:45

Designing learning spaces

Ms Lynda Carter
University of Nottingham, School of Education

Dr Brett Bligh
Professor Dr Do Coyle
University of Nottingham, Visual Learning Lab

Dr Rolf Wiesemes
Visual Learning Lab / University of Nottingham

This paper develops a broadly socio-cultural perspective on the use of interactive Teaching and Learning Observatories (iTLOs). The iTLO has developed substantially since its original inception in 2000 as a tool for remote teacher training using video conferencing. Whilst the technology used in the iTLO supports learning and teaching in borderless classrooms, a range of applications with training and research partners has now developed over several years. Initially, the iTLO was conceptualised as a particular forum for 'instructional conversations'. In practice, this means that the iTLO has been and is still used as a means to connect groups of teacher trainees to a range of secondary school classrooms as part of their initial teacher education. Additionally, the iTLO includes research-oriented collaborative uses such as 'Constructing Strategic Classrooms with beginning learners of French and German' (2001-2002); 'Developing Thinking Skills with learners of German' (2002-2003); 'Tracking spontaneous language development and self-regulation with beginning learners of German' (2003-2004); 'Pupil voice' (2005-6); 'Talking the talk – teacher use of spontaneous meta-talk to observers' (2005-6); 'Interactivity: beyond the classroom' (2005-6). At the same time, whilst iTLO uses have evolved and are currently in their 4th generation phase, changes in observation and collaboration patterns have occurred which could be summarised as shifting from observation to interaction and from reflective practice to critical dialogue.

The work in the iTLO has been documented through systematic logging of user information as well as recording of video link data and ensuing discussions. Whilst the original application of the iTLO was at first limited to linking teacher trainees into live classrooms for initial teacher education, iTLO uses have expanded substantially leading to the development of the 4th generation TLO, which allows the implementation and development of mutually constructed interactive learning spaces, which are facilitated through the adopted uses of current video conferencing technologies.

Coyle's research (2005) documents affordances and constraints of a wide range of iTLO activities within multiple zones of development set within a socio-cultural framework. This provides a useful overview of how technology enhances the use of learning spaces in the 1st and 2nd generation of iTLOs. Whilst this is work in progress and evolving, our current research findings suggest that the development of iTLOs provides new learning and teaching opportunities that go beyond the traditional confines of initial (teacher) training and continuous professional development. These new learning and teaching opportunities arise through the use of critical incidents theories in combination with the development of theories of practices and related 'post-method pedagogies' (Kumaravadivelu, 2001, 2006). Tharp & Gallimore's (1988) 'instructional conversations' offer one possible lens through which iTLO interactions might be theorised. However, it is also becoming clear that iTLOs offer the opportunity to redefine classroom boundaries in relation to learning and teaching spaces. Essentially, iTLOs demand fundamental questioning and reconceptualisation of teacher, learner and researcher roles as well as a redefinition of learning and teaching spaces.

Coyle, D (2005) Exploring Zones of Interactivity in Foreign Language and Bilingual Teacher Education in Holmberg, B; Shelley, M; and C. White (eds) Distance Education and Languages: evolution and change Multilingual Matters, Clevedon.
Kumaravadivelu, B. (2001). 'Toward a postmethod pedagogy.' TESOL Quarterly 35(4): 537-560.

Tharp, R G.; Gallimore, R (1988) Rousing Minds to Life: Teaching, Learning, and Schooling in Social Context, Cambridge University Press, Cambridge.

1190 Short Paper

keywords: interactive teaching and learning observatories / zones of interactivity in teaching and learning / instructional conversations / using video conferencing in learning and teaching

Bridging 3D and Web-based virtual learning environments

Tuesday
15:45

Designing learning spaces

Mr Jeremy Kemp
San Jose State University

Dr Daniel Livingstone
University of Paisley

Interest in the use of 3D multi-user virtual environments (MUVE) for e-learning has dramatically increased in recent years. In the past 12 months in particular there has been explosive growth in the use of the user-configurable MUVE Second Life as a platform for e-learning. The ease with which educators are able to develop their own custom content and use the environment to support constructivist and constructionist learning appears to have been a major driving force. However, Second Life has a number of limitations as an e-learning platform in its poor support for text based material and its lack of provision of tools to support asynchronous discussion and reflection on experience. This paper outlines the Sloodle project which integrates Second Life with a traditional Web-based VLE to enhance the 3D e-learning experience.
We demonstrate how Sloodle is able to enhance and support effective communication and learning in Second Life, and present preliminary findings from its use by a number of early-adopters.

1158 Short Paper

keywords: multi-user virtual environments / VLE / Second Life / games-based learning / simulation

Reusable learning objects: enabling contextual adaptation

Tuesday
15:45

Large-scale implementation

Mr Julian Tenney
IS-Learning Team

Reusability of learning materials remains in reality an elusive goal. Whilst many of the issues in designing for reusability have been addressed, feedback suggests that for reusability to fulfil its true potential, learning objects must be easily adaptable by academic teaching staff to suit their own needs and the needs of their learners.

The University of Nottingham's Learning Team, in partnership with the School of Nursing, have developed an approach to learning object development that allows new learning objects to be easily created from proven pedagogical templates, and for existing learning objects to be easily modified, and adapted to changing contexts of use.

The School of Nursing identified several pedagogical models that were in frequent use across its teaching activities that were popular with both students and teachers, and successful. These pedagogical models have been encapsulated in Learning Object templates, developed using Xerte. The templates separate the learning object's logic from its data, and Xerte provides views onto both the logic and the data using tools designed to meet the needs of both technical and non-technical staff.

The presentation will demonstrate how the University of Nottingham continues to develop tools and methodologies that facilitate the development

and subsequent adaptation and reuse of learning objects. We will show how two learning object templates that use very different pedagogical strategies have been developed, how academic teaching staff can create new learning objects from these templates and how existing learning objects can easily be adapted.

During the presentation, we will present the key challenges that are faced when designing learning resources that are easily repurposed and reused, and outline the nature of the solutions we have developed. All the tools demonstrated are freely available to the wider community.

1176 Demo

keywords: reusability / learning objects / authoring tools

Tales from the bleeding edge: dangerous developments at RLO-CETL

Tuesday
15:45

Large-scale implementation

Mr Carl Smith
London Metropolitan University

Mr Alan Leeder
Dr Raquel Morales
University of Cambridge

Mr Michael Taylor
University of Nottingham

The term "bleeding edge" (Barus, 199-) describes a technology so new, untried and untested, that the user is required to take risks in the form of reductions in stability and/or productivity in order to use it. A technology is typically considered to be bleeding edge when there is a) lack of consensus - no-one really knows for certain where this is going; b) lack of knowledge – a new kind of technology or process is being implemented that isn't yet being discussed in the academic or trade press; and c) there is industry resistance to change – there may be voices speaking against the technology, yet some organizations are implementing it anyway because they believe in its inherent benefits.

This describes the current situation at RLO-CETL, a three-way Centre for Excellence between London Metropolitan, Cambridge and Nottingham Universities which has, at its heart, a social network of developers that are collaboratively evolving a suite of powerful learning object development tools and methodologies.

In this series of pro-active demonstrations, CETL developers will introduce the framework and theory underpinning their innovative practice (Boyle et al, 2006); demo a range of the very latest learning objects and show how they are evaluated (Morales et al, 2006) both formatively as part of an iterative agile rapid-prototyping development lifecycle and summatively with cohorts of learners across all three institutions. Participants will be invited to interact throughout the demos, to discuss the advantages and disadvantages of the methodologies, tools and templates that impact on policy and infrastructure, afford large-scale implementation and facilitate these dangerous developments.

1244 Demo

keywords: learning objects / pedagogies / collaborative development / social networks / action research

A tool to support the design of personal development activities

Tuesday
15:45

Large-scale implementation

Mark Barrett-Baxendale
Liverpool Hope University

Selwyn Lloyd
Phosphorix

Ms Janet Strivens
The University of Liverpool

While the provision of opportunities to all students for Personal Development Planning is a national policy requirement in UK HE, the sector-agreed definition does not constrain institutions nor dictate what takes place under that label. In a recent survey of ePDP and ePortfolio practice in UK HEIs (Strivens 2007) it was found that 83% of respondents already used some form of electronic tool to support their PDP implementation, and for many this was a key driver towards acquiring an institutional e-portfolio system or set of tools. However, without a clearer description of what happens under the PDP label, it is difficult for technologists to design tools and systems which best support the process.

In 2002 a survey of more than 30 institutions generated a list of thirty-three activity types which practitioners recognised as part of their institutional PDP process, each of which generated output types or records (Grant and Richardson 2002). This provided a useful starting point in thinking about the PDP process as a series of (learning) activities, different groups of which are selected by different tutors/institutions to instantiate their interpretation of the term PDP. Key to the work described below is the concept of PDP as a series of learning activities which generate and make use of learner records.

Between 2002 and 2006, a software development team known as Phosphorix have worked on a series of interoperability-based projects in HE and FE, many funded through JISC, to explore the possibilities of joined-up records of achievement, e-portfolios and personal development activities in the context of distributed service architectures. This paper will briefly describe the progress of these developments, and focus on one aspect of the requirements they have addressed: the development of e-PDP services and in particular a 'PDP activities design wizard'.

The Liverpool Hope University ICEBOX project was responsible for a number of developments of ePDP tools including an integrated blog/learning journal and blog aggregation interface which allowed students to watch each others' blogs, interact socially or in a learning context or for tutors to do the same. The next step was to develop a software system that enables staff in educational institutions to design personal development activities and share those designs with others. Initially aimed at individual learners, the software will develop towards team/group activity builders.

This presentation will demonstrate the PDP activities design builder and discuss its potential with reference to other on-going projects.

1320 Demo

keywords: personal development planning / learning design / interoperability

Jaws dropping: ever mending; never ending! A DIY approach to accessibility

Tuesday
15:45

Large-scale implementation

Ms Emelye Evans
Mr Shane Sutherland
Pebble Learning

The PebblePad ePortfolio System is in use in more than 30 HEIs and an increasing number of other educational and professional institutions. Flash was used to develop a user friendly and easy to use interface. Prioritising usability over accessibility was a conscious decision for the development team though the intention was never to avoid obligations in this arena.

This demonstration will chart how the development battle to support commercial screen reading software in the system before concluding that a purpose built tool was both more advantageous to the end user and more sustainable. Working with the RNCB, Hereford; an independent text to speech engine was developed. It includes Mia, My interactive assistant, a screen reading avatar.

Using a live version of the software the demonstration will show how any user can select the screen reader, how items are created, saved, shared etc. and how the system is designed to provide logical tabbing to improve all users' experience. The demonstration will also show how users can adapt every element of the system from creating a personalised interface to designing individual templates for their online assets.

Throughout this session reference will be made to extant theories of usability and accessibility; it will also draw upon the growing body of research around personalising learning and personal learning spaces.

Whilst the demonstration itself is not hands-on participants will be offered demonstration accounts to test the accessibility of the system. As a result of the session participants will have an improved understanding of:
- The design decision processes taken in the development of a complex e-learning system;
- The issues inherent in aligning tool development with specialist commercial screen-reading software;
- The challenges of developing an in-house solution.

The presentation will conclude with user evaluation data gathered from sight impaired and other pilot users.

1111 Demo

keywords: accessibility / e-portfolio / personalisation / usability / avatar

An approach and tool for adapting learning objects based on underlying learning designs

Tuesday
15:45

Learning and internationalism

Ms Enzian Baur
Professor Tom Boyle
Mr Dejan Ljubojevic
London Metropolitan University

This vision for learning objects has been to improve the quality of teaching and learning through the widespread availability of granular, self-contained learning resources. Several national and international repositories have been developed - e.g. ARIADNE, MERLOT, JORUM, and NLN. However, the evidence points to very limited impact in achieving this aim. One major barrier is the demand from users to be able to adapt and repurpose learning objects to meet their local needs. The project aims to meet this demand for rich adaptation and repurposing of learning objects.

The traditional model for reuse has been to separate content from context in order to make the content reusable. However, content on its own is of limited

pedagogical value. This project inverts the traditional model by focusing on pedagogical form rather than content as the basis for reuse. As a first step the pedagogical pattern embedded in a set of award winning learning objects was extracted. These learning objects won a European Academic Software Award (EASA) in 2004. An authoring tool was developed that supports the adaptation and generation of new learning objects based on this pattern. The tool captures and presents the pedagogical pattern in a visual, executable form to use as electronic storyboard. Each pedagogical decision is realised by a component in the storyboard that can be independently accessed and edited. In addition, each component has an associated pedagogical commentary which describes (with illustrations) the pedagogical function, and provides options for how this pedagogical function can be achieved. The tool thus supports access to and editing/repurposing of the distinct components of the learning object enabling authors to adapt the learning object to their specific cultural and pedagogical needs. Changing the language of instruction, for example, can be done in a simple, direct fashion. The tool can also be used in full authoring mode to create a totally new learning object based on the pedagogical pattern. At this time the tool supports one pedagogical pattern – that derived from the EASA award winning learning objects. However, it has been constructed to support many 'plug-in' patterns.

At the conference the tool will be demonstrated, the pedagogical rationale described, and the usability evaluation data discussed. This talk will reflect on the importance of an approach to the reuse of learning objects based on pedagogical pattern rather than specific content. It will discuss and illustrate how this framework is being extended to support the 'repurposing' of Web based learning objects for use on mobile phones.

1182 Short Paper

keywords: learning objects / learning design / authoring tool

Cultural influences on learning object design and development

Tuesday
15:45

Learning and internationalism

Professor Tom Boyle
Ms Mei Qi
Dr Yong Xue
London Metropolitan University

The paper identifies and discusses design factors that are relevant to the development of culturally sensitive learning objects. Culture incorporates socially transmitted expectations, beliefs, and values about what good learning is, and consequently shapes the way people learn. It is an important issue that should be taken into account during the design and development of learning objects, because designers usually develop learning objects relying on their own cultural convention unconsciously, rather than taking account of the diversity of culture.

The influences of cultural elements on using learning objects were investigated in two universities, London Metropolitan University (LondonMet) in the UK, and Beijing Union University (BUU) in China. At the primary stage of the study, a set of culture-related variables that affect the use of learning objects was proposed based upon an extensive literature review. These culture-related variables are mapped to the process of design and development of learning objects to highlight possible culturally sensitive design factors. 223 students in LondonMet and 167 students in BUU took part in the study in the academic year 2003-2004 and 2004-2005 separately. The case study involved learning objects for Java programming. The learning objects were translated from English to Chinese for the students in BUU, but the other features were kept the same.

Analysis of the data showed that the learning objects were helpful to the students in both universities in understanding the basic learning content. But reactions to other issues such as presentation and use of scaffolding were reported differently by the two groups of students. The influences of culture

are related to factors such as appropriate examples, navigation structure, and acceptable layout of the interface. For example, the Chinese students held positive attitudes towards the quizzes in the learning objects much more than students in LondonMet in the survey. This seems to be because hard work to achieve academic success is closely related to success in family and social life. In contrast, British students see it as more loosely related.

Cultural flexibility in the design of learning objects requires a systemic approach in which cultural influences are addressed explicitly in the entire process of design and development. In the ongoing research, a cultural reference model is being developed that helps designers to accommodate the particular requirements of different cultures. In order to relate the cultural reference model to practice, it is being embedded in an authoring tool. This tool was developed to facilitate the development and adaptation of learning objects for accommodating the needs of learners (Boyle, 2006). The authoring tool is based on an underlying network that represents the decisions made during the design process. Advice derived from the reference model is being attached to the decision points in this network to guide the tutor in making culturally sensitive design choices.

1333 Short Paper

keywords: cross culture / learning object / reuse

Measures of learning style in the evaluation of blogs as reflective learning tools

Tuesday
15:45

Learning technology for the social network generation

Mr Niall Watts
University College Dublin

This study investigates blogs as learning tools in higher education. It aims to discover whether student bloggers are active or reflective and individual or collaborative learners. To this end it compares the learning style of bloggers with reflective and collaborative learning as seen in their blogs posts.

Computer Mediated Communication research has been criticised as focusing on student evaluations and Human Computer Interface factors rather than on learning. This study uses standard test instruments to measure learning e.g. Kolb's Learning Style Inventory (KLSI) was used to measure learning style. KLSI suggests that bloggers would have a preference for the diverging and, to a lesser extent, the assimilating learning style. However, most of the bloggers in this study showed a preference for the converging learning style. This preference is common among students in abstract and applied areas and in courses with a major practical element.

Blog posts and comments were coded for reflective writing, using heuristics. This analysis found that about one third of the posts and comments were reflective. It was triangulated with a questionnaire, which found over eighty percent of the students to be reflective.

The number of comments and links in the blogs was counted and the identity of the bloggers making and receiving the comments recorded. The quantity of comments and links among the students suggests that the students were collaborating and that they had formed an online community. Questionnaires were used to triangulate the research findings.

1123 Short Paper

keywords: blog / learning style / Kolb / reflection / collaboration

Blogs and e-mails: an effective means to understanding the student learning experience?

Tuesday
15:45

Learning technology for the social network generation

Dr Alison Stokes
Dr Jason Truscott
EL CETL, University of Plymouth

The Experiential Learning (EL) Centre for Excellence in Teaching and Learning (CETL) at the University of Plymouth is currently researching undergraduate student learning in the natural and environmental science disciplines. Experiential learning has been descried by Kolb as 'learning by doing'. But how do you actually gain an insight into what the students are really thinking about while learning and interacting in experiential contexts, such as: fieldwork, lab work or work-based learning? This paper looks at an ongoing pilot study that is using readily available electronic methods to capture the student experience and also to encourage reflective practice.

For this pilot study we chose to concentrate on 1st year environmental science students, asking the participants to either use weblogs or e-mail as a means of capturing their experiences. There are currently 8 participants, evenly split between blogging or e-mailing.

The students have been asked to participate for a 2 month period; the time frame being strategically placed so that it also overlaps with experiential events in their timetables (fieldwork and lab work). A website named 'Student Corner' has also been developed to provide students with a point of reference that includes project details and enough support to get them started.

To date findings have shown that certain students are generally responding well (considering their existing study work loads), typically 1-2 posts a week. Other students are less forthcoming and their blogging and replies to e-mails are somewhat disjointed and last minute; this is particularly so for e-mails. However, we are also finding some interesting and revealing content, which encompasses both their discipline based experiential events and student life experiences. Student posts and replies range from just simple plain text to the more adventurous among them adding photographs or even completely redesigning their blogs.

We will be reporting on our findings from the pilot study and evaluating the effectiveness of blogging versus e-mail. These findings will consider the premise that blogging (particularly when the blog is private as is the case in this study) is generally 'non-interactive' in contrast to the 'reactive' form of communication, e-mail, used here. Some emphasis will also be given to the effectiveness of certain motivational approaches that encourage student participation in electronic social research.

This pilot study is a trial run of a much larger study planned for September 2007 that will encompass all of the EL CETL disciplines (biology, environmental science, geography and geology). This paper will therefore contain details on how we see our research developing and it will also include practical advice to academics and researchers wishing to employ similar research methods in educational contexts. We will also address questions concerning whether blogs and/or e-mails are in fact an effective means to understanding and gaining insight into the 'hidden' undergraduate student life and their learning experiences. It is intended that data gathered from this and future studies will be used in conjunction with other EL CETL studies to assist in understanding and improving student life and learning for future undergraduates.

1279 Short Paper

keywords: experiential learning / reflective practice / capturing student experiences / electronic social research methods / fieldwork, labwork and work-based learning

Blogs, reflective practice and autonomous learning in graphic design communication.

Tuesday
15:45

Learning technology for the social network generation

Mr Peter Maloney
Chelsea College of Art and Design

Since their inception in 2004 Blogs have become a major contributor to the development of the social networking phenomenon.

This paper reports on a small qualitative research project utilising case studies of the use of blogs by Level2 BA Graphic Design Communication students. In the project particular emphasis is given to the capacity of the Blog to assist in the development of reflective behaviour.

Reflection is consistently emphasised as a desirable graduate capability, and is an expectation in programmes in the general field of Art and Design. Whilst students in Graphic Design are used to handling sophisticated hardware and software in the fulfilment of design briefs, it is less common for them to draw on the power of ICT to support metacognitive activity such as reflection. The report discusses the tool in comparison to sketchbooks and reflective journals in terms of collating and organising information and reflecting on action and questions how this implementation can further foster an autonomous approach to learning.

The increasingly fragmented and often remote nature of current university education experience means there is a necessity for a re-introduction of community through a blended learning approach. To what extent can Blogs not only satisfy this need to engender community and promote peer learning but also offer new paradigms for the pedagogic practice of the teacher? The present study has particular value in that it bridges a number of aspects of level 2 student learning such as placements, student exchanges and electives.

The presentation will exemplify student practices and will demonstrate the flexibility of the tool in a range of learning and teaching activities. It will seek to situate this research project in the wider application of blended learning technology and discuss issues surrounding the use of third party software applications within learning and teaching practices at this level.

1290 Short Paper

keywords: blog / reflective practice / peer learning / graphic design / autonomous learning

Which side of the wall are you on?

Tuesday
15:45

Learning technology for the social network generation

Ms Rita Kop
Mrs Clare Woodward
University of Wales Swansea

Is the new Web 2.0 technology the panacea many claim it to be? And how influential is it to those who reside on the wrong side of the technological wall? It is estimated that about half the UK population does not use technology and 25 percent of these people do not see any relevance of technology to their lives. There are those like Selwyn who doubt if Web 2.0 technology will even enhance learning at all. The digital natives – digital immigrants typology by Prensky adds another dimension to the debate around the digital divide, and even the Net-generation seem to use it for fairly trivial activities related to chatting with their friends rather than the collaborative and constructivist learning experience envisaged by enthusiasts. The potential of the latest Web 2.0 and mobile technologies and the possibilities for personalisation, network and community forming they offer, place the learner at the centre of the learning experience, rather than the tutor and the institution, and could be instrumental in determining the content of the

learning experience. By influencing education for all, they also revive the ideals of 'adult education for liberation' as argued by Illich and Freire. Their vision was to see people take ownership of the learning process, rather than institutions controlling their education.

This paper will report on research in progress in an HE Department of Adult Continuing Education analysing the effect of moving away from a learning experience wholly directed by the institution, towards a more personalised one where students have more control over the content of the curriculum. The research will establish whether a negotiated approach involving the use of social education technologies in adult education, and a greater control by the students over shaping the content of their learning programme will have a liberating effect on individual student's ownership of learning. The research approach will use an integrative learning design framework and will apply this model to experience design.

The paper will also assess developments in this area by drawing upon literature including Illich's considerations that education must be fit for purpose in relation to the personal, social and educational needs of participants. Moreover, it will fundamentally explore the issues of 'ownership of one's own learning process' and the extent to which the new social software tools enhance the learning experience.

1207 Short Paper

keywords: personalised learning / Web 2.0 / ownership over learning process / divide between digital natives and immigrants / engagement

Web 2.0 and informal learning

Tuesday
15:45

Learning technology for the social network generation

Prof Robin Mason
Open University

Dr Frank Rennie
UHI

In this paper we describe the use of a range of Web 2.0 technologies to support the development of community for a newly formed Land Trust on the Isle of Lewis. The application of social networking tools in text, audio and video has several purposes: informal learning about the area to increase tourism, community interaction, and 'ownership' of the Trust's website and pride in the local landscape. The paper provides background theory related to informal learning and Web 2.0 technologies, and describes an innovative application of them to a sparsely populated rural community.

1066 Short Paper

keywords: rural community / heritage resources / user generated content

Meet the ALT-C and ALT-J editors

Tuesday
17:00

ALT strand

Ms Isobel Falconer
Glasgow Caledonian University

Dr Nichola Whitton
Manchester Metropolitan University

Mr Ian Smith
Napier University

Dr Rhona Sharpe
Oxford Brookes University

Mr Steve Wheeler
University of Plymouth

Dr Frances Bell
University of Salford

Dr Jane Seale
University of Southampton

1370 Meet the Editors

This is a rare opportunity to meet the editors of the Research Papers and Abstracts for ALT-C and the editors of ALT-J! The editors will give guidance on what they look for in a research paper/conference submission, and there will be plenty of time to ask questions. Essential for anyone who is new to the process of submitting conference proposals and research papers, or would like more tips on how to get published.

keywords: publishing learning technology research / submitting papers to conferences

Educational television beyond the TV set

Tuesday
17:00

Designing learning spaces

Mrs Maria Luisa Zorrilla-Abascal
University of East Anglia

This research project is about convergent production and use of educational contents, particularly for television and the Internet, from a Cultural Studies perspective. The vision leading this project assumes that convergence should be about extending the televisual text across media and generating transplatform intertextualities. The case that better reflects my understandings of educational TV-Internet convergence is BBC Schools, which includes television series and corresponding websites.

The project is structured following three main lines of enquiry: a) content generation (institutional sphere), b) content itself (intertextual dimension) and c) content users (teachers and children in the classroom), which are addressed through a multimethodological strategy. The methodological approach for the content generation line is based on interviews to BBC key actors and documental analysis. The text analysis is being approached through an instrument developed following Literary theory, around the concept of intertextuality. The content users' line has been explored through media sessions in schools, with six different age groups using observation, participant observation, interviews, questionnaires and learning activities.

For implementing the text analysis stage of this project, it was necessary to undertake an extensive educational media review which showed there are three main categories of television products regarding their intertextual relations with Web contents: a) series that have their own websites; b) series that don't have their own Web spaces but which can be used in combination with other BBC Web contents; c) and the ones for which there are no BBC Web related contents. BBC Internet resources were categorised as a)

websites designed for television series, b) stand-alone websites, and c) extra-textual contents (i.e. teachers' and parents' Web spaces). Since convergence is the aim of this project, recording of series with their own websites was privileged. The plan includes a complete academic year of recordings (2006-2007).

This is a three year project (2005-2008) which has a fifty percent of progress at present. It is premature to express any results; nevertheless, there are some key ideas that have emerged and which signal interesting paths ahead:

- Television is changing and merging with other technologies, especially the Internet, the iPod and mobile phones.
- Convergence is transforming the media industry and the role of producers is changing: the new label tends to be "content generator" and not TV producer or Web developer anymore.
- Web sites are evolving from information receptacles to spaces for users' creation and generation of original contents.
- Web sites are to TV programmes what "extra features" are to DVDs.
- Media literacies are not exclusively about using media, but also about combining media effectively.
- Regarding convergence, one insistent issue is about what screen will prevail: the television screen or the computer one… in the classroom, another screen should be considered: the smart board.
- Children approach their Internet experiences retrieving their competences as videogames players, more than their reader abilities, performing a clicky-clicky navigation, a superficial scanning of the Web pages with an almost anxious need of clicking in every active element.

1217 Short Paper

keywords: convergence in the educational sphere / educational content generation and users / intertextual relations between TV and the Web

Motivating learners: mobile learning objects and reusable learning objects for the X-Box generation

Tuesday
17:00

Designing learning spaces

Mr Roger Gossett
London Metropolitan University

Miss Claire Bradley
Dr John Cook
Mr Richard Haynes
Mr Carl Smith
RLO-CETL, London Metropolitan University

This talk will present work that has investigated the pedagogically effective design and user evaluation of a series of Sports Science Mobile Learning Objects (MLOs) and Reusable Learning Objects (RLOs) that incorporate innovative rich media techniques.

Many expensive rich media learning environments do a good job of simulating participation. However, whilst students are initially attracted they are soon aware of the lack of true interactivity and, just as rapidly; any potential for deep learning is lost. Non-participatory reception of information is still the norm. For improved learning the content needs to be stimulating, engaging and seductive. Thus a key area of research for us is to investigate how to make learning objects that both generate and answer questions (i.e. help students fill a knowledge gap) whilst at the same time supplying results in terms of engagement of learners.

There are links here to the work of Malone and Lepper (1987) on motivation. They identified four major factors in relation to motivation: challenge, curiosity, control, and fantasy, arguing that these are what make a learning environment (such as a gaming activity) intrinsically motivating. So to be challenging, activities should be kept continuously at an optimal level of difficulty to keep the learner from being either bored or frustrated. To elicit sensory or cognitive curiosity in activities one can use audio-visual devices or present information that makes the learner believe that their current

knowledge structure is incomplete or inconsistent. Activities should also promote a sense of control on the part of the learner, that is, a feeling that learning outcomes are determined by their own actions.

Our approach to achieving motivation (in terms of challenge, curiosity, control, and fantasy) is to design functional, intuitive graphic and interface design and the construction of interactive narrative. These factors fed into our learning design template which in turn prescribes the way in which our Internet based and mobile based learning objects are realised.

These highly engaging, interactive RLOs and MLOs are based on high-end techniques of 3D modelling and motion capture that are particularly strong on motivational aspects such as challenge and fantasy. These learning resources allow learners to find solutions to difficult problems, for example, by allowing them to peel back the layers of a human body, exposing first the muscle and then the bone structure in order to conceptualise the mechanical system acting at the elbow joint with reference to the effort arm. The talk will report the results of the student evaluation of both the Web and mobile versions with a comparative study of their interactions. We are currently in the process of analysing all the data; however, preliminary results indicate high user satisfaction. For example in response to the question: “What words would you use to describe these learning objects?”; the answers from the students in the focus group included: “clear”, “modern”, “futuristic”, “interactive”, “realistic”, “simple”, “adaptable”, “fun”, “easy to use”, and “interesting”.

The presentation will also cover the following questions: Can our innovative rich media techniques be applied in other disciplines? Do we need to slavishly follow games principles or does pedagogical effectiveness require us to take a modified approach?

1265 Short Paper

keywords: motivation and games theory in learning / mobile learning / learning design templates / rich media based learning resources

Lecturers’ perceptions of videoconferencing as a tool for distance learning in higher education

Tuesday
17:00

Designing learning spaces

Miss Carina Bossu
Dr Peter Shanahan
Dr Robyn Smyth
The University of New England

Dr Sarah Stein
University of Otago

This paper explores the findings of a study into the potential usefulness of videoconferencing at one of Australia’s leading distance education universities. The University of New England (UNE) is a regional university with a long distance education tradition and high reputation for supporting distance learners.

The study included an online survey and interviews of participants in four diverse case studies. It occurred early in the adoption of Internet-based broadband videoconferencing and was intended to provide base data and initial insights into the potential for the technology to be useful in a distance education setting. Since the study was concluded, several off-shoot projects have commenced. These projects support the initial conclusion that Internet-based broadband video conferencing has great potential for supporting distance learning and learners.

1063 Research Paper

keywords: videoconferencing / teaching and learning with technology / distance learning

Widening access to educational resources: the development of tools to support deaf and hearing students.

Tuesday
17:00

Designing learning spaces

Dr Malcolm Allan
Professor David Harrison
Mr Iain Stewart
Glasgow Caledonian University

1116 Research Paper

A tool to support hearing impaired students has been developed. This paper describes the evolution of the tool and discusses whether the tool may be adapted to integrate into the general learning environment of the wider student body to benefit the overall learning experience. Initial findings are presented and show that the concept has merit. Further developments to improve the effectiveness of the tool are described.

keywords: assistive technology / adaptive education systems / voice recognition / accessible educational resources

Does a handheld gaming device make an effective assistive technology tool?

Tuesday
17:00

Designing learning spaces

Mr Andy Pulman
Institute of Health & Community Studies

Medical personnel need to have the ability to quickly calculate measures on drugs rounds and in other areas of their role. Students entering health and social care with poor numeracy skill levels have previously been flagged as a concern by both Institute of Health & Community Studies (IHCS) academics and also in contemporary research (Gillham and Chu, 1995). Any tool that may help to improve skill levels is therefore viewed as extremely beneficial.

Potential educational uses for handheld gaming devices like the Nintendo DS Lite and Sony PlayStation Portable have become increasingly apparent with the possibilities of access to mobile devices containing software for educational improvement encompassing many different disciplines.

This paper describes the evaluation of an innovative TechDis Higher Education Assistive Technology (HEAT) project investigating the use of the Nintendo DS Lite and Brain Training software package as an assistive technology tool for students from IHCS requiring help with numeracy during the autumn term of 2006. It provides an overview of using mobile devices within a higher education environment and seeks to raise awareness of some of the possibilities that can be created for students and staff.

1059 Short Paper

keywords: mobile learning / assistive technology / TechDis HEAT Scheme / numeracy / m-learning

An exploration of tablet PC use in undergraduate business education: initial perceptions and experiences of students and academic staff.

Tuesday
17:00

Designing learning spaces

Mr Murray Scott
National University of Ireland, Galway

Ms Lorraine Fisher
University College Dublin

Exploratory research is underway within an Unidentified School of Business (USB) to study tablet personal computers (PC) use in undergraduate business education. This joint research project has been designed by two European universities who intend to examine the use of tablet PCs over a ten month period during the 2006 / 2007 academic year. This study sets out to understand what role tablets play in supporting student and staff engagement in class based computer mediated tablet supported interaction. Our aim is to understand how tablet PCs are used by students and staff to participate in a complex technologically enhanced learning environment and to assess what

advantages such use brings to education.

The use of tablet PCs in business is gaining increased research interest as studies try to establish how their use enables new ways of working (Garfield, 2005). In education, recent studies have started to evaluate the usefulness of tablet PCs in academic work by university professors (Weitz et al., 2006). At present there is a pressing need to understand how tablets support active instruction in a specifically designed, technologically enhanced small group class environment (Liu et al., 2003). By conducting this study we hope to extend our understanding of the role that tablets play in curricula for business education and make an initial assessment on the value of this technology.

At present tablets are integrated into one USB program which is in its third consecutive year of being taught. Tablets are an integrated component of this program which is delivered to a small group of 30 students in Semester 1 of their penultimate year of study. Students are taught in a small group classroom which contains white boards, wireless networking, video conferencing and access to a centralised work station which hosts specialised groupware software for use in coordinating online activities.

A broadly interpretive ethnographic approach (Denzin, 1997) will be used to guide in class observation of tablet use within specific curricula tasks. Observations will complement field note collection whilst deployment of in-depth interviews with academic staff and student participants will enable us to understand how tablets support active instruction and participation in group work. By conducting this study we hope to find out what role others play in supporting social practices which surround the process of learning (Lave and Wenger, 1991). We hope to present our initial findings at conference and share our learning on academic tablet use.

DENZIN, N. K. (1997) Interpretive ethnography: ethnographic practices for the 21st century, Thousand Oaks, Sage.
GARFIELD, M. J. (2005) Acceptance of ubiquitous computing. Information Systems Management, 22, 24-31.
LAVE, J. & WENGER, E. (1991) Situated Learning: Legitimate Peripheral Participation, Cambridge, Cambridge University Press.

1070 Short Paper

keywords: tablet PC use / undergraduate business education / perceptions and experiences / students and academic staff

Beyond school control: Year 6 students appropriate mobile technologies as curriculum tools

Tuesday
17:00

Dr Elizabeth Hartnell-Young
Learning Sciences Research Institute

Ms Janet Simner
South Nottingham e-learning centre

Designing learning spaces

What would it be like if students wrote the curriculum? The spread of state-mandated, documented curricula within a paradigm of control is relatively recent. Mobile technologies challenge this view by enabling learner-generated activities and content to flow into formal educational environments. Beyond this, where students have control of tools to create content, they have the opportunity to contribute to their curriculum. They can engage in and capture both planned and unplanned experiences, making them part of their curriculum. Through this, learners not only gain knowledge and skills, but a sense of agency in the world.

The study reported here accompanied a pilot project introducing PDAs as a resource for all students in a Year 6 class on a 24/7 basis. The class teacher, an e-learning consultant and a researcher were involved in planning the project, and collecting data.

Each of the 30 students in one year 6 class, and their teacher, were lent a PDA on a full time for two terms. The teacher's philosophy of learning led her to explore the device and engage with her students within the goal of delivering curriculum and preparing the students for national tests. The consultant provided pedagogical support and captured video evidence. The teacher wrote reflections from time to time, while the researcher collected data by observing classes, video recording and photography, discussion with students, interviews with the teacher and parents, and reflection with the consultant.

The introduction of a new tool into the classroom had a number of benefits, according to the teacher. She observed that the class quickly developed the ethos of a shared learning environment that supported individual children's self esteem and showed that teachers are never too old to learn. The children appeared more motivated to learn than previous Year 6 classes, and the class achieved 100% attendance for several months.

There were signs of the students moving beyond the documented curriculum. The students became confident as citizen journalists, using the video camera function to record interviews for authentic purposes., On one occasion, when the researcher attended the school to interview parents, a student greeted her with 'Do you mind if I record this on the PDA?'. A more kinaesthetic approach to children's learning emerged, as students moved more around the classroom space and engaged in open discussion and fun.

A focus on activities that involved collaboration and exchange of work between students was at the core of the initial planning, and this was evident throughout. The device was unfamiliar to the families and was treated with great interest in the early stages. Some parents used Bluetooth to share music and pictures with their children, and several, having found unprotected wireless networks in the neighbourhood, encouraged children to access the Internet.

Further work is needed to identify ways that teachers can value the activities and content created by students on a 24/7 basis, and incorporate them into assessment for learning.

1336 Short Paper

keywords: PDA / primary school / approach to curriculum

A reusable model for usability testing of online teaching and learning applications.

Tuesday
17:00

Miss Nicola Wilkinson
engCETL, Loughborough

Large-scale implementation

This paper will examine how a reusable model has been developed for the usability testing of an online e-learning tool across a number of disciplines and institutions. This study is part of a 2 year Joint Information Systems Committee funded e-learning project, with the aim of providing an open source peer assessment tool (WebPA) for academics and students within UK higher education.

Existing research studies on the usability testing of software within large scale software development projects show that the majority are based on the use of a large sample size of participants. However, our model proposes the use of a small number of participants across a number of disciplines. The use of a limited group is suggested in some usability methods where it has been demonstrated that large samples are not needed, are often beyond the scope many projects and provide no new usability issues after the first few participants.

This short paper will also provide the context of our usability testing model within more general or more specific methods, such as heuristics. However, there are no available models that can be followed and used repeatedly, across a number of academic disciplines and which are specific to e-learning tools. This model helps discover all the usability issues that arise in any system developed for one discipline and then made available to academics in other disciplines. This paper will also demonstrate how the cross-disciplinary usability testing carried out by the project, is enabling the facilitation of the peer assessment tool to be adapted, to cater for a variety of users with differing requirements and perspectives.

This model has been proven to be institution independent and is been used to assess the usability of the WebPA tool, for academic adopters, within the projects chosen pilot institutions. The information gathered through this stage of the model has been used to feed in to the pedagogic research and technical development of the tool. This demonstrates that usability barriers to new e-learning tools can be identified easily and addressed within the software.

Currently, the majority of the work has taken place in the lead institution (Loughborough University) for the project and is on the second iteration of use with the group of cross discipline WebPA users. The model is also being used to evaluate the experiences of the academics using the WebPA system, at projects partner and pilot institutions.

It is hoped that this model can be reused or adapted, for all the future development of the WebPA system and in the development and evaluation of other Web based e-learning tools.

1057 Short Paper

keywords: usability / reusable model / peer assessment / cross-disciplinary

Design for re-usable learning: the V-ResORT resource

Tuesday
17:00

Large-scale implementation

Dr Gordon Joyes
University of Nottingham

Ms Sheena Banks
University of Sheffield

This paper describes the outcomes of a three year project involving action research into the design of a re-usable website that incorporates an 'invented everywhere' principle. The process has involved a user needs analysis, expert panels, literature review of transferability issues related to the re-use of resources, rapid prototyping and use of local mentors as part of ongoing dissemination and evaluation. The aim was not only to produce innovative learning materials that met learner needs, but to explore an approach to design for reusable learning that would allow genuine ownership by academics by establishing a model for development of an expanding community of users who would add to the materials in order to customise them to their own local contexts.

The teaching area chosen was research methods and began by focusing on education studies with the aim to extend this more widely to the social and health sciences once an effective conceptual, pedagogic and professional development model had been piloted. The choice was influenced by the expertise of the individuals initially involved, user needs identified by subject review and national conferences/ workshops. The fact that research methods represented a core element of post graduate studies meant that there was potential for extensive re-use of the materials in every higher education institution as well as expertise in each institution to draw on to contribute to them. A key outcome is the Virtual Resources for Online Research Training (V-ResORT) website www.v-resort.ac.uk developed through a consortium project funded by HEFCE and led by the Universities of Nottingham, Sheffield, Bath and Canterbury Christ Church. Central to the Web based materials is the recognition that video narratives can present authentic

multiple representations of 'real' researchers projecting their knowledge and experience of the research process, can show complexity and the contested nature of educational research and can help to build online learning communities. The project uses Internet-based technologies that support video streaming and captures a wide range of researcher experiences, case studies and expert views organized into flexible e-learning materials to give an authentic context for theory and practice. These are supported by skills training and links to resources. This represents a radical departure from conventional text based and theory led approaches to introducing research methods in education. The action research approach has resulted in ongoing evaluation of the Web based resource and the collection of case studies of use in different courses and institutions. One measure of the effectiveness of the approach to the design for re-usable learning has been the ways resources are being contributed by other institutions and the Education Subject Centre as well as the uptake for use in Health Studies and a cross university graduate school research training module. This project raises issues in relation to sustainability of the community of users and the resource, the choice of technologies for delivery and the ways the introduction of new technologies may tend to support current pedagogic practice rather than effect change.

1106 Short Paper

keywords: learning design / research training / action research / video narratives / higher education

Cn we uz mobz 4 LernN? - Can we use mobile devices for learning?

Tuesday
17:00

Learning and internationalism

Mr James Clay
Gloucestershire College of Arts & Technology

Wouldn't it be nice if all learners in an educational environment had access to a wireless laptop and free wireless access to their digital resources at a time and place to suit their needs? The reality is that learners don't always have access to what we as practitioners would like them to have to enable them to access their learning.

However they do have access to some mobile digital devices which could be used, these include mobile phones, iPods, mp3 players, portable video players, PSPs... These devices are used extensively for entertainment, but rarely used for learning. Should we be exploiting the technology learners bring with them to the classroom? We live in a time where technology changes at an extraordinary pace. Despite increasing expenditure on computer equipment and associated peripherals, such as interactive whiteboards and projectors, many institutions still feel under-resourced and unable to meet the technological requirements demanded by the next generation of learners. The investment in computer-based technology requires a major annual expenditure for most institutions because computer equipment has a relatively short life-span and the requirements for running today's cutting edge software changes rapidly. This can be a drain on over-stretched budgets and results in a need to look for cost effective alternatives.

In a world where mobile technologies are becoming increasingly mainstream, shouldn't Universities and Colleges be exploiting these technologies and encouraging their use as part of the teaching and learning process? Studies are beginning to show that mobile telephones, ipods, mp3 players and other portable devices can be used effectively to deliver learning materials. It should be possible for institutions to capitalise on the successful integration of these technologies into every day life and to exploit the teaching and learning potential inherent in the already familiar devices. However can we really use mobile devices for learning, can they effectively provide a learning experience via a small screen? What about personalisation, interactivity, communication? James Clay (at the WCC) researched and developed the use of mobile devices for learning. Now at Gloucestershire College of Arts &

Technology (Gloscat) he is planning the embedding the use of mobile devices across the whole college.

This workshop will demonstrate some of the latest devices which can be used for mobile learning and allow participants to try them out and consider how they can start to utilise mobile devices to enhance and support learning in their institutions. After introducing the concept of mobile learning participants will then be organised into small groups to look through a series of pedagogical case studies on mobile learning and see if they could apply these to their own institution. Participants will then be challenged in small groups to create a series of exemplar scenarios which they could take back to their institutions to initiate or extend the use of mobile devices to enhance and support learning. These scenarios will then be shared with the community via the Web.

1305 Workshop

keywords: mobile learning / handheld learning / iPod / PSP / mobile phone

Whose e-learning is it anyway? A case study exploring the boundaries between social networks and VLE courses.

Tuesday
17:00

Mr Michael Cameron
Durham University

Dr Jo Fox
Durham University History Department

Learning technology for the social network generation

Student use of 'Web 2.0' social networks (e.g. Facebook and MySpace) has provoked a variety of responses from teachers and educational institutions. The 'decentred' control is simultaneously the strength and danger, depending on perspective. Some American schools have banned social sites while educators' blogs expound the pedagogic benefits of these tools. Regardless of teachers and institutions, students are running social networks. Their role in student life and learning is growing.

We use a specific case study to illustrate important questions for educators and institutions. What activity is occurring in the Web 2.0 environment and what pedagogic benefit does this bring? Are students creating and reflecting on their own learning individually, with the tutor, or both? Does Web 2.0 better facilitate independent, reflective student learning, giving them ownership of the learning process? Can and should we bring these activities in-house? Are there legal implications? What is the relationship between institutional pages and student sites? How can teachers rationalise the two? We must address these questions to understand how we support e-learning in the future.

The paper compares interactions occurring in a VLE course with that on a Web 2.0 site associated with a History module. The paper draws on Etienne Wenger's concepts of legitimate peripheral participation in communities of practice to offer an explanation for full participation of students in social sites, and more measured participation in the class VLE. Foucault also provides a lens to explore the power structure inherent in Web 2.0 sites and institutionally owned systems.

The paper examines the experiences of one teacher (Jo Fox) and her final year history students studying Propaganda in Britain and Germany (1939-1945). With permission from her students, Jo delved into their Facebook sites to find some surprising activity. Jo encountered much she would not want to encourage, alongside the sort of activity she had been crying out for in Blackboard forums. Within Facebook, informal, sometimes inappropriate activity co-exists with highly appropriate learning interactions. Alongside humorous slights on teachers were book reviews and in depth analyses not evident in the VLE interactions. Is this because Web 2.0 tools have affordances not found in Blackboard? Is familiarity and control the key to participation?

Rather than worrying about the loss of control, Jo accepted the social and academic activity occurring naturally in Facebook, whilst seeking to learn from it. By monitoring Facebook, Jo can see what motivates and concerns students and reflects this in her teaching. The formal business of the course remains within Blackboard's boundaries, with its annual archive, audit trail and teacher-centred approach. Less formal, more varied interaction is occurring in Facebook, enabling students to construct their own learning in their own terms.

The paper will acknowledge that this is a specific case study, and is therefore strong on 'validity', but not 'generalisability'. It is supported however by survey data exploring Durham students' motivations for using Web 2.0 sites. Further research may build an understanding of post Web 2.0 e-Learning.

1233 Short Paper

keywords: Web 2.0 / student-centred learning / institutional policy / online communities of practice / ownership of learning

Building bridges: how e-learning can encourage social constructivist approaches to teaching

Tuesday
17:00

Learning technology for the social network generation

Mr Tony Churchill
University of Leicester

The nature of the bridges considered in this paper are a variety of means of bridging the divide between traditional and constructivist approaches to teaching. This paper reports on a continuing research project considering the influences of e-learning on the transformation of teaching in HE institutions. It considers both innovative practice and the theory of learning and technology.

The format of this paper is based on an exhibition staged at the Van Gogh Museum, Amsterdam in December 2006. The works of artists– such as 'Die Brücke' (The Bridge) group of artists– were placed alongside Van Gogh's work that influenced them. The main sources of data are a series of semi-structured interviews conducted with teachers at University of Leicester (supplemented by a mind-mapping exercise) and online discussions undertaken as part of continuing professional development at the University. This has been supplemented with interviews and questionnaires completed by colleagues at other institutions. The case studies produced are placed alongside relevant examples of theory. Consideration is given to the extent that the cases indicate bridges between different approaches to teaching.

There have been various attempts to establish a continuum of teacher beliefs and behaviour – teaching-centred, traditional approaches and learning-centred, constructivist approaches (e.g. Larsson's phenomenographic exploration, 1983). In many respects the work of Samuelowicz & Bain (1992, 2001) frames the debate regarding the existence of an "intermediate orientation" between these approaches to teaching. In their original paper (1992) they identified a transition point between an approach that is "teaching-centred", involving "knowledge transmission" and one that is "learning-centred", involving "learning facilitation". In this intermediate orientation, neither of the other orientations could be clearly identified. Such an intermediate orientation suggests an incremental path from a teaching- to learning-centred approach. Without such an intermediate orientation (which Samuelowicz & Bain question in their subsequent work, 2001) there is no longer and incremental path or continuum. It suggests that there needs to be a fundamental shift in beliefs for a change in practice to occur. This introduces the need for there to be a tipping point for the transition between teacher- and learner-centred teaching. In exploring a range of case studies this paper seeks to establish whether such a continuum exists. It seeks to address the question,

"Does engagement with collaborative e-learning encourage academics in higher education to adopt a more constructivist approach to their teaching? (If so, why?)". In order to establish this, the research has increasingly focussed on the extent to which there can be said to be intermediate categories between the poles. If a continuum does not exist, then to what extent can e-learning provide the bridges needed to make the link?

1358 Short Paper

keywords: social learning / constructivism

Social conferencing: moving learning beyond lectures and learning management systems

Tuesday
17:00

Learning technology for the social network generation

Dr Birgit Loch
Dr Shirley Reushle
University of Southern Queensland

Social conferencing tools were trialled at the University of Southern Queensland (USQ), Australia, to connect learners beyond physical classroom boundaries. Seventy-five per cent of USQ students are studying at a distance in local, national and international locations, a unique characteristic of this institution. Until recently, online deliberations at USQ has tended to be rather Learning Management System (LMS) focused but current literature warns of the risks of this approach and outlines how new technologies have taken online pedagogy far beyond the large LMSs. The literature supports using a collection of tools to build loosely connected learning environments rather than a single tightly focused environment with limited tools. An action research method was used for this study because its interactive focus and potential for involvement suited the context and objectives of the trial and allowed for a strong link between theory and practice. Social conferencing tools were implemented in two quite different learning environments. They were trialled in an online postgraduate Faculty of Education course and in a Faculty of Sciences mathematics service course offered to undergraduate distance students.

In the Faculty of Education, the software was used to link students across the globe to participate in interactive and collaborative activity to explore online pedagogy as a discipline, and to communicate via audio, text and video. The shared whiteboard was used to explore literature and develop and present academic publications. The trial involved students interacting with peers and sharing ideas in a virtual conference environment, thus engendering a learner-centred community which relinquished the control of the teacher. This process supports a social constructivist approach where learning occurs in a social context (learning with and from others) and learners build from experience and construct their own knowledge and meaning rather than relying on external enlightenment.

The second trial tested the use of social conferencing software with undergraduate distance mathematics students, focusing on the accessibility and usability of communication provided by these tools. Mathematical communication requires the use of specific symbols to be effective, and these need to be provided visually as well as aurally. In general, only teaching staff are trained and familiar with mathematical typesetting software, and electronic communication with students often results in frustration for both student and teacher. Quite often distance students feel isolated in their studies of mathematics. Social conferencing software bridges this communication gap by providing shared whiteboard and audio-visual tools, enabling attention to be focused on the pedagogical aspects of online tutorials. Use of the technology has assisted in moving control of the learning environment from the facilitator to student-led and student-centred activities.

1330 Short Paper

keywords: social conferencing software / distance education / action research / interaction and collaboration / social constructivism

Evaluating online peer review

Tuesday
17:00

Learning technology for the social network generation

Dr Andrew Ginty
UCLAN, School of Dentistry

Dr Carol Wakeford
University of Manchester, Faculty of Life Sciences

In the Faculty of Life Sciences around forty students each year develop e-learning resources for their final year project. Teaching and learning of project skills takes place in a blended programme comprising face-to-face presentations and workshops complemented by online activities, and supported by group discussion forums within our virtual learning environment, VLE, for peer review of project materials. The feedback provided is crucial to project development, involving students in a cycle of reflection, evaluation and modification of project work. Assessment of projects has two components; 25% for a literature review, and 75% for project performance, the resource and the project report. To enable supervisors to evaluate performance of these non-laboratory based students, we provide transcripts of discussion board contributions that, we hope, reflect the students' engagement with the programme and, in particular, with the peer review process. In order to facilitate qualitative analysis and interpretation of discussion board information, we have conducted a pilot study using NVivo software to access, manage and analyse the discussion text. This software permits classification and sorting of textual information that can then be investigated for specific content and ideas.

Using NVivo we were able to move beyond the basic classification and sorting of contributions by student name and topic (possible within the VLE). We were particularly interested in evaluating ideas related to enquiry-based learning (EBL), since we have introduced an enquiry-driven approach to project design and development that is evident in laboratory research projects, and students were asked to consider this aspect of resource design in the review process. We aimed to determine how students receiving feedback perceive the value of this support and criticism. We attempted to discern the nature and value of peer support and determine whether those providing it showed evidence of critical thinking: we were interested to see if peer review promoted learning. Through analysis of the discussion text we were able to provide project supervisors with evidence that their students had addressed the programme outcomes. We were interested to see if supervisors found this additional information useful when assessing student project performance (i.e. measuring process rather than product).

Post-course analysis involved examination of the characteristics of students who behaved as supporters and those who were, in general, supported. We wanted to examine the continuity in the help provided, and determine whether students formed dyads and triads of support and whether peer support is reciprocated. Following evaluation of the peer review process in the context of e-learning, we will next consider the feasibility of peer assessment through the online environment.

In this presentation we share the evaluation and feedback from this year's cohort and discuss how this directed plans to expand the scope of peer learning within the programme. We demonstrate analysis of the data to investigate feedback and self-reflection by students. The paper contributes to our understanding of the process behind peer support and feedback, and the effect on learning. Moreover, it provides a critical study of the use of peer review in undergraduate bioscience projects.

1302 Short Paper

keywords: peer review and support / NVivo / project performance / critical thinking / enquiry based learning

Developing a community of practice using camels.

Tuesday
17:00

Learning technology for the social network generation

Mr Peter Trethewey
Bromley College of Further & Higher Education

Dr Carlos Moreno
Natural Resources Institute (NRI)

Ms Sarah Crofts
Mr Robert Dolden
Ms Veronica Habgood
Ms Maggie Leharne
Mr Simon Walker
The University of Greenwich

This paper reports on the work-in-progress of a project called CAMELS (Collaborative Approaches to the Management of e-Learning in Schools). It aims to research scalability and transferability of the CAMEL model. Specifically it explores the emergence of a Community of Practice within the context of a university and a partner college.

The CAMEL model is based upon an arrangement adopted by Uruguayan farmers who visited each other's farms to share agricultural problems and collaboratively develop solutions. In essence the model constituted a Community of Practice (CoP). Communities of practice are groups of people who share a concern or a passion for something they do and learn how to do it better as they interact regularly (Wenger 2007, online). Wenger makes the point that practitioners require a community to help solve one another's problems, learn about new developments, avoid narrow approaches, and reflect to improve upon practice.

The ethos of sharing effective practice by showcasing and discussing issues underpins activity within the context of:
- A new teaching and learning infrastructure
- A diversity of e-learning approaches, platforms and Web 2.0 applications
- An HEA e-learning benchmarking project

CAMEL employs a series of structured study visits, supported by online discussion. The aim for each partner is to showcase the range of different e-learning approaches used and discuss issues. The underlying philosophy is characterised by an open and honest commitment to share and collaborate (the 'warts all' approach). The development of trust is an essential factor. Participation enables the partners to experience the wide range of approaches used, hear students' and other stakeholders' views, and develop understanding and confidence in employing e-learning. Each visit is evaluated using a variety of methods.

Three of the four CAMEL events have now taken place. A range of e-learning practices has been demonstrated and discussed including students speaking about their experience.

The authors will report on this more fully once all visits have been conducted. An interim analysis of these visits has revealed that the approach appears to have positively met the high expectations of various stakeholders, generated a range of ideas and encouraged them to develop further their e-learning practices. Similarly, the experience of visiting each other's schools seems to be opening the way to "lateral" communication as opposed to "silo" communication which characterises some schools in various academic institutions.

Although similar organisational approaches were adopted, a number of differences have appeared between the original CAMEL project and its offspring. These relate to the effectiveness of the core team, release of staff to attend events and achieve continuity. From these modest initiatives, there are indications that the CAMEL model used in a large university context can become highly effective in developing a community of interest that, in the long-tem, may develop into a CoP and help the institution achieve its policy aim of supporting a bottom up approach for e-learning developments.

1236 Short Paper

keywords: CAMEL / CoP / distributed learning / Web 2.0 / learners

Wiki-based peer tutoring

Tuesday
17:00

Dr Adriana Berlanga
Dr Francis Brouns
Dr Liesbeth Kester
Dr Peter B Sloep
Mr Peter van Rosmalen
Open Universiteit Nederland

Learning technology for the social network generation

In online learning, particularly in non-formal and informal settings, solving content-related problems that students may have, will rapidly consume much tutor time. This is David Wiley's teacher-bandwidth problem (Wiley & Edwards, 2002), which has also been described by others (cf. De Vries et al., 2005). Ultimately, it results from the lack of a class structure. Thus, a teacher cannot anymore address the students all at once, and students will anymore consult each other since they meet anyway. Simple content questions may be solved by checking out various Internet sources, but more complex questions of the why and how kind cannot. Rather than solely rely on professional tutors, we have developed a system that organises the help of peers as tutors. This has the added benefit of also bringing online students in touch with each other in a very natural way.

The system relies on the availability of text-based course materials and student profiles, which detail on what courses a student has expertise. A student - the tutee - asks a question and through the use of latent semantic analysis (LSA), text fragments in the course material are identified that bear relevance to the question (Van Bruggen et al., 2004). Rather than offer the fragments straight-away to the tutee, through their profiles knowledgeable peers are identified. These peers are then invited to answer the tutee's question, that is, to act as peer tutors. Those who agree will 'meet' the tutee in a wiki environment, which contains the question as well as the most relevant text fragments the LSA has identified. The tutors will edit the fragments, add their own insights and thus may produce an answer that is satisfactory to the tutee.

At this moment, the LSA software has been tested and calibrated, a Moodle extension has been written that handles the user interfacing, the interfacing with the LSA software, and the business logic. A first field trial has been conducted to establish firstly; whether answers provided by LSA selected peers fare any better than answers provided by randomly selected peers, and secondly; how students appreciate peer tutoring through a wiki.

Acknowledgment: The present work was carried out as part of the TENCOMPETENCE project, which is (partly) funded by the European Commission in TENCompetence (IST-2004-02787) (http://www.tencompetence.org)

De Vries, F., Kester, L., Sloep, P., Van Rosmalen, P., Pannekeet, K., & Koper, R. (2005), 'Identification of critical time-consuming student support activities that can be alleviated by technologies', Research in Learning Technology (ALT-J), 13(3), 219-229.
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Wiley, D. A., & Edwards, E. K. (2002), 'Online self-organizing social systems: the decentralized future of online learning'. Quarterly Review of Distance Education, 3(1), 33-46.

1353 Short Paper

keywords: peer tutoring / wiki / social software / language technology / community of learning

Exploring students' understanding of how blogs and blogging can support distance learning in higher education

Tuesday
17:00

Learning technology for the social network generation

Dr Grainne Conole
Dr Lucinda Kerawalla
Dr Gill Kirkup
Dr Shailey Minocha
Mr Mat Schencks
Mr Niall Sclater
Open University

We focus on exploring students' understanding of how blogs and blogging can support distance learning in higher education. We report on the findings from a survey of 795 distance learners at the UK Open University, and interviews with course designers whose courses utilise blogs. Despite enthusiasm from educators, the survey revealed that students are not enthusiastic about the potential for blogging activities to be built into their courses. Analysis of students' open-ended comments revealed that some students have positive expectations about blogging facilitating the sharing of material and ideas, for example, whilst the majority expressed concerns about subjectivity. We also discuss some empirically derived guidelines that we have generated that will enable educators to provide the appropriate scaffolds so that students can appropriate blogging tools for their own individual learning needs.

1148 Research Paper

keywords: blogs / distance learning / higher education

Postgraduate blogs: beyond the ordinary research journal

Tuesday
17:00

Learning technology for the social network generation

Ms Gill Clough
Ms Rebecca Ferguson
Miss Anesa Hosein
The Open University

The study described in this paper investigated ways in which keeping a research journal as a blog rather than as a paper document influenced the postgraduate student research experience. Four blogs (three individual and one collaborative blog) initiated by three research students were used as the corpus of data. The three individual blogs acted as alternatives to the traditional research journal. The analysis indicated that blogs can promote a community where students are encouraged to reflect and share ideas, skills and research life idiosyncrasies. Blogs also acted as memory repositories and encouraged collaboration amongst the research students.

1150 Research Paper

keywords: blogs / research journal / community of practice / collaboration / postgraduate research students

Does a collaborative approach to designing for learning ensure effective practice?

Wednesday
9:00

ALT strand

Ms Lorna Burns
Barnet College

Ms Kerri Hazlewood
Mr Phil Openshaw
Leeds College of Technology

Mr Peter Dickson
Loughborough College

Dr Jill Jameson

There is much interest in formalising collaborative partnerships and recognition of the importance for educational institutions to work together to realise opportunities for economies of scale, development and innovation. But what of the actual practice, as carried out by teachers, students and other stakeholders? What are the hurdles and implications associated with formalising collaborative learning communities? These are some of the questions being investigated in the eLIDA CAMEL project (e-learning independent design activity / collaborative approaches to the management of e-learning) which is proving to be an interesting and informative model for professional development that has led to deeper understanding of why particular learning designs work and led to greater empathy between

Mr Malcolm Ryan
Mr Simon Walker
The University of Greenwich

participants from different sectors.

This symposium intends to engage participants in discussion about the potential of collaborative approaches, specifically to develop learning designs. The panel are all members of the JISC eLIDA CAMEL project comprising a group of institutions with core principles that:
- Recognise the implicit knowledge possessed by all participants,
- Support sharing and critiquing
- Value social interaction and trust
- Document outcomes
- Plan future meetings on the basis of evaluation

This symposium will be of use to:
- Practitioners involved in the design of e-Learning activities
- Managers committed to enhancing provision for learners
- Researchers who are exploring formal models of collaborative organisation

The group has met approximately every 2 months. Each meeting focused on a different aspect of the programme but has always maintained the basic ingredients of sharing developments, socialising, discussing ideas and project planning. The main content of the 5 meetings held has been as follows:
University of Greenwich - Project start, getting to know each other, LAMS training, developing LAMS sequences.
Dartford Grammar School - The role of the mentor, sharing effective practice in learning design, moodle training, the students' experience.
Greenwich Community College - mentoring workshop, sharing and critiquing effective practice in learning design in moodle (blended learning), the students' experience
University of Greenwich - initial case studies (with students), visual and pedagogical design. Moodle/LAMS integration.
Loughborough College - LAMS sequences, review of mentoring and using quizzes in Moodle.

There will be a short contextual introduction followed by four brief reflective accounts from each of the panel members. Participants will be presented with a number of key issues, such as the role of mentoring, the use of technologies that support learning design reusability, and the role of theory to develop practice. They will then participate in small group discussion, facilitated by a member of the eLIDA CAMEL project, leading to the production of a set of posters. Following a short period to view and reflect upon the posters, a whole group debate will be initiated with the panel on models for developing learning designs. Learning designs that were developed for the project may be shared with partners and made available using guest passwords outside of the conference.

Participants will:
- Consider mentoring models to support the learning design development
- Discuss key issues in the management of e-learning
- Propose strategies for the collaborative development of learning designs

1282 Symposium

keywords: learning design / collaboration / community of practice / professional learning communities / reusability

Web 2.0 applications as student-centred tools for portfolio construction: evaluating the fit between the technology and the stakeholders

Wednesday
09:00

Designing learning spaces

Ms Susannah Diamond
Mr Andrew Middleton
Sheffield Hallam University

Educational developers are continuing to challenge conventional teaching practice through the promotion of initiatives such as student autonomy, employability and active learning.

Alongside the pedagogic initiatives, Web technologies are maturing rapidly. Learning environments of the future are likely to be more customisable, user-centred, personalised, integrated, and dynamic and student-created electronic portfolios for learning, assessment, and personal development are increasingly likely to become commonplace elements of the new learning environments.

At the moment, institution owned virtual learning environments do not match the Web 2.0 experience in offering user-owned and participatory experiences. However, many Web 2.0 tools offer potential in allowing students to create Web-based e-portfolios and provide a timely opportunity for testing the capabilities of the tools to contribute to and change the learning toolsets of the future.

The Wired Portfolios project at Sheffield Hallam University aimed to explore:
- Students' current perceptions and experience of such tools.
- The best ways of using the tools, and the new opportunities afforded by them; and
- How manageable staff finds assessment of portfolios created with 'student-owned' tools.

The project explored student opinions about the use of social networking tools via surveys and focus groups, and invited students to create portfolios using such tools in contexts outside of academic modules.

Participants will:
- Consider a framework for the use of portfolios in teaching and learning
- Look at evidence from stakeholders and literature about the fit of participatory Web 2.0 technologies to the changing requirements of teachers and learners.
(15 min)
- Use the framework to actively explore the potential of a variety of Web 2.0 applications to construct and share portfolios. (40 min)
- Discuss the future adoption of Web 2.0 approaches as an extension of existing learning environments. (20 min)
- Evaluate their current use of learning environments for learning, teaching and assessment and consider whether new, Web 2.0 supported approaches might be of benefit (15 min)

Participants will gain:
- An overview of the potential of emerging Web 2.0 approaches for constructing online portfolios;
- An understanding of the benefits and risks of adopting freely available Web 2.0 applications;
- An insight into the readiness of UK HE to adopt Web 2.0 approaches in learning.

1267 Workshop

keywords: Web 2.0 applications / electronic portfolios / student-centred learning environments / participatory Web

The TENCompetence Personal Competence Manager

Wednesday
9:00

Designing learning spaces

Chris Kew
Phil Beauvoir
Mr David Griffiths
CETIS

Ruud Lemmers
Logica CMG

Professor Rob Koper
Dr Harrie Martens
Dr Hubert Vogten
OUNL

When developing competences we use many different systems which are differentiated for institutional or technical reasons. These use different representations, interfaces and applications, creating a high cognitive load for the user. Consequently a new type of application is needed, a Personal Competence Manager.

The innovative solution is a coordinating framework for all aspects of competence development. For example a user may use the system to plan, integrate and manage their leisure study for a scuba diving certificate, an accounting qualification required by their job, and a distance education course for a legal degree which they hope will lead to a new career.

The system comprises an open source, service oriented, standards-based infrastructure, and a Personal Competence Manager (PCM) client, which will be demonstrated in this session. The PCM is an Eclipse Rich Client Platform application.

The demonstration will show how users can
- Search for a Competence Development Profile meeting their needs
- Identify appropriate Competence Development Plans
- Carry out Competence Development Activities in the context of a competence development plan
- Support for this process
- Agent based help (initial implementation)
- Access to a Friend of a Friend community
- Feedback, forums and support requests posted by users

Users are not divided into those seeking to acquire competences and those offering competence development solutions. Support will be demonstrated for individuals, groups and organizations in defining new Competence Profiles, and Competence Development Plans or Activities.

The demonstration will be hands-on. Participants with portable computers can install and use the PCM, with others following a projection.
Understanding of:
- Problems faced by people managing a range of competence development activities
- The way the PCM can help them in this process
- The innovative approach and features offered by the PCM

1277 Demo

keywords: personal competence manager / service oriented architecture / collaboration / informal competence development / interoperability

Evolution of learning resources – How the process can be accelerated?

Wednesday
9:00

Designing learning spaces

Dr Charles Duncan
Intrallect Ltd

Rob Arnsten
MyKnowledgemap Ltd

This demonstration concerns the life-cycle of digital learning resources. There are many, many educational “objects” in digital form and when new objects are created the inspiration, text, structure, images, and often a whole lot more evolve from previously existing resources. It is probably more realistic to consider that learning objects evolve rather than being created afresh with no parentage.

In this demonstration we consider the process of evolution, the tools that can ease the process and the skills required for people to support this evolution. The first stage is to ensure that as much potential source material is available and easily usable. We also need to be able to identify the best material for evolution. Then we help to bring together the pieces that will form the newly evolved or adapted object. And finally we free it and make it available for others to adapt further.

Adaptation of e-learning content is a significant step beyond simple re-use or interoperability. Adaptation is the ability to take an e-learning object and change it, and then reconstruct the e-learning course with a new repurposed set of e-learning objects.

We examine the tools required for adaptation of learning objects. Do they need to be high-tech to the extent that only skilled technical e-learning practitioners can manipulate e-learning content? Or can we respond to the different challenge of interface design to construct a tool that can be used by most authors and lecturers to achieve similar results. We review the design challenges and compromises that may be needed to achieve "universal usability" of tools. These challenges are based on practical examples using the intraLibrary learning object repository (on which the Jorum service is based) and the Custom Learning Studio based around Compendle.

Finally we will demonstrate these tools working and invite discussion on how learning objects might further evolve.

1299 Demo

keywords: learning-objects / adaption / tools / intraLibrary / Compendle

Web 2.0 Slam – 'Performing' innovative practice

Wednesday
9:00

Designing learning spaces

Ms Josie Fraser
josiefraser.com

Ms Helen Keegan
Learning Technologies Centre, University of Salford

Ms Frances Bell
Salford Business School, University of Salford

New and emerging technologies can be perceived as having a steamroller effect – be there or be square! In this workshop, participants will describe, evaluate, and even critique Web 2.0 as a means of understanding exploring the potential of social networking by performance. From the Social Shaping of Technology, we present the concept of innofusion which recognises that user needs and requirements do not pre-exist but are discovered and incorporated by users in the course of their struggle to get the technology to work as they wish (Fleck 1988).

The workshop activity will support participants' reflexive engagement with innovative practice, as well as modelling the performative and improvisational structure of much innovative practice, as they are asked to create a 90 second presentation or slam. The activity trigger is the ubiquitous video by Mike Wesch, The Machine is Us/ing Us (Wesch 2007) viewed over 1 million times. Taking a single concept from this video, the separation of form and content, Helen Keegan and Frances Bell will present examples from our own practice with students, to highlight this concept in the context of social networking and what is generally called Web 2.0.

Having grounded Web 2.0 in the practice of learning and teaching, Josie Fraser will provide an overview of her framework for personalisation "Personalisation in Electronic Environments") which was developed specifically to provide an evaluation tool for activities, sites and services developed and used within education. The slot will focus on dynamic (or deep) personalisation as a practice particularly well facilitated by Web 2.0. Visual montages of positive and negative statements on the impact of Web 2.0 on education today and the issues (such as copyright, identity, ethics, governance, privacy, inclusion) will link to the activity proper. Helen, Josie

and Frances will each demonstrate a slam, followed by participants working in pairs to develop their slam. The workshop finale will be the performance and evaluation of the slams using an informal 5 point approach where each participant votes on 2 slams, randomly assigned. Prizes will then be awarded! (There will be limit of 30 participants to ensure full participation)
Workshop Outline

Time (minutes)	Activity
5	Getting started – Innofusion, Web 2.0 and Slams
5	The Machine is Us/ing US video
1	Highlight 'Form and Content ' - Visual montage of issues from video
5	Whirlwind tour of some Web 2.0 applications and services
12	Grounding Web 2.0 in practice
8	Dynamic Personalisation – an opportunity for radical change
1	Visual montage of positive and negative statements/ quotes
5	3 x 90 second slams to get the ball rolling
Helen " Affective Aspects of Blogs"	
Josie "Personalisation as Emancipation"	
Frances "Ethical dilemmas of Web 2.0"	
2	Slam title selection (presented on Post-it note, to be uploaded immediately to Web 2.0 Slam Flickr group by workshop organisers)
15	Slam preparation
25	Slam delivery
5	Points mean Prizes

Fleck, J. (1988), Innofusion or diffusation? The nature of technological developments in robotics, 7, Edinburgh University.
Wesch, M. (2007), Web 2.0 ... The Machine is Us/ing Us, Youtube, (Video), http://www.youtube.com/watch?v=6gmP4nk0EOE.

1298 Workshop

keywords: Web 2.0 practices / improvisation / rapid delivery / collaboration / performativity

Designing with technology to enhance learner responsibility: shifting control through assessment practices

Wednesday
9:00

Large-scale implementation

Dr Steve Draper
University of Glasgow

Dr David Nicol
Ms Catherine Owen
University of Strathclyde

This workshop will serve as a 'master class' for those who wish to redesign their assessment practices to enhance learner control over learning. The background is a large-scale Ł1m implementation demonstrating how the re-design of formative assessment and feedback practices in HE can support the development of learner self-regulation and encourage students to become assessors of their own learning. The Reengineering Assessment Practices (REAP) project, was funded by the Scottish Funding Council, under its e-learning transformation initiative.

In REAP the concept of learner self-regulation was operationalised and refined during the project. Eleven criteria for the promotion of learner self-regulation were defined drawing on a substantial body of learning research including two literature reviews. Over twenty modules across three HE institutions were re-designed using a range of different technologies – blogs, electronic voting systems, podcasts, e-portfolios etc – with approximately 5000 students participating in redesigned modules. All modules were evaluated in relation to the 'assessment for self-regulation' criteria and in terms of the added value of the technology. In addition, an assessment and feedback experience (AFEQ) questionnaire was created to evaluate the extent to which modules provide opportunities to develop learner control and the

extent to which learners perceive themselves to be in control. The AFEQ is a generic tool that can be used in any discipline and in any year of study and extends and clarifies the data available through the National Student Survey (NSS) instrument.

This workshop will first highlight new thinking about assessment and feedback in the digital age. It will then provide a few case examples from the REAP project. Participants will then have an opportunity to work in groups to redesign a module based on REAP principles and using selected technologies. These will be discussed in the report back. Participants will also have an opportunity to report back on the value and relevance of the principles to their context. Ways of using the AFEQ will also be discussed.

This workshop will be of relevance to teachers, learning technologists and senior managers in FE and HIM. Participants should leave this workshop with new ideas about how to integrate technology use in assessment and feedback design, having generated and discussed their own examples of redesign strategies, and having explored methods of evaluating innovations in relation to learner control.

1194 Workshop

keywords: range of technologies / large-scale implementation / assessment principles / theories of learner self-regulation / evaluation of student experience

Just where are institutions going with e-learning? Or the smoothest paths lead nowhere...

Wednesday
9:00

Large-scale implementation

Prof Terry Mayes
Glasgow Caledonian University

Veronica Adamson
Glenaffric Ltd

Derek Morrison
Higher Education Academy

Prof Jethro Newton
University of Chester

Prof Gilly Salmon
University of Leicester

Richard Trigg
Warwickshire College

This symposium will examine some key challenges, opportunities and dangers facing institutions as they consider how (or how far, or whether) to embed e-learning, particularly in the context of a rapidly changing external environments. The symposium is inspired by the current higher education Academy/JISC Pathfinder programme and will centre discussion on issues raised by the Pathfinder pilots.

The background to the session is provided by the nine institutional projects which constitute the Pathfinder pilot programme. These institutions had previously been pilots for the e-learning benchmarking exercise. Their Pathfinder development projects have therefore been based on a detailed assessment of areas of strength and weakness. Each project is aimed at strategic change, though to call them change management projects is to conceal a degree of uncertainty about the direction of development which the title of this conference expresses well.

The session will be structured around four key issues: each of which will be introduced briefly by a participant from the Pathfinder pilot programme and then offered for debate to the panel and the audience.

1. Are funded programmes like Benchmarking/Pathfinder the right way to facilitate development? This is a fundamental question about the programme itself – not its detailed management, but the overarching role of the sectoral enhancement agencies (e.g. HEA, JISC, BECTA), and the Funding Councils themselves, in navigating the path. The HEFCE 10 -year strategy has placed the responsibility for embedding e-learning back with the institutions. Do these programmes encourage a kind of dependency culture in institutions?

2. Is the educational landscape in the UK so fragmented that it makes little sense for Pathfinders to speak for anyone but themselves? Different

institutional missions require radically different strategies. Is it sensible to conduct this debate at the level of the 'sector'? The Pathfinder programme is characterised by significant variation in institutional 'mission': are different paths are being created?

3. Should e-learning development be delegated entirely to the discipline level? Should institutions even attempt to have an institutional e-learning strategy? This argument acknowledges that subject experts have their own e-learning communities, and their own distinct pedagogical approaches. But if we follow that line, is it sensible to ask each subject within each institution to develop its own approach? The Pathfinder pilots are taking different positions on this and the 'open educational resources' issue.

4. Should institutions focus their efforts not on further development of resources and environments but rather on the empowerment of their users to exploit the learning power of the Internet for themselves? 'Beyond Control' may be thought to point to a kind of demand-side approach, where the role of institutions changes from an emphasis on provision to one on empowerment. A University might do no more in learning technology than ensure that all its users (learners, both staff and students) are skilled in using Web and Web 2.0 resources to the maximum. Empowerment has implications very different from 'support'.

For each of these issues a Pathfinder participant will introduce the question and a 'Question Time' format will invite the panel to express views in turn followed by audience questioning and commenting. The chairing role will be taken by Terry Mayes, who is 'critical friend' to the Pathfinder pilot programme.

1306 Symposium

keywords: pathfinder programme / benchmarking / empowerment of learners / institutional change / strategic development

Collaborative knowledge building through online reflective journals: a Russian case study

Wednesday
9:00

Large-scale implementation

Dr Elena Luchinskaya
Manchester Metropolitan University

Using the theories of Mikhail Bakhtin and the results of a three-year EU TEMPUS project (2002-5) coordinated by Manchester Metropolitan University, and a follow up ESCalate project (2005) in the Udmurt Republic, Russian Federation, this paper assesses the usefulness of computer mediated communication, in particular online reflective journals as a means of encouraging collaborative knowledge building in the field of social policy in Russia. It explores the difficulties of using such a technique in Russia, where academics and practitioners are unfamiliar with reflective practices, and outlines the benefits of using this approach and Bakhtin's theory of speech genres in analysing how collaborative knowledge building takes place.

1125 Research Paper

keywords: collaborative knowledge building / computer-mediated communication / online reflective journals / speech genres / Bakhtin's theory

Online tutor training: international developments

Wednesday
9:00

Learning and internationalism

Dr Kevin Caley
Dr Gordon Joyes
Dr Ian McGrath
University of Nottingham

The School of Education, University of Nottingham, UK and Beiwai:Online, Beijing Foreign Studies University, Beijing, China have been engaged in a collaborative action research project to develop a generic module for the training of online tutors as part of the eChina-UK programme. Details of this higher education Funding Council for England funded development and the wider eChina-UK programme of which this project was only one part can be found at http://www.echinauk.org/. The challenge for the project was to design an online module that would incorporate both personalisations, i.e. accommodate tutors with different experience and skills, and localisation, i.e. be adaptable to a wide range of e-learning contexts. An action research approach to the design for re-usable learning was adopted that built upon the project team's experience of working in international contexts and the established relationship with Beiwai: Online. A pilot in China has been followed by collaboration with University of Science Malaysia to develop the module for a different context and to explore this process. This has involved work across six subject disciplines and a full evaluation of the materials.

The demonstration will provide a guided tour of the tutor training module which incorporates an experiential approach to raising awareness of key issues and concepts in relation to effective support for online learners. The online tools that have been developed to support the continuing professional development approach adopted will be introduced.

The outcomes for participants will be:
- Raised awareness of the nature of a core curriculum and effective pedagogy for training of online tutors;
- An opportunity to be involved in a network of potential users of the open source and free to use module.

1105 Demo

keywords: online tutor training / innovative tools / collaboration / localisation / personalisation

Runaway objects: preserving our digital belongings

Wednesday
9:00

Learning technology for the social network generation

Dr Catherine Howell
University of Cambridge

As digital and networked technologies increasingly permeate every dimension of social and personal life, we acquire more and more personal 'digital belongings', or artefacts. Such digital belongings may operate as part of our identity in complex ways. They can include discrete digital objects or content (such as images or audio), networked objects (such as online profiles, avatars, and blogs), and identity management tools (such as account names and passwords).

This workshop will invite participants to consider key questions pertaining to personal digital belongings and personal archiving practices, and their relationship to wider technological, cultural, and social issues. How do we manage our digital belongings, on- and offline? What are the stakes involved? How do we balance the practice of 'risky' behaviours with factors such as convenience and ease of use? Participants will be introduced to a repertoire of relevant research techniques and will develop scalable research plans to further investigate this area.

This workshop is aimed particularly at new researchers. Participants will be introduced to a set of advanced research techniques, and will be invited to consider how they might apply these to the conduct of a small-scale action research project within their own institution. The wider intended outcome is to contribute towards research capacity building within the professional community.

Workshop participants will gain:
- An overview of issues pertaining to personal digital belongings and personal archiving practices;
- Understanding of relevant technological developments and issues, including password management systems, user authentication, and OpenID;
- Hands-on experience with innovative research instruments and tools designed to elicit user requirements in this area;
- Feedback on how to develop their ideas into concrete action research projects.

Structure:
1. Welcome
Informal welcome and brief ice-breaker activity.

2. Introduction
The workshop will commence with a brief overview of the field and relevant issues. This will lead directly to an introduction to relevant research techniques, including think-alouds, photo elicitation, and time analysis.

3. Discussion
Participants will be invited to form small groups (of approx. 4 – 8), choose a topic for discussion, and then to consider how they might start to investigate their area of interest using one or more of the research techniques described.

Topics will include:
- 'De-Flickring': When, and how, do individuals decide to restrict access to their personal digital belongings?
- Online Identities and Proprietary Spaces: What are some of the implications of institutions choosing to outsource key systems for the management of personal information?
- Public Discourse and Moral Panic: How do the media (including online media) impact on our perceptions of risk?

4. Reporting and Feedback
Each group will then report on their findings, with opportunities to give and receive feedback. Collectively, the reports will form a set of informal outlines or guidelines for a series of complementary, innovative action research projects. This resource will subsequently be made available online to all conference participants.

5. Summary and Close
After a brief summary from the convenor, the workshop will close, with thanks to all participants.

1227 Workshop

keywords: personalisation / personal archive / information management / data protection / digital self

A moveable feast? The accessibility opportunities and barriers of m-learning

Wednesday
9:00

Learning technology for the social network generation

Dr Simon Ball
Mr Alistair McNaught
TechDis

There are a range of considerations that need to be made when implementing aspects of mobile learning (m-learning). The accessibility of the software and hardware are principal among them. On first inspection, the small size and fiddly interfaces of many mobile devices would appear to militate against their accessibility but fundamental to an understanding of accessibility is the centrality of an accessible learning experience. It is possible for a device with sub optimal accessibility to be used to create a considerably enhanced learning experience. The central concept is an awareness of the value added (or subtracted) for the intended learners.

This paper proposes a model of accessible e-learning, exploring four different domains: the accessibility of the interface, the content, the task and the 'cultural capital'. Using sample learner scenarios it is possible to discuss accessibility and inclusion in much broader terms – sometimes with surprising results. The importance of this approach is that it begins to rank pedagogical factors alongside purely technical factors as an explanation of accessibility. This approach is further developed by exploring how some typical m-learning tasks can be revisited at entirely different levels of Bloom's taxonomy, creating learning experiences of widely differing richness and engagement.

There are a number of broad ways in which m-learning may add value to the learner, and a (lesser) range of circumstances where value could be arguably subtracted. But it is not the simple cost benefit analysis of 'the mobile approach' that gives the true picture. Many traditional teaching approaches are also of limited accessibility to existing learners. The true benefit of a mobile learning solution can only be gauged with reference to the alternative 'traditional' approach. A simple table is provided to allow an assessment of the relative accessibility of a proposed m-learning activity and concluding recommendations are provided to encourage practitioners use m-learning in innovative ways as part of an overall strategy of inclusive, creative teaching approaches.

1117 Research Paper

keywords: m-learning / engaging students / accessibility / value added

Context, collaboration and community: the role of GPS-enabled PDAs

Wednesday
9:00

Learning technology for the social network generation

Ms Gill Clough
Dr Ann Jones
Dr Patrick McAndrew
Professor Eileen Scanlon
Open University

Learning contexts have been described by Taylor et al. (2006) as "the combined physical, information and social setting of learning, which for mobile learning in particular is in continual change". Kadyte, (2004) described the contexts of mobile learning as overlapping, hierarchical and dynamic, changing over time. This study used Personal Digital Assistants (PDAs) with inbuilt Global Positioning Systems (GPS) to extend the physical context of a Nature Trail by providing situated access to relevant audio, text and photos. Delivery of these resources was triggered as participants entered the relevant geographic location with their PDAs. In addition, the social effect of collaborative learning was explored by asking the participants to do the trail in groups of two or more and to subsequently contribute to a group blog.

The goal was to explore how participation in a collaborative, location-aware mobile learning activity with situated content might encourage the development of a leaning community. Participants were asked to use their

PDAs to record their impressions of the experience which they could later upload onto a group blog. These impressions could be images, video, text or audio. Henri and Pudelko, (2003) identified four types of virtual community which they characterised according to the "intentionality" of the group to create a cohesive social bond; the loosely cohesive community of interest, the goal-oriented community of interest, the learning community, and the strongly cohesive community of practice. Evidence of evolving community was demonstrated by the collective creation and sharing of content created using the PDA both during and after the initial mobile activity.

Participants were given PDAs loaded with CAERUS, from Birmingham University, containing the Walton Hall Nature trail. Participants were guided around the Nature Trail at the OU campus, receiving contextually relevant audio, images and text at appropriate points. The PDAs were HP IPAQ 6915s with GPS, wi-fi and GPRS for Internet access, stills and video camera as well as support for recording both audio and text notes.

Some participants struggled with usability problems which detracted from the experience. Participants with more experience of PDAs or with a greater interest in Nature persevered and were able to form a virtual community of sorts, but this was more at the level of Henri and Pudelko's (2003) Community of Interest than a Learning Community. The main barriers to community participation seemed to be concerns over its "open" nature, a lack of a sense of community with other participants and insufficient motivation to overcome problems such as lack of time.

Henri, F. and Pudelko, B. (2003) 'Understanding and Analysing Activity and Learning in Virtual Communities', Journal of Computer-assisted Learning, vol. 19, pp. 474-487.
Kadyte (2004) 'Learning can happen anywhere: a mobile system for language learning' in Learning with mobile devices - research and development (eds, Attewell, J. and Savill-Smith, C.) Learning and skills development agency, London
Taylor, J., Sharples, M., O'Maley, C., Vavoula, G. and Waycott, J. (2006) 'Towards a Task Model for Mobile Learning: A Dialectical Approach', In Press.

1304 Short Paper

keywords: PDA / learning community / blogging / context / GPS

Podcasting and assessment for learning

Wednesday
9:00

Learning technology for the social network generation

Dr Christopher Laing
Dr Paul Vickers
Northumbria University

Podcasting is the pre-selection of on-demand audio broadcasts; the user will subscribe to a series of shows, and then choose when and where they will listen to them. In essence podcasting offers a more sophisticated delivery mechanism. Recently podcasting has been seen by some within higher education has having the potential to offer a unique perspective on the production and communication of educational material. Commentators have noted that educational podcasting could provide additional, on-demand, personalised content that is directly linked to lecture/seminar activities, thereby encouraging and supporting independent learning.

However, the completion of an initial podcasting trial within the School of Computing, Engineering and Information Sciences at Northumbria University has raised some important issues of educational podcasting that need further investigation – do podcasts aid students' understanding, or indeed assist in their module performance and progression, how 'useful' are podcasts in helping or enhancing the student experience?

In attempting to resolve these issues, it is suggested that podcasting must become part of the assessment process. For example, podcasting may enhance the process of assessment for learning by offering students 'rich informal' feedback – using monologues, interviews, dialogues, group discussions, etc., to provide more detail on what is expected for assignments, or project work; to provide continuous guidance and coaching on how they may approach/undertake a particular piece of work.

However, in the study undertaken at Northumbria University, the students were asked to produce their own podcast as part of the assessment process for a multi-media computing module. The assessment process consisted of assignment and exam. The assignment required the students to create an enhanced podcast, to include images, and to be no greater than 25 MB in size. The title was "An audio-visual diary of how I created this podcast".

In essence this assignment focused on (i) offering students extensive opportunities to engage in the kinds of tasks that develop and demonstrate their learning, and (ii) using technology that the students find easily accessible and non-threatening to create a reflective audio/visual report on the process of creating the podcast, highlighting the challenges faced, the design decisions made, etc.

It should be noted that the 'making' of the podcast will not contribute to the assessment for learning agenda, but the podcast itself does offer a novel way of getting students to reflect on their own learning, offering them the opportunity to express themselves in a manner that is quite different from the typical reflective report section required in most assignments. Because the reflection itself is the central part of the assessment, this approach is directly contributing to the AfL agenda – the learning IS the assessment.

In this paper the authors will present an investigation looking to identify if educational podcasting has any role in enhancing the process of assessment for learning. The paper will report on student feedback to using podcasting as part of the assignment process, present an evaluation of the effectiveness of this approach to educational podcasting, and discuss the potential of this approach to improve the students' learning experience.

1261 Short Paper

keywords: assessment for learning / enhanced podcasting / develop and demonstrate learning / learning is the assessment

Engaging with mobile technologies for learning and assessment purposes

Wednesday
9:00

Learning technology for the social network generation

Mr Gareth Frith
ALPS CETL, University of Leeds

Mr Robert Arnsten
MyKnowledgeMAP

ALPS (Assessment and Learning in Practice Settings) is a higher education Funding Council for England (HEFCE) funded regional consortium of collaborating HEI partners jointly committed to enhancing the student learning experience by stimulating and supporting innovation in the delivery of learning, teaching and assessment whilst ensuring that students graduating from courses in Health & Social Care (H&SC) professions are fully equipped to perform confidently and competently at the start of their professional careers.

Many of the competences required at graduation are shared across all H&SC professionals. ALPS will draw together uniprofessional expertise in workplace H&SC assessment by looking for commonality of purpose and sharing of scarce resources to assess common outcomes. Mobile technologies will support and enhance this aim by providing a standardised platform with which to collect formative information with the possibility of storing this information centrally to inform summative assessments.

The aim of this workshop will be to introduce participants to using mobile technologies which may be used to support innovative practice in the learning and assessment in health and social care practice settings and to discuss how this could be extended to other professions and disciplines.

Content of workshop:
- Discussion and demonstration of current technologies, for example smartphones, MP3 players and PDAs. Examine and demonstrate future technologies such as wearable computing. Also consider possible implications of mobile game platforms.
- Encourage participants to use smartphones to take pictures, record audio and text and send these to a reflective learning media board.
- Participants will examine the various aspects of learning, assessment (formative and summative) and reflective learning using Blogs and mobile devices.
- Participants will be encouraged to play a mobile game and comment on how this form of rich human-computer interface could be applied in a learning application.

Participants will work in groups using smartphones, PDAs, a wearable headset, a game platform and other aspects of technology and rotate around stations to experience each aspect of using mobile technologies.

Participants will:
- Be familiar with using a mobile device to record text, audio and images (pictures and video).
- Have experienced sending these media objects to a Blog or Media Board
- Have been introduced to how these devices can be used to support innovative ways of learning and assessment.
- Be familiar with using a mobile device to access Internet sites tailored for mobile use.
- Be starting to form ideas on how mobile technologies can be used in their subject areas or profession. This will cover three alternative approaches:
1. Standard mass-market mobile phones;
2. Current high-specification smartphones/PDAs;
3. Realistically possible medium-term future technologies.

1315 Workshop

keywords: assessment in practice settings / work-place assessment / mobile technologies / interprofesisonal assessment / assessing core skills

What gives life to our community? An appreciative inquiry-based approach for studying the emergence of a community in Web 2.0 learning applications

Wednesday
13:30

ALT strand

Dr Rhona Sharpe
Mr George Roberts
Oxford Brookes University

This workshop aims to:
- Report on the first phase of the EMERGE community
- Share lessons learned on facilitating the emergence of the community
- Introduce appreciative inquiry as an evaluation approach for studying community development

The Emerge project is supporting the JISC Users and Innovations programme by creating a community of practice of developers using Web 2.0 technologies to support learning. In planning the Emerge support project we argued that the evaluation of the project should not just record our learning for future projects, but should contribute to the learning with the community. We chose Appreciative Inquiry as an underpinning framework for our evaluation, using it to create the “atmosphere of collective inquiry”

characteristic of communities of practice (Wenger, et al, 2002). So far we have used interviewing, sharing stories and visualisation techniques to capture what gives life to the Emerge and other communities so that we can find ways to organise the Emerge project around the things that really work.

The workshop aims to introduce the Appreciative Inquiry approach through active participation in some of its techniques. We will showcase the Emerge project as an illustration of how appreciative inquiry can guide development projects. For example, Appreciative inquiry acknowledges that the act of undertaking research has a transforming effect on organisation itself. Positive questioning techniques are used to determine what works rather than highlighting barriers and problems. In this workshop participants will undertake a short appreciative interviewing exercise to demonstrate the impact of positive questioning.

Appreciative Inquiry also shares in the learner-centred, emancipatory education movement and in the broader constructivist challenge to positivist epistemologies. Gergen (1999) identifies the appreciative approach with forms of practice that attempt to get beyond essentialism, ethical foundationalism and hierarchical ordering of identity politics to embrace a more radical constructionism in relational theory. Grant and Humphries (2006) note that it has an "... epistemological base in the premises of social constructionist theories". "Meaning is negotiated between participants..." (p. 407). However appreciative inquiry is criticised for being "... too Pollyanna-ish" or excessively focused on "warm, fuzzy group hugs" (p. 404). For example, according to Cowling (2001), it "...is different to critical knowing", it has "as its basis, a metaphysical concern positing that human life is a miracle that never can be comprehended fully" (p. 34). Grant and Humphries, and Gergen by applying a rigorous, anti-essentialist, critical theory-led approach, recover appreciative inquiry from unknowable interiorisation, and provide it a firm foundation as a research approach and evaluation methodology. There will be time in the workshop for critical discussion of the suitability of the appreciative inquiry approach.

1251 Workshop

keywords: appreciative inquiry / evaluation / community of practice / jisc-emerge

Engaging the 'Xbox generation of learners' in higher education.

Wednesday
13:30

Designing learning spaces

Mr Jebar Ahmed
Mr Zafer Ali
Mrs Mary Sheard
The University of Huddersfield

The paper refers to a recent study funded by the TQEF (Teaching Quality Enhancement Fund) through HEFCE (higher education Funding Council For England). A major challenge facing higher education is in meeting the learning needs of future students who are described as the 'Xbox generation', 'the digital generation', or 'the mobile generation' due to the high profile of technologies in their lifestyles. The study seeks to identify transitional implications for maximising the learning success of new generations of digital learners in their undergraduate and post graduate studies. Drawing on the study's findings, the paper discusses the continuities and discontinuities in students' learning with technology in the Secondary school and HE sectors. The study takes a socio-cognitive perspective on student learning with technology. The theoretical framework underpinning the study draws together a cognitive theory of learning around critical knowledge building activity such as describing, explaining, and arguing, perspectives on learning with technology and effective pedagogies for engagement in learning.
A mixed-methods approach was used. The research was conducted in five partnership secondary schools in three different local authorities, in an associate school in a fourth local authority, in the School of Education and Professional Development and across other university departments at the

University of Huddersfield. Data collection in Secondary schools was through lesson observations, focus group interviews with students, student questionnaires, student logs, interviews with teaching staff, and teacher questionnaires. Data collection in the university was through individual and groups interviews with students, student questionnaires, focus groups and interviews with lecturers and tutors, and interviews with other key players including learning technology advisers.

The study reported in this paper aims to contribute to the current body of research on students' use of learning technologies (Conole et al, 2006; Creanor et al, 2006; Jarvis et al, 2005), by identifying and comparing the learning that core, peripheral, and developmental learning technologies in the two sectors are currently supporting. In doing so the study highlights the developing role of learning technology in personalised and independent learning; critical, social, and organisational learning; and in pedagogies for engagement. The findings inform recommendations for pedagogical strategies to engage future generations of university students in learning that harnesses their digital intelligence and their familiar and preferred learning approaches. The paper aims to contribute to a research –informed debate at strategic levels in university schools and departments about developing and refining innovative and creative teaching practices in higher education.
The paper offers a reflection on the successes and limitations of the work, including constraints imposed by examination timetables. Through a critical appraisal the paper indicates the potential of the study for further developments in the context of transitional pedagogies between universities and their partnership schools.

Key words: 'Xbox generation of learners, transition, learning technology, pedagogy
keywords: Xbox generation / learning technology / transition / pedagogy

1083 Short Paper

'Here's looking at you': a comparative study of teacher and learner perspectives using the hybrid learning model.

Wednesday
13:30

Designing learning spaces

Dr Alan Masson
Dr Vilinda Ross
University of Ulster

The need to describe and disseminate effective practice has become increasingly important and there are many emerging trends and technologies to capture, record and disseminate current practice. The Hybrid Learning Model, a novel method of capturing and disseminating teaching practice has been developed by the CETL(NI), 'Utilising Institutional e-Learning Services to Enhance the Learning Process'. Research undertaken as part of this initiative reports the use of the model to investigate both teacher and learner perspectives within the realm of e-learning.

The main aim of the procedure is to demonstrate how all learning activities can be mapped onto a series of understandable and universal set of learning events where the teachers and learners' experience and roles are clearly defined at each stage. The model focuses on processes in teaching and learning and proposes a 'palette' of 8 specific ways (learning events) of learning/teaching that the practitioner (or student) can use to describe any point in the development and analysis of learning activities.

In this paper, two comparative studies using this model will be described. In Study 1, an online learning activity delivered to nursing students from the School of Nursing is recorded from the teacher's perspective. The learning activity, where students are presented with a case study via a VLE, is mapped onto the 8 learning events by the practitioner and from a closed list of generic verbs the teaching and learning activity is described in plain English.

In a comparative study (Study 2), focus groups were run with a sample cohort of nursing students that had been taught the learning activity by the practitioner. Students used the model to record the activity but from the learner's perspective. A pack of flash cards containing the learning events and an associated list of verbs describing that learning event was used in the process and were adapted for usage by the learners. The distinct activities of the tutor and learner and their interaction in the learning activity were compared and examined from both perspectives.

The strength of the method proposed is its transparency, use of simple language and its potential of breaking down effective complex learning activities into a generic, re-usable format so that good practice can be disseminated, reapplied and evaluated easily.

The method has added value in that, along with recording practice and the actual process involved at every stage of the learning activity, it promotes self and peer reflection of teaching and learning practices and communicates these practices to support evaluation. Use of this proposed model can be used to enhance the learning and teaching experience, create re-usable learning scenarios and promote and change teaching practice.

The paper will evaluate the model as a reliable method of reflecting on practice, as an effective method of describing teaching and learning activities which can be easily reused and in terms of its transferability to model teaching by using simple to understand methods.

Opportunities will be discussed to use comparative models to develop, evaluate and enhance practice.

1255 Short Paper

keywords: learner perspective / teacher perspective / capturing and disseminating practice / evaluation

A preliminary investigation into the motivational aspects of accessibility simulations

Wednesday
13:30

Designing learning spaces

Dr Steve Green
Mr Georgios Papadopoulos
Dr Elaine Pearson
University of Teesside

There are legal, moral and ethical reasons for making online learning materials accessible to disabled students, but teaching staff are not always aware of the barriers to access that students may encounter and cannot always appreciate the difficulties of disabled students. This project explores the motivational aspects of simulations in education, examines their potential to raise awareness, to help staff appreciate these barriers and to encourage them to adopt inclusive online practice, thereby, offering an improved learning experience for disabled students. The motivational nature of simulations is quite significant. Motivation can be seen as the learners' desire to participate in the learning process. In recent years, a number of studies have taken place to measure and prove the motivational aspects of simulations and their effectiveness on learning. Results reveal that the use of computer systems promotes a positive effect towards learning. Other literature suggests that simulations can be effective as a motivational strategy. The results of a number of pilot studies revealed that learning through interactivity – simulations – can increase learners' understanding, motivation and their ability to explore. Workshop evaluations suggest that simulations can be successful in instilling empathy for academics with the disabled student experience, and motivates them to adopt new online teaching practices.

Part of the outcomes of this study include the design and development of a range of appropriate simulations based on interactions with a virtual learning

environment (Blackboard), which can help staff appreciate the issues relevant to various types of disability. A prototype has already been developed simulating a number of impairments. The simulated disabilities are based on the most common disabilities in UK's higher education according to the Higher Education Statistics Agency (HESA). Each simulation comprises a task typical of those students are expected to face in an online course. The simulations that are currently available are based on visual disabilities (cataract and glaucoma), motor disability, and cognitive disability. Additional simulations including dyslexia, colour blindness and hearing impairment are planned. It is important to mention that these simulation activities do not simulate the disability itself, but rather the effect that it may have on a disabled student's interactions with the computer. Although a number of Web accessibility simulations are available (Webaim, DRC), feedback indicates that simulations designed specifically to reflect the student experience of online learning activities are required.

The prototype simulations are currently being evaluated and reviewed by academic staff in a workshop situation. This paper will present the result of these initial evaluations and the implications of the results for further research. The outcome of this research should provide means by which academic staff, creating online learning resources, can be motivated through empathy to create an online experience that gives the disabled student an equal and independent learning experience.

1321 Short Paper

keywords: simulations / accessibility / disability awareness

Computer supported collaborative learning in the recording studio

Wednesday
13:30

Designing learning spaces

Dr Andrew King
Hull University

This paper will outline the findings of an explorative mixed-methods case study on the use of learning technology by students working in collaboration on a recording task. Previous research on computer-assisted collaborative learning reflects different types of interaction with technology (Crook 1996; Kumpulainen & Mutanen 1998; Neo 2003; Nicol & MacLeod 2005) as well as the possibilities of learning in real and virtual environments (Brna & Aspin 1998; Simoof & Maher 2000). This enquiry used learning technology as a support aid for students working in a situated environment (the music studio) involving collaboration about a practical activity (drum-kit recording) through face-to-face interaction.

64 first-year music technology students at the University of Hull were matched in pairs according to ability and divided into two groups: the first group had access to a learning technology interface (LTI); the second (control) had access to a manual. Both groups of students were observed and assessed in the completion of the drum-kit-recording task. The observational data showed that Learning technology encouraged effective planning and better execution of pre-production activity than using a manual: it encouraged 'full' (rather than 'isolated' or 'relay') collaboration; it facilitated problem solving by reducing trial-and-error and the time taken to overcome problems as well as suggesting resolution of technical problems encountered. It was also found that learning technology does not impact upon typical role-play among students working in a studio environment nor affect the type and frequency of verbal/non-verbal discourse compared with other small group situations.

1094 Short Paper

keywords: collaborative learning / music education / recording studio practice

Institutions offering digital displays and their associated education theories: an investigation into learning and interpretation in gallery

Wednesday
13:30

Designing learning spaces

Ms Agathi Tsoroni
University of Central England in Birmingham

This paper investigates learning strategies associated with digital displays; and more specifically how virtual exhibits are planned, against an analysis of how they are received by the visitors. A number of art, science and leisure institutions in the UK that hold contemporary digital displays are examined.

Models of electronic learning are discussed. Existing research in learning with digital technologies has focused primarily on e-learning and on the use of handheld computers and other electronic devices by visitors to create individualised visits to a gallery.

A combination of interrogation methods is used. An extended case study research is conducted in five of these institutions; the case studies comprise interviews with staff and visitors to the sites, repeated visitor observations and access to key documentation about the vision and their education strategies, as well as website research. In the remaining five institutions research comprises physical visits to the site and website research.

The paper covers a wide range of visitor offers, including art, science and natural history exhibitions; exhibitions comprise a combination of digital interactive and mechanical exhibits. In every exhibition stand-alone exhibits as well as the educational sessions that take place around the exhibition are examined. The institutions are: Thinktank, Urbis, At-Bristol, FACT, The Public, Kinetica, The Deep, the National Waterfront Museum and Eureka.

This paper investigates models of electronic learning in the galleries. According to Vygotskian constructivism the mind is an interweaving of the brain, in the body and it is also distributed in artefacts. Research conducted by Donna Haraway and Katherine Hayles imagines subjectivity as a 'distributed cognitive system' composed of human and non-human actors. Do current approaches acknowledge that a learner behaves differently in front of a computer as compared to a book? Some museum workers, as well as computer experts, talk about the possibility of a 'distributed subjectivity'. The paper discusses whether gallery designers, curators and educators take into account the shaping of the subjectivity of their audiences through the contact with computers.

Drawing from Hein's research in museum learning and Hawkey's research in models of digital learning, an orthogonal system is created. The one continuum represents education theories; the other continuum represents the use of multimedia technology in the galleries. Each examined institution is placed in one of the four quadrants of the orthogonal system. Examples of the digital and education offer of each institution are given and discussed.

An evaluation of the use of digital displays in the gallery and their associated education theories is offered. It is argued that science and natural history institutions which employ digital technologies situate their educational practice towards the constructivist and discovery learning side of the spectrum; digital art institutions follow more didactic or behaviouristic approaches.

This research is different to previous ones as it takes into account both the museums' intentions and the learners' perspectives on learning from digital exhibits. The research is limited in UK only institutions. Fuller results will be available on completion of the research in six to nine months.
keywords: learning from digital displays / distributed subjectivity / models of digital learning / museum visitors' perspectives / curators' and educators' perspectives

1195 Short Paper

Developing an online work placement experience

Wednesday
13:30

Designing learning spaces

Ms Sarah Cornelius
University of Aberdeen

Dr David Medyckyj-Scott
University of Edinburgh

The traditional work placement or internship offers tremendous opportunities for students to gain work related skills and the potential value of the placement experience has been widely recognised in higher education. However, work placements also offer challenges and problems for those organising the experiences – for example difficulties can be faced finding and managing suitable placements and it is hard to ensure equality of opportunity for all who wish to participate.

With support from JISC and the HEA subject centre for Geography, Earth and Environmental Sciences, the e-MapScholar Virtual Placement was developed in response to these problems. Drawing on a range of theoretical ideas appropriate for online learning (JISC, 2004), including learning through experience, the use of reflection to develop professional practice and learning as a socially situated experience, the Virtual Placement provides case studies which are real world problems for students to solve using geo-spatial data. The case studies permit risk taking within a controlled environment, can be used to prepare students for a face to face placement and provide a learning experience which is responsive to the learning style and pace of individuals.

The first Virtual Placement case study that has been developed involves a study of the visual impact of a wind farm and requires the use of Geographical Information Systems software. The case study was jointly developed by an interdisciplinary team based at the University of Edinburgh with original materials provided from the Macaulay Land Use Research Institute.

To work on the case study the student takes on the role of researcher for a networked virtual consultancy organisation, supported by a tutor or other staff playing the roles of various staff in the organisation. A series of structured tasks are provided via a specially developed Web site, framed by induction and reflection activities and supported by innovative 'clockwork' features which permit timed release of tasks, and distribute emails automatically to users (Cornelius et al., 2005). This paper will provide a brief introduction to the Virtual Placement and show how the wind farm case study has been used and evaluated at the University of Glasgow.

Following amendments made in response to comments from evaluators, the wind farm case study is now freely available for educational use. The vision for the Virtual Placement is to develop a suite of case studies, and provide a placement 'shell' within which users can develop their own case studies.

This paper will reflect on the experiences of dissemination and identify the potential for reuse and extension of the Virtual Placement concept. In particular the provision of opportunities for collaborative online working and for the integration of formal and informal learning to reflect practice in the contemporary workplace will be explored.

Cornelius S, Medyckyj-Scott D, Forrest D and Elcock A (2005) The e-MapScholar Virtual Placement. PLANET Number 15. December 2005. pp. 26-28 [available online http://www.gees.ac.uk/planet/p15/sc.pdf]
Joint Academic Systems Committee (JISC), (2004) Effective Practice with E-learning: a Good Practice Guide in Designing for Learning. (Bristol: Higher Education Funding Council for England)

1212 Short Paper

keywords: virtual work placement / experiential learning / dissemination

Exploring the use of physical, mobile learning for school children

Wednesday
13:30

Designing learning spaces

Mr Peter Lonsdale
Professor Claire O'Malley
Professor Mike Sharples
University of Nottingham

Mobile participatory simulations let learners take an active part in the simulation of a physical or social system, such as the spread of a virus [1] by interacting with each other and their environment, coordinated by handheld computers. So far, these have been specialist programs designed to model a single dynamic system.

This paper describes a participatory simulation authoring toolkit (PaSAT) that allows teachers and children to easily build customised participatory simulations for use in classrooms or outdoors. PaSAT can be used to simulate the spread of a disease, social interactions, an interactive adventure, a scenario-based game, a scientific inquiry task, or a free-form location-based experience. The work comprises:

1. The design, implementation, and evaluation of a general purpose authoring toolkit for participatory simulations, running on wireless handheld computer, with optional GPS positioning.
2. The use of the authoring toolkit by the researcher to build simulations that indicate the advantages and disadvantages of physical learning experiences as compared to similar experiences using a desktop PC.
3. Enabling children and teachers to design their own learning experiences using PaSAT, along with an indication of what support is necessary for such creative activities.

In the first trial (March 2007), children aged 11-12 will use PaSAT to take part in a learning experience requiring them to explore the physical layout of their school grounds, to prepare for an imaginary flooding disaster. It is expected that children in the mobile learning task will have greater engagement with the topic, compared to a similar system on a desktop PC, through enhanced interactions with their peers, greater use of spatial and episodic memory, and the construction of shared narratives.

Evaluations will be performed using a combination of observation, video recording, and system logging, with analysis to indicate the effectiveness of the learning experience, problems that have arisen during the trial, and advantages of the system over non-physical learning experiences. The data will be analysed to provide a picture of how the students used the system to complete the task, including their interactions with peers and teachers, and with the system itself. Emphasis will be placed on identifying breakthroughs and breakdowns in the learning process, and on assessing the usability of the system. The impact on learning outcome will be assessed through post-task measures to determine how memorable, meaningful, and understandable the activity was for the students, compared to a similar task performed using desktop PCs.

PaSAT will eventually be a system that can be used by children and teachers to build participatory simulations using standard equipment. It currently serves as a research tool to explore the questions of how and why we should explore the potential of physical learning experiences, along with the potential problems that may be encountered. Such problems may be technological or pedagogical, and an understanding of how to overcome these problems will inform the use of next-generation mobile devices in the classroom.

Colella, V. (2000). Participatory Simulations: Building collaborative understanding through immersive dynamic modelling. Journal of the Learning Sciences, 9(4), 471-500.

1303 Short Paper

keywords: mobile learning / participatory simulations / physical learning

Support for widening use of e-learning using a toolkit approach: a case study from the University of Nottingham

Wednesday
13:30

Large-scale implementation

Mr Andrew Beggan
Dr Wyn Morgan
The University of Nottingham

In the past, the University of Nottingham's approach to developing e-learning focused on using a number of enterprise applications (Portal, WebCT, QMP, etc.), school based VLE environments, video production and interactive RLO development, all supported by dedicated teams including multimedia developers. Individual staff members seeking to create their own e-learning content used software tools such as Dreamweaver, Quia and Xerte. Although this approach proved successful in meeting individual requirements, it sometimes lacked wider University impact and has 'hidden' examples of good practice. It also led to an imbalance of adoption between a small number of enthusiasts and a large number of less well informed academics.

To address this imbalance and to provide wider opportunities for the adoption and utilisation of e-learning, significant strategic investment by the University put in place a number of key people and processes. The e- learning/e-knowledge committee (eLeK) has supported the development of 'e-learning toolkits'—a range of simple tools and applications to support academics in creating rich e-learning content, made available from a central point of access. Tools range from the traditional enterprise applications through to the development of bespoke tools, providing a suite of e-learning options requiring minimal academic input to create rich online learning experiences.

In the presentation, we will discuss the strategic decisions behind the development of e-learning toolkits, issues faced and benefits to the University. In addition, we will demonstrate a range of internally developed tools including current examples from a number of schools and subject areas.
keywords: e-learning dissemination / academic autonomy / strategic step change / rapid content development / toolkits

1153 Demo

Interactive e-assessments

Wednesday
13:30

Large-scale implementation

Professor Geoffrey Crisp
University of Adelaide

Teachers' epistemologies for learning and assessment are closely linked, and range from a teacher-centred focus on knowledge reproduction through to a learning-centred focus on knowledge transformation. Teachers will need to reflect on the formats that will be necessary for future assessment tasks that will engage students and provide appropriate opportunities for them to demonstrate the acquisition of valued skills and knowledge. Part of this reflection will involve the need to investigate assessments that mix real and virtual environments, testing declarative knowledge as well as conditional and procedural capabilities. Assessments that allow students to manipulate virtual data and objects in real time will be required.

This session will include a brief overview of interactive e-assessment and then demonstrate how discipline specific examples of e-assessments that use commonly available browser tools, such as java applets and plugins, can be constructed in various online systems. The emphasis will be on how to incorporate tools that require interactivity on the part of the student. This interactivity in the assessment task will allow students to explore, or make errors, and seek their own solutions to the assessment tasks. This demonstration will include simple instructions on how teachers and those assisting them can incorporate browser tools such as java applets and plugins into commonly used online learning management or assessment systems.

Many java applets and browser plugins are freely available on the Internet and teachers may use them as stand alone learning tools as well as incorporate them into e-assessment tasks. Although the science discipline areas such chemistry, biology, geology, physics, mathematics and statistics are well represented, other discipline areas such as music, business, economics and commerce all have such tools freely available for educational use.

Participants will become more aware of the potential for interactivity in student assessment tasks and how this may be achieved for a variety of disciplines in commonly used virtual learning environments.

1086 Demo

keywords: interactivity / e-assessment / browser plugins / java applets

Social networking and repositories: engaging the user in the development of the Carrick Exchange

Wednesday
13:30

Large-scale implementation

Dr Rob Phillips
Murdoch University

The Carrick Institute was established by the Australian Government as the national focus for promoting learning and teaching in higher education. A key priority is to develop mechanisms for the identification, dissemination and embedding of good individual and institutional practices at a national and international level, and the Carrick Exchange will be the mechanism through which this is achieved.

The Carrick Exchange is intended to be more than just another repository. It will be a set of online services to provide social-networking and collaboration, resource contribution and sharing, search and discovery, and peer review and commentary across the Australian higher education sector. The Carrick Exchange will provide:
- Access to quality resources that support teaching and learning by searching and browsing
- Access to learning materials for sharing and repurposing
- Information about new technologies that impact on teaching practice and student learning experiences
- Ideas about learning and teaching practice
- Opportunities to network with other academics with similar interests in group spaces
- The ability to save resources, and search results to a personalised MyExchange area
- Opportunities to comment on and exchange ideas about the relevance and usefulness of particular teaching resources and to view the comments of others
- Opportunities to participate in discussions, debates and dialogue about teaching in higher education

The Exchange services are being developed in consultation with the higher education sector, guided by the principles of co-production with user communities. The project team involves Carrick Institute staff, technical architects, individual experts and professional bodies. Development began through the use of scenarios and a static, Web-based ‘demonstrator’. The scenarios were validated through a Think Tank held in September 2006. Feedback from this, and other, activities was used to inform the development of Use Cases, which are being validated through expert review and through a national roadshow and pilot group strategy. This feedback will inform the development of a prototype system, which will, in turn, be evaluated through a national consultation strategy.

1361 Short Paper

keywords: embedding good practice / repositories

Supporting the Net Gen learner by integrating e-resources within a University VLE

Wednesday
13:30

Large-scale implementation

Mrs Jill Beard
Ms Kathryn Cheshir
Ms Anne Davey
Dr Barbara Newland
Bournemouth University

E-resource access has become an integral part of many students' learning experience. The availability of e-books and e-journals has increased dramatically and in many higher education libraries there has been a steady movement from print to electronic materials. At Bournemouth University 60% of the total Library budget is now spent on electronic resources. In 2005, the number of electronic downloads from databases; e-books and e-journals far exceeded the number of books borrowed. Net Generation students (born since 1980) have different attitudes towards using computers for learning (Brown, 2000, Tapscott, 1999). These students have grown up in a world in which computers are part of life, they like to multi-task and are used to continuous communication, through texting, phone calls and e-mail, and instant access to multiple sources information via the Internet (Oblinger, 2003).

In 2005 Bournemouth University began the implementation of Blackboard as a single VLE across the University. Working from the perspective of the learner the unit of study was chosen as the standard for integration. Thus the initial focus was on providing easy access to quality learning materials for the students. This was achieved through this project being undertaken by the Educational Development Services (EDS) and the Library which are both within Academic Services. The EDS aims to enhance the practice of learning and teaching, support the effective use of e-learning, encourage innovation in the curriculum and promote scholarship and research.

Project planning included an opportunity to review the Library provision and identify which e-resources might be delivered better at the module level. The challenges of the first phase of the project included the provision of reading lists chosen by the academics to be integrated within each module. The second phase was direct access from the module to exam papers. The third phase is designing learning activities to exploit the e-resources, including digitised versions of high demand texts in the Short Loan Collection, which has been made possible by changes to the Copyright Licensing Agency (CLA) licence. For example, encouraging collaborative learning with Web 2.0 technologies by examining the implications for group work, made possible by the provision of multiple simultaneous users of e-books.

The aggregate of issues and downloads has increased implying that users might be reading more. Further evaluation is planned towards the end of the academic year in order to include the revision period in the summer.

Online learning activities using quality e-resources are the next step forward in e-learning for the majority of academics, who are familiar with using reading lists, and will engage Net Gen students, who are confident online learners. There are some limitations to the changes in the CLA licence but there is still plenty of scope for developments.

Brown, J. S., (2000), New Learning Environments for the 21st Century, http://www.johnseelybrown.com/newlearning.pdf, last accessed 13 February 2007
Oblinger, D., (2003), Boomers, Gen-Xers and Millennials, Understanding the New Students, Educause Review, July/August
Tapscott, P, (1998), 'Growing Up Digital: the Rise of the Net Generation', McGraw Hill, New York

1283 Short Paper

keywords: e-resources / copyright materials / e-literacy

Minted: Moodle integration with enterprise data

Wednesday
13:30

Large-scale implementation

Dr John Davies
Mr Paolo Oprandi
Dr Carol Shergold
University of Sussex

One of the challenges facing institutions when they adopt a learning management system (LMS) is the handling of staff roles and student enrolments in an efficient and scalable way that keeps pace with registration changes. In this paper we describe our experience of the data integration, and the interfacing of our student record system (SRS) portal and departmental websites with our LMS, Moodle. We also discuss briefly how we plan to pass marks data generated in the LMS to the SRS.

We received JISC funding for the Minted project (Moodle Integration with Enterprise Data). The project created a standards-based solution (IMS Enterprise) to data integration, which can be reused in different contexts. Use of an open technical standard for interoperability specification moved us closer to the e-framework model for learning technology of small, agile services, loosely coupled with standards-based exchanges of data.

We adopted many of the solutions that were developed for the project within our own institution.
- We use a RESTian Web service approach to allow straightforward read access of the central records database.
- We use the Minted enrolment plug-in, that subscribes students to Moodle course sites from Enterprise data and creates users and courses and handles staff roles.
- We have direct links from our SRS portal to the LMS courses and applied single sign-on so staff and students wouldn't need to re-enter their passwords when moving from the SRS to the LMS.
- We use the Minted profile plug-in, which addresses a missing feature of Moodle by making it possible to set up default settings for automatically created users and courses.

In early 2007 we were awarded more JISC funding for a toolkit project - entitled XMarks - to facilitate the exchange of marks and assessment information between systems using a Web services model in a generic way, which will also work for our systems.

A survey of student's opinion of our LMS was overwhelmingly positive, in terms of both usability and value. We will be conducting more in-depth research into how student approaches to learning have been supported through our LMS over the coming months. From the perspective of staff, we hold regular users' group meetings to gather feedback on our LMS and are undertaking a formal evaluation of the staff experience in the summer term.

The Minted project has been highly successful. It has enabled us to quickly and effectively embed an LMS into the institution with little negative feedback. 25% of courses use our LMS, we have over 8000 students and over 600 staff subscribed. One concern is the lack of openness of our course sites to external audiences. At present the default settings mean that only those formally associated with the course can see it. We are looking for one solution that will provide open courseware (OCW) and courseware for current students.

1260 Short Paper

keywords: integration / scalability / Web services / REST / IMS Enterprise

Collaborative learning in a wiki environment: experiences from a software engineering course

Wednesday
13:30

Large-scale implementation

Mr David King
Dr Shailey Minocha
Mr Mat Schencks
Mr Niall Sclater
Dr Josie Taylor
Dr Pete Thomas
The Open University

The post-graduate course, Software Requirements for Business Systems, in the Department of Computing of the Open University (OU) is one of the early adopters of OU's Virtual Learning Environment. The course involves teaching systematic elicitation and documentation of requirements of software systems. On a software development project, team members often work remotely from one another and increasingly use wikis to collaboratively develop the requirements specification. In order to emulate requirements engineering practice, the course has been enhanced to include group collaboration using a wiki. In this paper, we describe the wiki-based collaborative activities and the on-going evaluation of the pedagogical effectiveness of a wiki for collaborative learning.

1159 Short Paper

keywords: wikis / collaborative learning / social constructivism / collaborative authoring / requirements engineering

Making wikis work: how do we create the conditions for effective collaborative learning?

Wednesday
13:30

Large-scale implementation

Mr Wayne Britcliffe
Dr Richard Walker
University of York

This paper explores the challenges of engaging undergraduate students in collaborative learning through the use of wiki tools, and reflects on the socio-constructivist perspective to learning design. The paper reports on a series of six pilot projects in different subject areas, designed around socio-constructivist pedagogical scenarios, which aimed to foster interaction, collaboration and community building for campus-based students. The projects were delivered in academic year 2006-07, as part of the University's phased roll-out of its Virtual Learning Environment (VLE). Staff were trained to use the University's institutional VLE (Blackboard Academic Suite), employing the Campus LX tool-suite, which includes an integrated wiki space within each module site. The wiki tool was central to the performance of collaborative activity in each pilot course.

The projects targeted group and community-based activities through structured group-work and cohort-based activity. The pedagogic scenarios included:
- Collaborative writing of case study reports, coupled with peer assessment of group reports
- Collaborative development of course glossaries
- Shared reflective journals of work-based practice
- Collaborative editing and development of course notes

The course design approaches have been captured within a wiki interaction matrix, which represents an adaptation of the model presented by Andrew Fisher at ALT-C 2006.

An interpretive research approach was adopted to review the courses, drawing on multiple data collection methods (qualitative and quantitative techniques) to provide a rich picture of student working patterns using the wiki tool-set. This involved the use of entry and exit survey instruments for the course, activity logs to track interaction patterns and structured interviews with focus groups, to provide rich pictures of student learning.

The preliminary findings from these case studies highlight the role of the instructor in managing the induction and enculturation processes - creating the conditions for collaborative learning between students. Feedback suggests that student engagement is contingent on a number of factors, ranging from technical competence (confidence with the tools) to affective support variables (trust, willingness to share), as well as confidence and ability to engage in critical thinking. Whilst the evidence is drawn from a restricted range of pilot modules and a small population of students, it runs counter to the 'digital native' thesis (Prensky, 2001) that students are naturally drawn to collaborative software in learning contexts, and are effective learners by right.

The paper offers a preliminary framework of instructional responsibilities for the design of collaborative activities using the wiki tool-set. This will be developed and refined further, as the University scales up VLE usage and staff become familiar with the collaborative tool-set.

1192 Short Paper

keywords: wikis / collaborative learning / learning design

A tale of two wikis: a comparative study of collaborative online spaces

Wednesday
13:30

Large-scale implementation

Mr Phil Cheeseman
Roehampton University

Mr Brian Kilpatrick
University of Surrey

The emergence of a rapidly evolving range of Web 2.0 technologies coupled with the ease and speed, with which the .net generation have adopted social-software applications, provides significant and new challenges to educational technologists and academics alike. They must decide which tools to adopt determine methods of implementation and resolve how to make room for collaborative learning within existing programme structures.

This paper will describe the approach taken by the University of Surrey and Roehampton University to introducing the use of wikis and associated collaborative tools. We describe the use of wikis embedded within our shared institutional virtual learning environment, alongside hosted social software applications to provide a media-rich environment that promotes creativity and collaboration.

We have adopted an action research approach that seeks to develop models of practice for using wikis. Central to this approach is a recognition that the views of learners must be considered in decision making processes about the adoption and use of tools for social interaction.

We present two alternative approaches to the use of wikis, one independent of our VLE (WebTV Vista) and the other integrated with it. In both cases additional social-software applications for bookmaking audio/video messaging and podcasting have been employed.

Evaluation of the use of these tools will include use of the following:
- An online survey, used to capture staff and students views, expectations and experiences of social-software applications prior to and subsequent to their use.
- Focus groups, used to explore underlying reasons for the views expressed by students accompanied by analysis of the use of tools through the VLE reporting interface and by adopting methodologies such as transactional analysis.

This paper focuses on two projects, demonstrating contrasting approaches to introducing the use of wikis:

1) In a project at the University of Surrey, 45 international students are using wikis to develop writing skills and promote social engagement prior to

joining a range of post graduate programmes. Students are using the hosted wiki, Wetpaint together with applications for video messaging in the collaborative development of a resource that explores issues of poverty from across the globe.

2) Students studying an MA in creative writing at Roehampton are using wikis as part of a module titled 'Writing and editing for the Internet'. Mediawiki has been integrated with the institutional VLE and is being used alongside tools for social-bookmarking and podcasting. Students are using these tools to better appreciate the impact that different Web technologies have on the roles of the online writer.

We will report on the students' experiences of using wikis and explore how their attitudes to collaborative working developed and changed through their use. From these experiences, we hope to develop pedagogical models for online collaborative group working across multiple learning contexts.

1311 Short Paper

keywords: wikis: models of practice / collaborative online working / vle integration / video messaging and social-bookmarking / wikis with social-software apps

Really SIMPLE stuff: simulated professional learning

Wednesday
13:30

Large-scale implementation

Mrs Patricia McKellar
UK Centre for Legal Education

Professor Paul Maharg
University of Strathclyde

It is generally acknowledged that professional learning can, under appropriate conditions, be considerably enhanced by the use of simulation. In aviation, business process, health sciences and science disciplines this has been proven in many individual use case studies. Over the last five years a team at the Glasgow Graduate School of Law (GGSL) has constructed a virtual simulation environment for professional learning in law, using proprietary software. Postgraduate students on a professional legal education programme, formed into virtual firms, use this sophisticated online environment to carry out entire legal transactions on behalf of virtual clients – for example purchase and sale of property, litigation in the Sheriff Court, and winding up the estate of a deceased client. UK Centre for Legal Education (UKCLE) & JISC have always known the value of what became known as the 'transactional learning environment' and in May 2006, began supporting a major project developing an open source, open–standards Web-based simulation engine, now called SIMPLE (Simulated Professional Learning Environment). The SIMPLE project addresses two fundamental sets of issues in the use of e-simulations:

1. The design and implementation of an online professional learning environment that can be used in a wide variety of professions within HE and FE
2. The educational, organisational and management issues that arise from the large-scale implementation of this environment.

The project seeks to establish that SIMPLE can be used by any professional discipline for education, training and assessment, and within any professional grouping in society generally. It enables problem definition to begin with construction of the problem space. It can be used to generate problems and problem-based scenarios that:

- Are clear and clearly defined, or are deliberately defined as having unstated constraints
- Possess multiple solutions, solution paths, or no consensual agreement on the appropriate solution
- Possess more or less manipulatable parameters

- Are either typical problems for learners, or problems where there are no prototypic examples
- Allow for uncertainty about which concepts, rules, and principles are necessary for solution
- Require learners to make judgments about the problem and defend them
- Enhance substantial reflection and collaborative learning; or can be performed by singletons.

The simulations site learners in a professional context, where there are aggregates of transactions, perhaps multiple solution paths, and where their work is, as it will be in the workplace, distributed between tools, colleagues, resources, anticipated and unanticipated problems and individual constructions of knowledge and experience. Such simulations are powerful learning tools, and the aim now is to generalise that success to other professions, other departments and schools.

SIMPLE is being specified according to the requirements of a representative grouping of professions currently law, architecture and social work, and the specification will be implemented as a fully-functional platform together with a suite of tools which will allow the creation of transactional content by academics and professionals in other professional groupings.

This session will show the range and depth of the initiative, together with brief video presentations of students commenting on their work.

1186 Short Paper

keywords: e-simulations / collaborative learning / transactional learning / learning for a profession / large scale implementation of innovative project

Creating learning networks in the national professional qualification for headship

Wednesday
13:30

Large-scale implementation

Mr Tim McShane
NCSL

This paper takes a cognitive/constructivist view of the design of networked learning spaces within the NCSL's online communities associated with National Professional Qualification for Headship (NPQH) which has 8000 candidates at any one time. NPQH online communities were originally set up in 2001 to be social constructive environment by Ultralab but became tutor/candidate dialogues. These were ineffective.

This paper shows how widespread dissatisfaction in 2005 led, through the findings of interviews and survey's with participants and tutors, to workshops with the lead online tutors and centre managers in the 9 regions which resulted in; the reconstruction of the communities into social constructivist/situated cognitive spaces; the creation of design templates for the use of tutors; action research into the optimum size of communities for group dialogue; and raising the quality of facilitation in community dialogue through online facilitation and tutor training. The surveys over the subsequent three cohorts show an increasing value put on the transformational nature of the dialogue from participants.

The perception of the participant's is improving as to value of online collaboration; tutors are still not convinced it leads to the significant development in leadership skills although the felt more confident managing the environment. This needs to be tackled next to show how transformational dialogue can take place.

Currently, we have used the lessons from NPQH in developing our latest programme, Leadership Pathways, a personalised learning programme,

needed to develop a way for situated cognitive learning to take place. We developed the idea of a blended learning event around key days the learning from which is used in the face to face sessions and beyond. This is currently being developed by one region. We are also seeking to widen facilitators and participants view of online spaces as not just locations but themselves as nodes in an actor network.

1162 Short Paper

keywords: redesigning learning spaces / rethinking the concept of online space / from constructivism to social constructivism / impact of community size / facilitator/tutor online training

Blended learning and media richness theory: student perception of different media platforms within an International MBA programme

Wednesday
13:30

Learning and internationalism

Ms Sue Bathmaker
Dr John Beaumont-Kerridge
University of Bedfordshire

Blended learning uses a variety of platforms and media richness theory (MRT) argues performance improves when participants use "richer" media. This evaluation studied an MBA programme designed for students in the UK and international locations, which are currently India and Oman. The media platforms used in addition to face-to-face tutorials were; a VoiceIP platform, bespoke CD-ROM materials, online academic databases, and a virtual learning environment (VLE: Blackboard). Qualitative research methods were used to evaluate student learning and assessment for each media platform. An integrated perspective was obtained via a quantitative methodology, the Analytic Hierarchy Process. This allows pairwise comparison within the given choice of alternatives, producing a hierarchical priority from each respondent of the relative importance of each of the media elements. A measurement of inconsistency is also derived as a result of the scoring the items considered.

The results indicate the Indian group of students viewed the media into two groupings; firstly a preference for synchronous real-time, real life communications (RTRLC) which included the VoiceIP platform and secondly the IT based media which included CD rom, the VLE and the Athens databases. This was not however the case for the students from Oman where the VoiceIP media was mostly on a lower priority. This implied MRT correlation with learning may be moderated by learning technology. It appears student preference was greater for the "richer media" where historical Internet development is better. The majority of all students did not however have a consistent view in terms of their importance of the various media available, with some overlap being apparent. The qualitative phase identified a need to develop the independent computer-based media elements to enhance the interactive student experience, and integrate them more within the RTRLC learning and assessment activities. Additionally, RTRLC elements appeared also to have a positive effect on student motivation although no correlation or differences could be identified with regard to MRT and learning styles within the cohorts studied.

Further research is indicated to investigate the integration of RTRLC / and independent computer-based media elements. Other aspects include the proportionate balance of use, interaction, focus, assessment and feedback to indicate relative value within the student experience of learning.

1237 Short Paper

keywords: blended learning / media richness theory / voiceIP

Large-scale messaging - techniques & technologies

Wednesday
13:30

Learning and internationalism

Dr Chris Dennett
Mr John Traxler
University of Wolverhampton

The last four or five years have seen a range of pilots and trials in Africa, Asia and Europe that have demonstrated that educational text messaging has a wide variety of exciting pedagogic, pastoral and administrative applications and that it is technically easy to implement and deliver. These trials and pilots have however been, for the most part, small-scale and local in their extent and short-term or fixed-term in duration and have not identified or addressed the challenges of scale or sustainability. The current presentation looks at the challenges and the strategies that have been used in Africa and UK to develop and run large-scale and sustained educational messaging across institutions, sectors. The presentation draws on well established projects at the nationally funded developments, earlier pilots, ongoing commercial consultancy at the University of Wolverhampton and a national teacher-support project in Kenya. The presenters will address:

- The Technologies: the various messaging technologies and message options, moving beyond broadcasting, how you procure, manage and pay for them; multi-media messaging
- The Opportunities: ways of exploiting messaging for administration, support, assessment and learning
- Implementation: buy or build, bespoke or off-the-shelf; piloting and testing; the market-place; getting learners on the system; training the staff; preventing abuse; messaging in blended learning; working with student attitudes and expectations
- Evaluation and monitoring: building it in, not bolting it on; using system and technical data; embedding evaluation into messaging
- Business models, business cases and budgets: retention, progression, recruitment, competition, savings, effectiveness; soft outcomes and distance travelled
- Policy Support: IT, HR, Learning & Teaching; how to engage with policy makers and managers
- Legal Issues: data protection, liability, harm etc

1108 Workshop

keywords: messaging / mobile learning / SMS

What is this creature called educational technology? A review of and from the field

Wednesday
13:30

Learning technology for the social network generation

Professor Laura Czerniewicz
University of Cape Town

Drawing on what researchers and professionals in the field internationally say, this paper reviews educational technology as an emergent field. The review reveals the continuum of perspectives on what the field is, and how it is bounded or fragmented. The paper then describes two dimensions of the field: the professional and scholarly considering how the forms of knowledge differ and overlap in each domain. Then the focus shifts to the nature of the new knowledge field, the scholarly domain, listing the tensions and contradictions which exist. Finally the paper provides conceptual frameworks for distinguishing fields from one another, suggesting what these approaches might mean, especially for the scholarly field of educational technology.

1097 Research Paper

keywords: discipline / scholarly field / educational technology / professional field / knowledge field

Can mobile learning content also be collaborative? A demonstration of tools and techniques from across the UK

Wednesday
13:30

Learning technology for the social network generation

Ms Jo Colley
Mr Geoff Stead
Tribal CTAD

Tribal CTAD have created and trialled innovative approaches to mobile learning since 2001. Our original experimentation with m-learning materials highlighted the importance of collaborative learning experiences. This led us to a more constructivist approach when developing both tools and materials, which collaboration and active participation are key. Our most recent developments, particularly those with the LSN, have made it easier for both tutors and students to participate, publish and develop their own materials. Research has shown that helping learners publish their own m-learning can encourage student involvement and engagement (LSN 2006).

Two of the most successful approaches were:

1. MyLearning Author: a PC based tool to create your own mobile activities. Originally aimed at teachers, students have been quick to claim it as their own. The MyLearning Author helps you create a set of simple, mobile games and activities, then share them with peers.

2. The MediaBoard: a flexible, Web-based tool which lets learners use mobile devices to capture and manage media for communication and collaboration. They build up online Web pages by sending messages, pictures and audio from their phones. MediaBoards lend themselves equally well to individual and group work.

Both were piloted in the Mobile Learning Teachers' toolkit project (LSN 2006) to great effect: 'a wide variety of learning materials were created with most tutors and students demonstrating great enthusiasm for mobile learning.' These new, open-ended m-learning tools present different challenges for educators. Teachers not only need practical skills, but also a different view of their own role in this new vision of education in which teachers and learners collaborate and investigate together.

At this demonstration, attendees will:
- Examine results of current trials and discuss implications
- Become familiar with the authoring tool and its applications
- Create their own m-learning materials for a specific purpose

1271 Demo

keywords: mobile learning / private blogging from your phone / mediaBoard and PocketPC / collaborating and creating / learners making their own mobile content

Student creation of serious games and simulations using the BehaviourComposer

Wednesday
13:30

Learning technology for the social network generation

Dr Ken Kahn
Dr Liz Masterman
Mr Howard Noble
Oxford University Computing Service

A growing community of researchers and educators are using computer modelling and simulation in many fields, including sociology, zoology, economics, archaeology, ecology, engineering, business and epidemiology (see, for example, http://sbs-net.sbs.ox.ac.uk/complexity/complexity_casg.asp). From a constructionist perspective (http://www.papert.org/articles/SituatingConstructionism.html), efforts to help students to acquire an understanding of both the process of model-making and the insights that can result from computer simulations should focus on supporting them as they build and analyse computer models in their field of specialisation. However, existing modelling tools, even NetLogo (http://ccl.northwestern.edu/netlogo), require that they first make a large investment in developing programming skills. This can deter some students and cause them to forego valuable opportunities for learning.

To address this situation, we are exploring the educational possibilities of accessible model-building tools within the JISC-funded Constructing2Learn Project. We have built a prototype model-construction tool called the BehaviourComposer. The key idea underlying the tool is that a large number of carefully designed customisable program pieces, called micro-behaviours, can be made available for composing a wide variety of models. Hence, the modelling process becomes one of browsing, composing, and customising modular components rather than programming from scratch. In this way, students can focus on issues related to the domain which they are modelling, as the major technical issues will have been resolved for them during the creation of these program fragments.

The proposed demonstration is intended to give participants a vision of how the making of computer games, models and simulations can be made accessible to non-experts. It will include a live session in which a series of models are incrementally constructed and run, and the audience will be given the opportunity to make choices about how the models are made. We will also report the results of early field-tests of the BehaviourComposer with students at Oxford University.

1102 Demo

keywords: modelling / simulation / multi-agent modelling / user accessible modelling tools

Documentit - a simple referencing tool

Wednesday
14:30

Designing learning spaces

Mr James Thornley
Northumbria Leaning

Mr Malcolm Bell
Mr Neil Eliot
Northumbria University

In this electronic age, resources for teaching good citation techniques haven't kept pace with the rate at which online information sources are proliferating. Research, writing and citation skills need to be taught effectively in order to enable students to reference correctly and wisely and to encourage good habits which assist in avoiding accusations of plagiarism.

'Document it' is an electronic solution designed to help this process using just-in-time learning specifically to tackle the difficulties students have citing multiple sources and recording information about them. By helping the student to record the correct information, following conventional citation standards, 'Document it' encourages students to learn how to create accurate and consistent citations. Built in to the software is an analysis mechanism

which helps the user to identify easily where acknowledgement of sources has been insufficiently robust.

In technical terms ‘Document it’ breaks down the documents into a sequence of words without any formatting or layouts to get in the way. It then performs a student centric analysis that gives an indication on a paragraph by paragraph basis of how the reference and course materials have been utilised in the construction of the finished piece of work.

In practical terms Document it sits within a Word document and can be called up at any point helping students to reference correctly, providing guidance and identifying where they may have inadvertently missed a citation. The advantage of the simple system is that by making it much easier for students to reference correctly and to avoid accidental plagiarism, it teaches good academic practice and encourages the development of sound research skills. In a number of trials with students at Northumbria Document it has proved itself to be an invaluable aid to academic writing.

1120 Poster

keywords: referencing / plagiarism / citation

The use of interactive online quizzes in Maths

Wednesday
14:30

Designing learning spaces

Dr Judy Ekins
The Open University

In order to improve student learning and hence retention on Level 1 Open University mathematics, we are piloting short interactive Internet quizzes, replacing previous longer multiple choice tests (CMAs). These quizzes are formative, but in rewritten courses they may constitute summative assessment. The OU package “Open Mark” is used, which permits a wide variety of question styles and feedback.

On the first course module (MU120), the quizzes cover preparatory work. On the second course module (MST121), there is one quiz per chapter (two weeks work). Students receive instant feedback, where as previously they had to wait days or weeks.

Each quiz has about six questions. A student is allowed several attempts, with appropriate teaching feedback after each attempt. At the end of each quiz, alongside the mark, relevant study advice is given to the student, with references to appropriate course material. Examples of the quiz questions and feedback will be demonstrated. The quiz administrators can see all student attempts, helping in both modifying questions and their feedback and also in giving individual help. An analysis of these results will be included.

The quizzes have been evaluated using actual students “thinking aloud” and an analysis of this, together with extracts of the videos will be shown. This and other user feedback on the pilot quizzes suggests that the quizzes are not only helpful to student learning, but also enjoyable.

Initial authoring and programming of quiz questions is more time-consuming than for the standard multiple choice tests. However there is built-in variation, so that questions may appear in different guises for subsequent users and repeat attempts. In the future, it is hoped to link the quiz feedback directly to PDF files of course materials and make these available together with a set of quizzes on the OU’s “Open Content” Web-site for all to try.

1154 Poster

keywords: e-assessment / distance learning / mathematics

Scripware: a Web-based package for teaching dispensing

Wednesday
14:30

Designing learning spaces

Dr Helen Boardman
Dr Matthew Boyd
Mrs Stephanie Bridges
Dr John Horton
Ms Rebecca Marshall
University of Nottingham

Student pharmacists take a module on the physical practice of everyday pharmacy within the law. Previously, teaching dispensing was based around paper prescriptions; larger, more complex classes now demand a course less labour-intensive in preparation and marking.

Scripware is a set of three substantial PHP programs run in conjunction with a MySQL database. (An earlier Authorware version had been available from a LAN only.) It operates in three different modes: 'Practice' (within the dispensing class), 'Unsupervised' (away from the class) and 'Examination'. Automatic feedback is available from the first two and in 'Practice' this feedback is moderated by demonstrators; furthermore, a number of counselling exercises are included.

The first program is for course administration including the creation of exercises. Students use the second for accessing the exercise and for resolving queries in dispensing. The final program allows the students' work to be reviewed by both students and moderators.

Scripware is used in three half-day weekly classes of about 40 students each over ten weeks, the last three being examinations. Each student sees eight exercises every week. The physical location is a custom-built suite that includes key features of a pharmacist's establishment such as a collection of standard pharmaceutical texts, drug cupboards and an 'over the counter' facility. After dealing with an exercise on the screen, a student goes on to select appropriate medicines from a drug cupboard and hands them to one of eight demonstrators – all practising pharmacists – who takes the role of patient but who subsequently checks the products dispensed are correct and comments on the student's counselling skills.

The poster will show how Scripware is used: participants will see how it is used by students (including the resolution of legal, clinical and professional issues), how it eases the burden of marking and how feedback enhances student learning.

1198 Poster

keywords: dispensing / large group e-learning / automated marking / blended e-learning

The use of practitioners concepts of inclusivity to inform the planning of learning activities

Wednesday
14:30

Designing learning spaces

Miss Emma Bradburn
University of Teesside

Recent research has identified the need to understand how accessibility concepts mediate the interpretation of accessibility guidance and thus practitioners' goal setting when creating learning experiences (Seale, 2006). This research project is aimed at directly responding to this need and aims to provide a planning tool to help practitioners in both identifying their own accessibility concepts and developing their own adaptable and inclusive approaches to teaching practice.

To gain an understanding of practitioners' concept framework, metaphors are explored. Metaphors can be understood as 'modelling ideas' structuring and directing activities and provide an opportunity to understand relationships between theoretical concepts and reality. Further the use of metaphor as an

evaluation instrument can provide an enriching context with which to reflect on experience. In the present study the evaluation techniques employed by Starr-Glass (2005) have been adapted to provide a means of gaining access to practitioners' metaphors regarding accessibility issues. The aim of this technique is to provide insight into the organisation of practitioner's theoretical concepts through:

- Eliciting practitioner's metaphors to provide insight into concepts of accessibility.
- Providing a short story or extended metaphor to provide insight into experiences of providing accessible learning experiences
Semantic Indicators
- Identifying semantic word clusters for analysis of congruence with support material vocabulary.

Results will be presented from the analysis of practitioner metaphors and themes explored along with the potential use of metaphors can inform support needs.

To facilitate the planning of inclusive learning experiences within individual teaching contexts a interactive tool design is proposed which aims to support:
- Concept identification to inform approaches to support.
- Planning learning experiences with regard for the diverse accessibility needs of students
- Identifying particular development needs for planned learning activities

1232 Poster

keywords: accessibility practices / planning learning activities / evaluation technique

Developing and evaluating an online PhD

Wednesday
14:30

Designing learning spaces

Prof. Christi Deaton
Ms Laura Shaw
University of Manchester

Prof. Peter Callery
Dr Gunn Grande
Mr Andrew Hall
University of Manchester

The poster reports on the development and implementation of an online PhD programme at the University of Manchester. The poster utilises the theoretical framework of Cultural-Historical Activity Theory (CHAT) (Vygotsky, 1978, Engeström, 2001) to explore experiences in the development of the programme. The use of CHAT allows new understandings of innovation in educational practice to be gained through the exploration of "contradictions" (Engeström, 2001) that emerge from the interaction between different activity systems and boundary objects. Activity systems include: the learner's experiences of e-learning, the innovators experiences, and the role of supervisors, delivery systems and institutional practices. Whilst boundary objects may include: the VLE; video communication tools; skills training modules; regulations and tutor and peer support.The poster explores the rationale, design, development, technological innovation, implementation and evaluation of an online PhD. This is drawn from 12 months of work within the Faculty of Medical and Human Sciences at the University of Manchester.

The study provides insight in to the experiences of staff and students during the development and implementation of the first online PhD in the University of Manchester. This is an evaluation of work in progress intended to feedback into a further cycle of development and refinement. The theoretical model being piloted should result in a robust methodology for rigorous study during phase II of the project. The work in progress has the potential to be of significant value to the UoM and the wider community in that it utilizes communications technologies to draw together researchers, supervisors, teaching staff and PhD students.

Engeström, Y. (2001) Expansive learning at work: toward an activity theory reconceptualisation, Journal of Education and Work, 14/1, 133-156.
Vygotsky, L. S. (1978) Mind in society - the development of higher psychological processes. Cambridge, MA: Harvard University Press.

1240 Poster

keywords: online PhD / activity systems / boundary objects / desk top conferencing / integrating AJAX technologies

Transformational engagement

Wednesday
14:30

Designing learning spaces

Mr Don McIntyre
Miss Sarah Young
Urban Learning Space

The poster will present the findings of a qualitative evaluation report conducted following the completion of an Urban Learning Space (ULS) project called Big Noise Glasgow. This 18 month pilot was themed around the creative industries with a focus on using technology in music and film. It explored how transformational learning experiences can unlock creative potential to assist individuals on their journey towards employment.

Programme deployment was planned in three phases; 'Consultation Research' with the community, 'Exploring Industry Avenues' taster sessions and 'Creative Development' of personal portfolios. The project structure was designed to allow for organic development where each phase informed the design of the next. As an urban creative studio space, Big Noise provided adults from the local community with access to teaching and advice from industry professionals and the opportunity to explore a wide range of skills. The studio environment allowed for exploration of ideas and skill development at the learners own pace and level of ability. Participants became independent as creators and producers of self led projects, while developing a network of contacts and peers.

ULS are working closely with the Centre for Creative Communities, who have been contracted to complete the final report which will be published by ULS by April 07. Currently underway are a series of interviews with the project partners, manager, learners and tutors which will inform the publication.

The poster will depict a diagram, mapping the project model, inter-related components and learner journey. The publication will be available to delegates on the day along with copies of the Big Noise DVD which provides further information on project methodology and showcases a selection of participant work.

1262 Poster

keywords: vibrant learning / learner centred approach / flexible project models / removing barriers / experiential learning

Environments to promote engagement, interaction and enquiry

Wednesday
14:30

Designing learning spaces

Miss Kate Breakey
Mr Ian Miller
University of Manchester

Dr Carol Wakeford
University of Manchester, Faculty of Life Sciences

The Faculty of Life Sciences has exploited technologies to create and expand physical and virtual learning spaces to enhance student engagement, interaction and enquiry. We have used videoconferencing tools, such as Macromedia Breeze, Marratech and Horizon Live Classroom, within computer clusters to extend real-time lectures and seminars to students remote from the Faculty, including those on industrial placement. This technology has also enabled international experts to participate in curriculum delivery;

Stony Brook University New York presented review sessions to distance-learning students on 'The Biology of being Human'. Evaluation showed this enhanced student engagement with course material.

Student interaction was encouraged using the polling tool within Macromedia Breeze to elicit instant feedback on problems, review opinions and stimulate discussion on topics like bioethics and project design. In the conventional lecture theatre, as an alternative to PC-based technologies, we used radio-controlled handsets for interactive voting to promote social and experiential learning. A problem-solving exercise in bioinformatics, for instance, involved a group task to search for genomic sequences of a virus causing disease outbreak. A scenario was presented to students who voted on the routes to follow in order to identify and control the virus. Final year students are designing additional scenario-based e-resources using new software, PBLi, installed in a dedicated project laboratory. We are currently the only University in the UK using this innovative software to develop online problem solving in virtual learning spaces.

Another initiative to stimulate enquiry-based learning involves custom-designed spaces incorporating interactive white boards, videoconferencing facilities (the access grid) and video/DVD technologies. The current challenge is to disseminate good practice to staff so that they exploit this valuable resource to link pedagogy with technology.

The poster contains photographs of learning spaces, screenshots of software that provides enquiry-driven e-learning spaces, and examples demonstrating enrichment of the student experience.

1287 Poster

keywords: learning spaces / enquiry based learning / videoconferencing / interactive voting / online problem solving

SceDer and COML: toolsets to facilitate collaborative learning for one-to-one technology classroom

Wednesday
14:30

Designing learning spaces

Professor Chris Greenhalgh
Mr Jitti Niramitranon
Professor Mike Sharples
University of Nottingham

This paper is based on an empirical study on the design of technology enhanced learning in one-to-one technology classroom supported by ubiquitous computing and a distributed system runtime environment. The research aim is to balance the pedagogical and computational approaches for teachers and learners which are focusing on the necessary tools that enable teachers to design learning scenarios, and to manage and monitor the activities happening in the classroom.

The research begins with a study of selected scenarios for effective interactive learning in 1:1 collaborative classroom. These scenarios are analysed to capture common components and are then defined as notations. A sequence of prototyping has produced a software system that supports notations for interactive learning design and then be combined into activity diagrams that cover the original scenarios.

The real value of these learning diagrams is that they can be exported as a COML package, which comprises the COML document and learning resources, in the form of electronic files. In a one-to-one technology classroom Based on a generic XML description, to formalize collaboration and workflow patterns, COML will be then executed by COML Engine embedded in the computer supported collaborative learning run-time system in order to manage the interaction of a teacher and learners with ubiquitous computing in a classroom.

We propose an architecture and software tools to support the research aims which comprises of a scenarios designer tool, an intermediate language and an interface engine for classroom management system. Following the proposed architecture, we have developed a Scenario Designer (SceDer), a Classroom Orchestration Modelling Language (COML) and a COML engine embedded in run-time system.

A proposed architecture and developed software tools have been tested with the GroupScribbles (a distributed system runtime environment software) based on a set of selected learning scenarios for classrooms equipped with pen tablet computers. The complete system will be having a heuristic test and will then be evaluated in actual 1:1 classroom settings to explore whether these tools are supporting the research aims.

A key objective of this research is to balance the pedagogical and computational approaches, so that technologies for classroom interaction can support effective collaboration in real classrooms. On the one hand, teachers (both expert and non-expert designer) will be easily able to design, prepare the lesson, monitor and manage collaborative learning scenarios supported by ubiquitous computing (such as a combination of tablet PCs, desktop PCs and electronic whiteboards). On the other hand, the computational system, including hardware and software technologies will be able to support a range of effective learning scenarios. COML will be able to potentially make the designed scenarios to become an exchangeable collaborative learning object, so that teachers can share lesson elements.
keywords: technology enhanced learning / learning design / learning systems platforms and architectures / collaborative and group learning / wireless and mobile technologies

1328 Poster

Virtual learning environments: the students' perspective

Wednesday
14:30

Dr Pat Gannon-Leary
Mr Chris Turnock
Northumbria University

Large-scale implementation

Virtual Learning Environments (VLEs) are used extensively within higher education, primarily as an educational tool, but can also have additional functionality. There has been considerable debate, both internal to the university and in the external academic community about the value of a VLE. The need to undertake detailed examination of how students use a VLE has been a recurring theme in this debate. The purpose of this study was to ascertain how students used the university's VLE. The study's aims were to:
- To find out what students use on the VLE
- To determine what students use the VLE for
- To investigate student perceptions of the VLE
- To find out what additional information and features students would like
- To identify factors influencing student usage of the VLE

Study methodology followed principles for examining students' experiences of technology recommended for the JISC e-learning programme and used in the JISC LEX and LXP projects. The study used a naturalistic approach, recruiting student volunteers to complete various tools that would provide a triangulated, essentially open ended approach to obtaining students' perspectives on how they used the VLE. Three methods of data collection were used:
- Online questionnaire (n = 407)
- Diary, completed once a week for an eight week period (n = 14)
- Focus group (n = 14)

Quantitative data provided in questionnaire and diary were subjected to descriptive statistical analysis whilst qualitative data obtained from all three data collection methods were analysed following the principles of thematic coding. The main study themes were structural consistency; provision of learning materials; communication; student motivation: collaboration and enhanced use of the VLE.
keywords: VLE use / user evaluation

1047 Poster

Factors affecting the adoption of faculty-developed academic software: a study of five projects

Wednesday
14:30

Large-scale implementation

Mr Stephen Ehrmann
The TLT Group

Instruction at institutions of higher education must adapt more rapidly to changes in workforce needs, to global issues, to advances in disciplines, and to resource constraints. Nationally, the pace of improvement depends in part on the speed with which new ideas and materials can be adopted in all courses at all institutions.

We studied the adoption of five highly evaluated academic software projects at MIT. The five projects were:
- iLabs – a remote labs software architecture;
- iMOAT – a Web-based system for managing the assessment of student writing;
- TEAL – redesign of studio physics combining inquiry, discussion, experimentation, and visualization;
- XMAS – a rich media authoring tool supporting quotation of DVD content
- xTutor - a tool kit for creating online quizzes and tests & implementation for introductory computer science and AI

The study was based on over 150 interviews of faculty and staff at 32 institutions as well as close study of project evaluations and other documents. Although there are about 10,000 institutions of higher education in the world, the number of adopters per project was closer to 10, even after a two-year, $2.5 million dissemination campaign. Among the factors impeding adoption: lack of rewards and support for faculty to improve teaching in content-specific ways; faculty isolation; and a lack of attention to adoption issues when projects were selected for funding.

To increase the speed with which academic programs are updated and improved, we made a variety of recommendations to universities, funders, and employers. Three of the most important recommendations: a) strategies to help all faculty frequently scan, select and adapt improvements for all their courses; b) expansion of communication channels among peers teaching similar courses without net increase in workload, and c) core services that can help innovators more readily develop and share ideas and materials with peers.

To see the full report on this year-long study, see http://www.tltgroup.org/icampus/

1131 Poster

keywords: dissemination of innovation / open source / implementation issues / reward systems / support for adoption of innovation

How many?! Reducing staff stress levels with an innovative approach to life science sessions.

Wednesday
14:30

Large-scale implementation

Miss Janice Gibbs
Mrs Sally Holden
Peninsula College of Medicine and Dentistry

The poster depicts the use of learning technology to address issues arising from a review of Life Science teaching at the Peninsula College of Medicine and Dentistry. Issues include:-
- A need to reduce repetitive teaching sessions.
- A need to encourage deeper learning with students and to promote self-directed study.

- To strengthen the integration of LSRC content and materials with other aspects of the curriculum.

At the Peninsula College of Medicine and Dentistry, the basic sciences taught in Years 1 and 2 are largely delivered through the Life Science Resource Centre (LSRC). Teaching and learning in the LSRC is centred on small group sessions; each group comprising 8-12 students. In total a tutor can deliver up to 12 identical sessions over a day and a half period. 7 other tutors will be doing the same at other simultaneously running stations. At steady state there will be over 1000 medical students and up to 300 dental students.

Within the College's Medical School, two key new approaches were proposed, the first is a new integrated contact teaching session, the second is the development of a suite of online learning support modules that are carefully designed to stimulate a deeper learning experience, encourage reflective learning, but also guide students in their preparation for attending contact sessions.

We aim to show a visual depiction of the pre-blended approach with student and staff experiences through to a pictorial representation of the process of large scale blended learning implementation and an evaluation of its impact on both the student and staff experience.

1191 Poster

keywords: blended learning / impact of blended learning on student experience

Starting academics out on the right foot with e-learning: e-learning starter packs

Wednesday
14:30

Large-scale implementation

Mr Brian Irwin
Sheffield Hallam University

This poster is about a staff development project, which provides e-learning starter packs to promote e-learning support and good practice. The purpose of the staff development pack is to bridge the gap between face-to-face and e-learning for staff members, particularly those new to e-learning.

At Sheffield Hallam University, there is widespread use of the VLE, Blackboard, for blended learning modules. However, feedback from new staff members suggests that there is a gap in getting started in e-learning at the university. Some academics do not know what support is available or the potentials of e-learning.

To bridge this e-learning gap with new academic staff members, we are creating a pack of materials to distribute to all new academic staff upon arrival. The pack contains a welcome statement, quick reference guide to getting support, a good practice guide based on student feedback, and other guides to provide pedagogical support and examples. In addition, the pack will contain Post-It notes with contact information for e-learning support. The packs are necessary to support the large-scale implementation of e-learning at the university, as new staff must be encouraged to engage quickly.

After the first run of the packs, an evaluation will be done using a survey of all pack recipients and qualitative interviews with a selected group. The results of the evaluation will be presented in the session. The purpose of the evaluation will be to explore the effectiveness of the packs, decide what additional materials should be included in or removed from the pack (if anything), and determine future staff development needs and activities.

1196 Poster

keywords: e-learning / staff development / dissemination / resources

Mapping expectations of online assignment submission and online feedback

Wednesday
14:30

Large-scale implementation

Mr Stuart Hepplestone
Sheffield Hallam University

This poster presentation will provide a visual representation of the process used in designing an electronic assignment handler tool in response to the growing student expectations of online assignment submission and online feedback.

Students at Sheffield Hallam University are increasingly demanding the ability to submit assignments online and to receive feedback and marks online. In response to two recent surveys, regarding their expectations of a supportive e-learning environment and enhancements they would like to see made to improve their online learning experience, students frequently commented on the usefulness and flexibility of online submission and online feedback, and that they would expect access to this within their modules.

To meet these rising expectations, the University undertook a project to improve the way student assignments are processed and to enhance the way in which feedback can be provided through the University's Virtual Learning Environment, Blackboard. This was achieved by mapping out the lifecycle of a student assignment, and highlighting key areas for development. These have now been developed into an innovative new tool which:

1. Supports online feedback by
- Enabling tutors to batch upload student marks with feedback file attachments
- Providing feedback on group assignments to each individual in the group
- Allowing students to access their feedback all in one place
- Encouraging students to engage and reflect on their written feedback

2. Provides students with a detailed receipt of their assignment submission.

The poster will show a structured diagram of the resulting 'map' which includes the lifecycle of an assignment, clearly indicating where students have responsibilities in the course of completing and submitting assignments and acting upon feedback. Information about future plans for investigating the possible range of methods for reviewing and marking assignments on-screen, and writing feedback electronically, will also be displayed.

1197 Poster

keywords: e-learning / e-assessment / online assignment submission

Calculations for nursing practice

Wednesday
14:30

Large-scale implementation

Mr Philip Blake
Ms Sherri Ogston-Tuck
King's College London

This paper describes an educational component for pre- registration nursing students, as part of preparation for practice and an academic requirement. A vast amount of research and literature consistently identifies a lack of proficiency and knowledge amongst nurses in drug calculations.

In order to integrate this into a pre-registration nursing curriculum, Calculations for Nursing has been developed as a component of mandatory training. In the Common Foundation Programme (CFP), all students receive a workbook and classroom teaching in the first few weeks following induction. The content focuses on basic mathematic principles, metric conversions and calculations in relation to medication management and administration. Teaching strategies include group work, reflection and guided

practice questions. In addition, a supervised hour and a half session, in a computer laboratory offers a variety of electronic resources for learning and the students are to complete a set of multiple choice questions at three formative stages. The resources and tests are hosted within a Virtual Learning Environment (VLE). Following this, the students undertake an online summative examination comprising of ten multiple choice questions. The test is 30 minutes long and 100% must be achieved in order for the students to progress through the nursing programme. Students who fail this examination are provided one to one tutorials, practice questions, online resources and may re-take the summative examination a number of times until they achieve 100%. These are offered on a monthly basis during the academic year.

This educational component is being piloted on the full cohort of first year nursing students (n=417). The statistical features within the VLE have been used to assess the results from the formatives and summative examinations. Quantitative data includes trends across branch pathway (adult, mental health and child health), pass/fail rates and average score. Qualitative data includes entrance criteria, level of registration being studied and other demographic data. Expert statisticians have been consulted to further extrapolate results and trends.

It may be difficult to determine the outcomes in relation to practice until further data is acquired. The system in place has allowed academic staff to identify students who require further support with numeracy and it is hoped that varying modes of learning (for example VLE, workbook and so on) will engage the student and target their learning needs more effectively. Analysis of the statistics, in combination with student records, will also help to identify those students in need of additional support and aims to prepare these students for safe and competent practice upon registration.

Calculations for Nursing will be rolled out over each subsequent year of study in order to provide a coherent strategy to increase knowledge and skill in numeracy and drug calculations. The content aims to develop progressively and expand upon those skills specific to the branch programmes. Initial findings from the qualitative and quantitative data of the pilot will be the catalyst for future development of the educational scheme, with the aim to improve numeracy skills and instil safe nursing practice.

1222 Poster

keywords: assessment / nursing / numeracy / VLE

E-learning in schools survey 2006

Wednesday
14:30

Large-scale implementation

Ms Sarah Kitchen
National Centre for Social Research

The E-learning in Schools Survey is a recurring national survey aiming to measure progress of schools towards e-maturity. It does so by measuring progress on a set of indicators that are believed to be representative of this. Target groups for data collection are head-teachers, ICT co-ordinators and teachers in both primary and secondary schools. The survey focuses on England. Issues are particularly wide, ranging from ICT leadership, strategy and spending on ICT, through technical infrastructure, availability of resources, time savings and teacher confidence. It is, effectively, an attempt at a comprehensive 'state of the nation' in respect of up-take and integration of educational technologies in schools across the country.

The report of this survey is expected to be available in April. In a following stage, a secondary analysis of the data will be conducted, to understand associations between several aspects of e-maturity.

1256 Poster

keywords: e-maturity

Authoring IMS learning design

Wednesday
14:30

Large-scale implementation

Mr Mark Barrett-Baxendale
Mr Paul Hazlewood
Miss Amanda Oddie
Liverpool Hope University

The poster will present the outcomes of the JISC-funded LD4P project (supporting practitioners in producing IMS Learning Design).

The project is developing a new user interface for the Reload IMS Learning Design editor, which is more suitable for use by teaching practitioners. The user requirements for this interface are being collected from practitioners working in a variety of subject disciplines in both further education (St Helens College) and higher education (Liverpool Hope University), through use and evaluation of the current version of the Reload editor. These practitioners are producing IMS LD units of learning, and, in some cases, running these with learners.

The poster will disseminate experience gained during the project; in particular, it will present case studies of the production of IMS Learning Design units of learning by teaching practitioners. The poster will also report on the learner experience of completing an online course supported by IMS Learning Design.

This will be an opportunity for delegates to see the new user interface to the Reload IMS Learning Design editor, and the process through which it was developed. There will be opportunity to provide further feedback on the prototype user interface and inform future development of the tool.

1257 Poster

keywords: IMS learning design / user interface / user evaluation / authoring

Culturally situated Japanese language online tutorials

Wednesday
14:30

Learning and internationalism

Mrs Judith Jurowska
Durham University

Durham University's Japanese language course incorporates a year's study in a Japanese University. Dr Kasza therefore created 'culturally situated' interactive tutorials employing Japanese pedagogic methodology, which emphasises students themselves discovering rules and then applying them to the language.

The text book-based exercises which the tutorials replace did not prepare students adequately for classroom application. Students seemed not to know whether they had met their learning objectives. Staff use a Word plug-in (Course Genie) to create Web-based, interactive tutorials from documents written in Japanese characters.

Course Genie affords repetitive practice such as:
- Flash cards to learn Kanji (vocabulary)
- Matching questions to teach Japanese idioms and collocations
- Gap fill questions to enhance and test knowledge of grammar

Together with feedback for students to gauge their progress.
Japanese follows very strict rules concerning the use of polite or colloquial language so staff intend to provide context by the use of carefully selected images and video. Students respond using the appropriate language.

Staff experience and small focus groups show that students are engaging more with the materials and find themselves better prepared for speaking in practical sessions. Students are simultaneously studying and self-testing what they are learning and receive instant feedback. Learning is reinforced and

materials are always available for revision. This means that they are able to overcome the initial cultural hurdle and focus on the performance aspect of language in the seminars.

I show a linear progression from passive book to interactive material using graphics and a series of screen shots from actual course materials. Blocks of text will give the background, an explanation of the pedagogic rationale used, data from student and staff evaluations and future plans. This should allow the reader to evaluate whether these methods are applicable to their own practice.

1171 Poster

keywords: culturally situated interactive tutorials / Japanese pedagogy / passive to active learning / self-tested learning with social context / aimed at practitioners

Identifying cultural differences in the barriers to online learning: validity and reliability studies of a tool tested in Taiwan and the UK

Tuesday
15:45

Learning and internationalism

Dr Ling Ling Lee
Tz'u Chi College of Technology

Dr Heather Wharrad
Dr Richard Windle
University of Nottingham

Increasing numbers of international students are registering on online courses in the UK yet lack of culturally appropriate online learning is a major cause of attrition in this group (AISR, 2006). “Cultural needs and cultural differences need to be taken into account at every phase of the design and delivery of online materials and support if courses and learning content are to meet learner needs” (Brennan, McFadden & Law, 2000, pg 8). A large scale survey is required to understand and identify the needs of international students when studying online and the barriers to online learning so that culturally appropriate pedagogy can be applied in the design of online courses and resources alongside issues related to connectivity (access to hardware and network) and capability (IT skills). After an extensive literature search, we could not find an appropriate questionnaire that would identify cultural barriers to online learning. Most studies looked at barriers in a small specific sample or used qualitative methods (for example AISR, 2006) that could not be applied to large, diverse populations. We report on the development of a questionnaire to determine cultural differences in the barriers to online learning. We have been carrying out studies to determine face, content and construct validity of the questionnaire along with reliability studies. The questionnaire will be used initially with Taiwanese and UK based students to compare their experiences of, and barriers to, online learning. We will report on the results of these studies and ask delegates to comment on the questionnaire. The presentation will outline the factors identified by students as barriers to online learning as a conceptual framework in diagrammatic form and will display charts of the results obtained to date. The questionnaire will eventually be available to the global e-learning community so that international comparisons of cultural barriers to online learning can be collected.

AISR, 2006.
Brennan, R, McFadden, M & Law, E (2000) All that glitters is not gold: Online delivery of education and training NCVER. www.ncver.edu.au/research/proj/nr9008.pdf

1184 Poster

keywords: online learning / culture / validity and reliability

Recording the student learning that takes place during clinical placements

Wednesday
14:30

Learning and internationalism

Dr Nic Earle
University of Bristol

We are piloting a new tool and process that enables our veterinary students to record online, the procedures that they learn and practice during their twenty six weeks of clinical placements. As well as producing evidence that will be used for QAA purposes, the system encourages the students to reflect on their own learning.

The software used is a version of the ePortfolio tool 'Profile', which, has been modified specifically for our needs by the Profile team. It enables students to log into their own account and record the veterinary procedures that they practice, as well as their reflections on their own learning. It also offers an electronic sign-off facility. When a student signs the form off, an email is automatically sent to the placement supervisor. The email contains a Web link so that the supervisor can access the form and enter their own assessment of the student. When the supervisor signs the form off, the form becomes locked and no further changes can be made. Email notifications are also sent to the programme coordinator back in Bristol to keep than informed of any activity.

This is the second phase of the pilot. After the first, we endeavoured to make the process for placement supervisors as effortless as possible in order to help ensure buy-in from the veterinary practices. We intend to evaluate this second phase of the pilot this summer.

This project is likely to be of interest to academic or support staff who works in an academic department that sends its students into clinical practices for periods of time, e.g. Vets, Medics, Dentists, etc.
keywords: ePortfolio / PDP / clinical placements / evidence of learning / low cost tool

1350 Poster

Using digital repositories to store e-learning material for mobile devices

Wednesday
14:30

Learning technology for the social network generation

Dr Stephen Charles
University of Leeds

Multimedia material is increasingly being used in the medical profession however the systems for the storage and collaborative sharing of this multimedia material medicine is in its infancy. There is a growing need to both store this medical material and provide a suitable means to find and view such material. A device such as a 3G mobile phone or a PDA can display multimedia and provides a quick and easy means for medical professionals to both gather and display medical training information. Potentially combining the mobile technology with digital repositories could provide and efficient means of disseminating e-learning information to the required audience while ensure that the source information is stored securely.

Leeds Metropolitan University currently runs the Virtual Learning Environment WebCT. The University of Leeds uses the commercial digital repository software called DigiTool from ExLibris having migrated from Endeavor Curator, A variety of tools have been evaluated for the development of e-learning material on portable devices. The ALPS project in conjunction with the MIDESS project aims to integrate these technologies.

As part of the JISC digital repositories programme, the MIDESS digital repository project is working with the ALPS mobile e-learning project. The ALPS project is tasked with examining the e-learning potential of mobile devices in the medical sector.

As part of the ALPS project an the possibility of the linking between a Virtual Learning Environment (VLE) at Leeds Metropolitan University with the digital repository at the University of Leeds has been examined. The MIDESS digital repository project at the University of Leeds is looking at the issues involved in the storage and access of multimedia data (images/sound/video etc) in digital repositories.

The digital repository, the VLE and the mobile technology are installed and we are currently integrating the products. Further evaluation will take place once these are fully integrated.

The ALPS project is an evaluation of the technology required to enable medical staff to conduct e-learning on portable devices.

Problematic areas in this study include:
- Different portable devices have different capabilities. Thus unless all medical staff are issued with the same phones then there may be potential issues with the phone not being able to view the e-learning material.
- The amount of material to be downloaded for the e-learning training may be substantial. Who should pay for this?
- The technology for viewing Web based material on portable devices is relatively immature.
- The technology for developing Web based material for portable devices is also relatively immature.
- The technology for linking digital repositories to VLE is in its infancy.

1092 Poster

keywords: digital repository / mobile devices / VLE / integration

Phoebe: Web 2.0 technology to support innovation and collaboration among teachers

Wednesday
14:30

Dr Liz Masterman
OUCS, University of Oxford

Ms Marion Manton
TALL, University of Oxford

Learning technology for the social network generation

Design for Learning provides an alternative perspective on practices traditionally referred to as course and lesson planning. It emphasises active learning through the appropriate use of technology and the creation of learning experiences that are motivating, enjoyable and productive. For teachers, this may mean going back to the drawing board to plan their lessons in depth. Many institutions provide training opportunities for teachers to engage with e-learning, and these initiatives are being supported by the emergent genre of pedagogic planner tools. In this poster we present the theory and methodology underlying the design of one such tool: Phoebe.

A project within the JISC-funded Design for Learning programme, Phoebe is designed to act as an online reference and planning tool. It offers users both flexible and guided paths through the planning process while providing advice on alternative teaching approaches, ideas for enhancing learning activities with technology and examples of innovative lesson plans.

The design requirements have been derived from a combination of a) an Activity-Theory (Leont'ev, 1981) analysis of outcomes of an earlier investigation into practitioners' use of generic tools in design for learning, and b) an "informant design" approach (Scaife et al., 1997). In Autumn 2007, we plan to start embedding and evaluating the tool in teacher-training and staff-development contexts. This, we hope, will demonstrate its value in providing a social environment for practitioners to explore the concepts and practices associated with design for learning.

The poster will complement a demonstration of Phoebe itself.

Leont'ev, A.N. (1981). The Problem of Activity in Psychology. In J.V. Wertsch (Ed.), The Concept of Activity in Soviet Psychology (pp. 37–73). Armonk, NY: M. E. Sharpe.
Scaife, M., Rogers, Y., Aldrich, F., & Davies, M. (1997). Designing For or Designing With? Informant Design for Interactive Learning Environments. In CHI '97. Proceedings of Human Factors in Computing Systems. (pp. 343-350). New York: ACM.

1115 Poster

keywords: design for learning / pedagogic planner tool

Video::Interactions - socially constructed analyses of video in an online environment.

Wednesday
14:30

Learning technology for the social network generation

Dr Rachel Scudamore
University of Nottingham

Video::Interactions - socially constructed analyses of video in an online environment.

Video::Interactions is an innovative online learning experience that combines the power of observational learning with social software principles to enable new forms of constructivist learning in relation to teaching development. Participants began by creating their own terms for discussing teaching: they agreed common teaching concerns and defined them in their own language. Such a folksonomy is an essential component of a socially constructed understanding of learning and teaching issues, as it places the negotiation of value and meaning within the participants' current expertise and motivational context.

In a specially designed online environment, participants then watched short videos of teaching online and tagged them according to their perceived value in addressing the previously agreed common concerns. This was carried out individually, with the collated results showing where commonalities and differences appeared in the perception of the value of the videos, according to individual levels of experience and particular motivations. A comparison of the context of the videos and the context of the participants' own teaching preceded each person forming their own action plan for teaching development. The online exercises formed a basis for rich discussion at the concluding face-to-face event where action plans were further developed with mentors.

The group's collective results were shared and, at each stage, the results of the previous task informed the design and content of the next task, making the online environment extremely flexible and responsive to participant activity. This iterative design allowed new modes of interaction between participants, and provided a freedom to the learning design not afforded by other online environments. The innovative and highly visual online environment will be represented on the poster, with extracts of participants' work and their evaluations, both on paper and on video.

http://pesl.nottingham.ac.uk/

1121 Poster

Keywords: video / tagging / folksonomy / educational development

Using Skype: learning with voice over Internet.

Wednesday
14:30

Learning technology for the social network generation

Ms Liz Bennett
University of Huddersfield

The wide spread availability and usage of Broadband in the UK has enabled voice over Internet (VoIP) technologies to be more widely available (Ofcom 2006). In this project one VoIP tool, Skype, was used with a group of students studying on MSc and Foundation degree programmes. Skype facilities include:

- Text messaging
- Voice calls to single user
- Voice calls to multiple users – up to 5 (conference calls)
- File exchange
- Web cam
- Awareness of someone's online status.

Teaching possibilities offered by VoIP include tutor led personal and group tutorials. Students can use VoIP to set up their own learning sets to offer each other advice and support. Thus VoIP has the potential to personalise the learning experience by providing targeted and timely advice and guidance. Additional contact with the tutor has the potential to aid trust building process (Laferriere 2006 in Kop 2006). However tutors might find VoIP difficult to manage and intrusive on their time. This poster reports on a case study using an ethnographic approach (Hammersley 1990 p.598) to evaluate the use of Skype in two courses at University of Huddersfield. The value of Skype to students and tutors and the skills needed by tutors in managing teaching in this environment will be examined.

The poster will show the Skype windows with annotations to explain the function of some of the tools. Quotes from students and tutors will highlight the key findings of the evaluation. Definitions of personalised learning and student centred learning will provide a theoretical framework in which to contextualise the use of this tool.

Hammersley, M. (1990) What's Wrong with Ethnography? London: Routledge.
Laferriere, T (2006) Learning Communities Networks: Learning to Participate, Participation to learn, Keynote speech at 'Collaborative construction of knowledge via Internet' seminar, Barcelona, January 2006 in Kop, R. (2006) 'The use of blogs, wikis and VOIP in the virtual learning space: the changing landscape of communication in online learning' ALT-C
OFCOM (2006) The communications market: nations and regions Available on line from http://www.ofcom.org.uk/research/cm/nations/nations_regions/ accessed 22/2/7

1122 Poster

keywords: skype / voice over Internet / personalised learning / student centred learning

Social software to support collaborative processes of undergraduate learning: early observations and emerging research requirements

Wednesday
14:30

Learning technology for the social network generation

Mr Richard Jones
Dr Richard Mather
Dr Janet Payne
Mr Karen Stepanyan
Buckinghamshire Chilterns University College

This poster reports early findings of an ongoing study to determine the uptake and impact of social educational tools at undergraduate level. It also explores the theoretical background to the educational use of social software and suggests directions for future research.
The primary concern of the study is to capture and describe the extent and patterns of use of educational software and Web 2.0 technologies among first year undergraduate technology students. Results indicate great variations in the ways that students engage with: [1] both social and content-centred educational environments; and [2] similarities in the ways of using social software within or outside the educational context.

1128 Poster

keywords: social software / Web2.0 / collaborative learning / online behaviour

E-learning for affective outcomes: what do we know?

Wednesday
14:30

Learning technology for the social network generation

Professor Kerry Shephard
University of Otago, New Zealand

This poster explores circumstances where e-learning is contributing to higher education for values, attitudes and behaviours. Most teaching and assessment in higher education has traditionally focused on cognitive outcomes of knowledge and understanding rather than on these affective outcomes. Using examples, the paper asks if the innovative and collaborative nature of effective e-learning is making affective outcomes more attainable and if teachers are consciously identifying affective outcomes in their course planning and literature. It suggests that those who develop e-learning should seek to recognise affective outcomes and explore the power of e-learning to achieve them.

1133 Poster

keywords: affective domain / values, attitudes and behaviours / social learning / teaching values and attitudes / professional values

Podcasting exercise physiology - enhancing the student experience

Wednesday
14:30

Learning technology for the social network generation

Dr Grant Abt
Mr Timothy Barry
Dr Elizabeth Mallabon
St. Martin's College (University of Cumbria Aug 1)

Podcasts are an innovative use of the ubiquity of the Internet to provide another tool for the e-learning tutor. Recent studies examine the qualitative aspects of their use in e-learning, but less in known of quantitative measures in relation to desired learning outcomes. The aim of this current study is to examine whether students can enhance their learning of exercise physiology, leading to a quantitative improvement in exam scores. In conjunction with this quantitative approach we will seek to evaluate qualitative evidence of the effect using this technology has on student's learning.

Our methodology includes 60 student volunteers from the first year sports science programme who were randomly allocated to either listen to six podcasts over four weeks (experimental group), or provided with material in print (control group). All participants undertake a pre and post formative test and data will be analysed using the effect size statistic and 90% confidence

limit. Validated phenomenographic tools will analyse approaches to learning and questionnaires will identify student approaches to using mobile technology. We are interested in identifying learning strategies, cognitive and behavioural changes in relation to using podcasting in e- learning.

This paper contributes to our understanding of Web 2.0 technologies and provides details of a rigorous study into the use of podcasting within a higher education sports science programme in the UK. Its findings will contribute to the growing interest into the use of audio technology across the sector and is funded through a HEA Bioscience grant. The poster will reflect the evaluation of the use of e-learning in dynamic and creative ways to support a culture of deeper learning and enhance understanding in the biosciences. Supporting video and enhanced podcasts will be available for conference participants to download. Rather than just expecting that using technology will enhance the student experience the research seeks to evaluate the "added value" of podcasting.

1139 Poster

keywords: podcast / exercise physiology / e-learning / mobile technology

Cultural capital and community development in the pursuit of dragon slaying (Massively Multiplayer guild culture as a model for sociable e-learning)

Wednesday
14:30

Learning technology for the social network generation

Mr David White
TALL (University of Oxford)

Mrs Deborah Goodbody
University of Oxford

This poster is an evaluation of ethnographic field work conducted in and around the World of Warcraft MMO. The study focuses on the motivation of Guild members to construct communities of practice both to pursue game goals and to socialise. This suggests that the guilds can act as useful models for understanding how online social networks function and how they could influence the ideology of next generation e-learning services.

The data from the study is considered by employing the notion of communities of practice, which highlights the interweaving of goal-orientated learning and the immersion of those participating in trusted social networks. This has the effect of generating and communicating what Baudelaire calls cultural capital, the lack of which often makes online learning a poor second to traditional face-to-face learning. The challenge presented here is how to abstract underpinning principles and practice that will be of value to e-learning away, from the immediate goals or ideology of a particular MMO. This is not to suggest that killing 3D dragons in collaborative groups is the future of e-learning. Instead it proposes that much can be gained from reflecting on the success of MMOs in motivating the formation of vibrant online communities.

The poster will include screenshots from the World-of Warcraft MMO and from community sites created by the individual guilds. It will also use annotated transcripts of in-game chat and VOIP to demonstrate points at which socialising and learning become interwoven. In addition, it will use diagrams to illustrate the relationships between the guild structures, Wenger's notion of communities of practice and what this might mean for future e-learning systems.

1152 Poster

keywords: social learning / informal learning / massively multiplayer online environments / ethnography / communities of practice

How to support part-time tutors professional development needs by using Wiki and Blogs

Wednesday
14:30

Learning technology for the social network generation

Mrs Anne Gambles
The Library and Learning Resources Centre

The JISC funded PROWE (Personal Repositories Online Wiki Environment) Project is based within the Open University and partnered with the University of Leicester. It has been investigating the use by part-time distance tutors in the partner institutions, of Wiki and Blog based informal repositories for sharing resources in the context of their own continuing professional development needs. The Project's deliverables will include a set of 'How To' Guides advising on how to support part-time tutors professional development needs when using Wiki and Blogs to meet these needs. Subjects covered will include, but are not restricted to:
- Questions to ask in order to determine user needs
- Intellectual property rights in wiki and blogs
- Questions to ask about software options for setting up wiki and blogs to support part time distance tutors
- Questions to ask about metadata and transferability
- Barriers and enablers to system adoption

The current pace of technology and online culture change is extremely rapid but we are endeavouring to 'time proof' the Guides and ensure they are sustainable. To do this we focus on principles and generic practices, in relation to research-emergent facts, rather than on individual technologies which may well become obsolete in only a few months time. The poster will illustrate the contents of the Guides and will include images of them. The Guides themselves will be made available as hand-outs.

1157 Poster

keywords: wiki and blogs / social networking / informal repository / cpd / how to guides

Podcasting as a social network tool is it a student reality?

Wednesday
14:30

Learning technology for the social network generation

Mr Andy Ramsden
University of Bristol

The concept of podcasting as a means of distributing information and facilitating the creation and support of ad hoc social networks has been evident for many years. Over time, we are observing some key trends, the popularity of publishing content via podcasting continues to grow, and the number of people subscribing to podcasts continues to increase. Advances in software and hardware have meant that podcasting can now be described as a low threshold technology (http://www.tltgroup.org/resources/rltas.html), and consequently offers the potential of mass participation. Given these trends there has been an increase in research into the potential of podcasting as a learning technology. However, much of this research has focused on the use of podcasting from a lecturer centred perspective, as a way of delivering lecture content, audio newsletters, and training material, while it has been focused on specific, small scale implementations at the individual course level.

This poster wishes to shift the emphasis and explore how receptive our current students are to using podcasting as social network software. For instance, "the idea of listening to podcasts appears to have strongly penetrated the consumer mindset, however, relatively few consumers appear to actively be taking advantage of them" (http://arstechnica.com/news.ars/post/20060406-6538.html). The question is these observations mirrored with students in UK HE? Therefore, given the increasing ease of participation, do students own the technology to participate

in podcasting? What do they think podcasting is? How are they currently engaging with Internet based audio and video? And are they currently publishing and subscribing to podcasts?

The outcomes will help identify the current potential of podcasting as a learning technology within fostering and sustaining social networks. The findings feed into the issues concerning successful implementation in terms of levels of student support.

1170 Poster

keywords: podcasting student habit

Reflecting through digital storytelling

Wednesday
14:30

Learning technology for the social network generation

Mr Christopher Murray
Dr John Sandars
University of Leeds

Digital storytelling is a developing concept for e-portfolios and this approach is especially suitable for the social network generation. This generation prefer to have less formal control over their learning, to collaboratively learn together and to use multimedia.

Traditional e-portfolios have emphasised 'control' in a text based environment. However, digital storytelling utilises the concepts of 'voice' and 'identity' to strengthen the reflective process through the collection and usage of multimedia digital artefacts. Digital storytelling enables the personality to dominate the presentation of the reflective process and encourages reflective learning to be situated in a biographical account.

The JISC funded ELP2 project is utilising the use of social software (blogs) in learning and teaching and widening participation activities. Two of the activities involve using digital storytelling for e-portfolios in three specific groups:
- Year 12 students thinking of applying to medicine
- Undergraduate medical students
- Patients in the community

One group of widening participation students will have co-created digital stories in April 2007. Lessons learned from this experience will inform the activities supporting the second group of participants (medical students, patients and year 12 students) who will begin the process in October 2007. The aim is the co-creation of a digital story to enhance understanding by the students of the real issues faced by the recipients of healthcare. The medical and year 12 students will reflect on their experience by using a blog as their personal e-portfolio.

The information will be conveyed using a laptop to demonstrate the digital storytelling and the reflective e-portfolio in the blog

1181 Poster

keywords: digital stories / reflection / production

Directed and undirected computer-assisted language learning, collaboration, and lifelong learning

Wednesday
14:30

Learning technology for the social network generation

Mr Paul Dempster
University of Nottingham Ningbo

Lifelong Learning Organisers (LLO) and the Framework for Lifelong Learning (FoLL) have been proposed as a way of supporting personal learning experiences and resources over different topics at different places and times. Concrete implementations, large studies, and undirected learning have been highlighted as areas of further work. CLLE is an implementation of this concept for language learning which encompasses these areas. The University of Nottingham Ningbo is a Chinese campus of 3500 students with English as the language of instruction. Both the grammar mapping tool and collaboration features within CLLE allow the students learning English and Chinese to experience a visual, interactive method of examining their language ability. Users of the system have vastly different abilities, from complete beginner in Chinese, to advanced academic English. They also have differing combinations of formal, informal, directed and undirected methods of learning. Using the system exposes them to the knowledge implicitly built up by learners using other methods of learning and their own previously successful subconscious methods. Outside the system, the data collected provides a view of the interactions between the learners and each individual learner's learning trail. The affect the instructor makes to directed learning is also exposed in this network of collaboration. Social and temporal views of this collaboration graph are used to illustrate these claims. Interesting usage examples of the grammar mapping tool are provided to show how it provides interaction in both a directed and undirected learning setting. The architecture which allows long-term and location-neutral learning will also be illustrated. Finally, as part of a continuing project future areas of work will be suggested and their integration with the existing system mocked-up.

1189 Poster

keywords: computer-assisted language learning / collaboration / lifelong learning / implementation

Cascading NewsFilm Online across the disciplines

Wednesday
14:30

Learning technology for the social network generation

Mr Simon Atkinson
The University of Hull

Mr Kevin Burden
University of Hull

Learning technologies can be adapted to appeal to the changing needs of the social network generation. Newsfilm Online an exciting resource for higher and further education in the UK. 3,000 hours of television news and cinema newsreels, taken from the huge collection of the ITN/Reuters archive covering a period from 1910s to the present day, is being made available online in high quality format for teaching, learning and research.

The Newsfilm Online project led by Cascade, the multimedia evaluation and development unit at the University of Hull and commissioned by JISC/BUFVC; will develop support materials to overcome the resistance frequently seen to the use of such sound and visual archives. We are doing this promoting the individual’s engagement with material in a pedagogy-led context, and suggest that to plan an effective engagement, identify the learning strategies and consider assessment possibilities for such material should come before any selection of content.

The poster illustrates the technical guidelines and support material developed and the evaluation processes undertaken in the early trials. The poster will also describe the case studies and scenario based exemplars being provided to

staff. The technical guidelines, handouts and Web resources will all be referenced. The poster invites reflective interaction allowing the user to annotate their personal copy if they choose.

The poster illustrates, using the visual metaphor of the movie director's viewfinder and a movie storyboard, nine models of possible clip deployment, illustrating the teaching practices each supports and suggesting a range of discipline contexts and teaching modes in which this might be appropriate. The poster (copies will be available) guides its viewers on how to access and effectively use the BUVFC NewsFilm Online Database. It asks direct questions of its viewer, providing an interactive dialogue so as to develop personal tailored approaches as to the future use of the archive.

A workshop supports this poster.

1215 Poster

keywords: digital literacies / archives / transferable skills / movie clip / audio visual

Tales from the bleeding edge: dangerous developments at RLO-CETL

Wednesday
14:30

Learning technology for the social network generation

Mr Carl Smith
London Metropolitan University

Mr Alan Leeder
Dr Raquel Morales
University of Cambridge

Mr Michael Taylor
University of Nottingham

The term "bleeding edge" (Barus, 199-) describes a technology so new, untried and untested, that the user is required to take risks in the form of reductions in stability and/or productivity in order to use it. This describes the current situation at RLO-CETL, a three-way Centre for Excellence between London Metropolitan, Cambridge and Nottingham Universities which has, at its heart, a social network of developers that are collaboratively evolving a suite of powerful learning object development tools and methodologies.

The framework and theory underpinning this innovative practice is based on an iterative agile rapid-prototyping development lifecycle (Boyle et al, 2006), which includes both formative and summative evaluations designed to capture quantitative and qualitative data across the partner institutions (Morales et al, 2006) using the RLO-CETL Evaluation Toolkit.

The poster will illustrate the stages of the RLO-CETL agile development lifecycle, showing the workflows (colour-coded for each stage) that underpin a variety of learning objects with thumbnail images of all their associated tools and templates. Learning objects that have been selected for their visual impact as well as pedagogical effectiveness will each be linked to their particular workflow and displayed as a series of screen-grabs with explanatory notes. Cross-institutional evaluation data linked to each of the objects will be displayed as annotated charts. To avoid cognitive overload and "chartjunk" (Tufte, 1983), textual information will be kept to the minimum required to clarify the narrative and redundant or gratuitous graphical decoration will be omitted.
A CETL developer will also be available to demonstrate the materials on a laptop.

This poster accompanies a demonstration of the same title.

1245 Poster

keywords: learning objects / pedagogies / collaborative development / social networks / workflows

The role of technology in psychology learning and teaching

Wednesday
14:30

Learning technology for the social network generation

Mrs Marina Crowe
Dr Tom Simpson
Mrs Annie Trapp
Higher Education Academy Psychology Network

This poster concerns an innovative, large scale study into the use of technology for psychology learning and teaching undertaken by the Higher Education Academy Psychology Network with funding from the JISC Delivering e-Learning (DeL) II scheme.

The last comprehensive survey of the role of technology in psychology learning and teaching in UK higher education (HE) was undertaken by CTI Psychology in the early 1990s. Much has changed since then, not only in terms of the technologies and online resources available to support the process of learning, but also in the prior experience and expectations of students entering HE. The aim of the current study is to measure the experiences and expectations of prospective students, current students, and staff, in order to identify differences between these three groups.

Three comprehensive questionnaires have been devised, piloted, and made available online and in hard copy: a non-university student questionnaire (released November 2006); a university student questionnaire, aimed at undergraduate and postgraduate psychology students in UK HE (released February 2007); and a staff questionnaire, aimed at academic and support staff involved in at least one psychology module (released May 2007). Each questionnaire addresses not only respondents' current use and experience of technology, but also their attitudes and confidence in using this technology, and their expectations of it in relation to psychology learning and teaching. Question content in each questionnaire is distinct but closely related, so that statistical analyses comparing the experiences and attitudes of each subject group can be made.

Complete responses have been received from approximately 300 non-university students, and approximately 1300 university students. At time of writing, approximately 100 responses have been received from staff.

Data and evaluation from this study will be displayed graphically and in text to highlight results within each subject group and comparisons between the subject groups. Similar methods will be used to illuminate differences between current experiences of and attitudes toward technology, and the experiences and attitudes of the psychology community in the early 1990s. Hard copies of the questionnaires will also be also be available.

1247 Poster

keywords: psychology / delivering e-Learning (DeL) II scheme / staff and students' attitudes and experience / technology / confidence

Technology Bundles - gathering staff and student experiences of using mobile technologies in learning, teaching and assessment

Wednesday
14:30

Learning technology for the social network generation

Miss Liz Aspden
Mr Richard Mather
Sheffield Hallam University

The Technology Bundles initiative aims to raise awareness and gather experience of how mobile technologies can be used in learning, teaching and assessment.

A range of technology was identified and purchased. This included MP3 players/recorders, portable media devices, portable gaming devices, personal digital assistants, and associated accessories. The devices were each bundled with associated guidance material and where available, case study material, to form a 'Technology Bundle', which is then made available for loan to staff and students. The borrower is asked to contribute to the bundle with a report, case study, or other relevant material resulting from their experience, with the intention that future borrowers will benefit.

The Technology Bundles initiative has been publicised at institutional conferences and other events. So far, a small number of staff and students have borrowed pieces of technology. Audio interviews have been carried out with some of the participants, and others have contributed by producing short written reports. A blog and podcast are being published to publicise and disseminate progress. Work on the Technology Bundles initiative is still in progress. It is intended that each loan and use of the technologies will result in a mini-evaluation, and that the overall project will be evaluated when a substantial amount of data has been collected.

The successes of the project so far include: increased awareness of how technology can be used in learning, teaching and assessment; the creation of course materials and placement support information using audio, and using student-generated audio resources for the benefit of students embarking on overseas placements. Limitations of the initiative are that funding for the purchasing of new devices is limited, and only a limited amount of devices are available for loan. Potential for future development of the initiative includes wider dissemination and use of the existing Technology Bundles, and the purchase of new technologies as funding becomes available.

The poster will illustrate the Technology Bundles initiative, and provide examples of staff/student experiences of using mobile technologies in learning, teaching and assessment.

1264 Poster

keywords: mobile technologies / mobile learning / generation of case studies / staff and student experiences

Encouraging diversity in the use of the wiki tool: a staff development model.

Wednesday
14:30

Learning technology for the social network generation

Ms Hilary Griffiths
Bristol University

Mr Andrew Ramsden
Bristol University

This poster will disseminate a changing staff development model introduced by the Learning Technology Support Service at the University of Bristol. Our aim is to encourage use of the wiki tool and to facilitate a more diverse and innovative use of that tool by the user community. The poster will address the following:
- How do we encourage use of the wiki tool?
- How do we facilitate diverse and innovative use?
- Can we shift our role from expert to facilitator in a widening community of practice?
- How do we deal with issues associated with a more problem based or constructivist educational environment, for instance, how do we balance tool

affordances with innovative uses and individual ownership by academic practitioners?

In particular, we will compare the wide possible range of uses of wikis with our observations from the first staff development implementation which produced low levels of activity and wiki use that clustered around distributing information. (cf http://guzdial.cc.gatech.edu/squeakers/coweb-catalog.pdf). The first iteration used a simple model of providing the tool institution-wide, plus specific populated examples of use in the form of staff guides. Our intention was that the user community would engage with and take ownership of the tool. Based on the outcomes of the initial implementation, the next iteration focuses on more effectively shifting the locus of control away from "experts" to the community. The intention is to initially prime a community space and then as the community develops our role shifts accordingly. A key research question for us is, will the community take control of the support environment and the wiki tool and embrace a model that encourages them to support each other in use that is not directed or controlled by us, the learning technologists?

1266 Poster

keywords: wiki / staff development / community of practice

Wikiversity - a complex space for collaborative learning

Wednesday
14:30

Learning technology for the social network generation

Mr Cormac Lawler
University of Manchester

This poster is about Wikiversity – a collaborative space for developing learning communities and free-content learning materials – developed through the medium of a "wiki", an editable website, just like its sister project, Wikipedia.

The poster will visually describe the key features of Wikiversity (the pursuit of widely-accessible learning, an open community of educators and learners, and this community's relationship with learning individuals, groups, and institutions around the world). It will maintain a focus on the interrelationships between its strengths (e.g. the empowering nature of collaboration) and its weaknesses (e.g. the various "barriers" to participation – technological, socio-cultural, and infrastructural, etc.). Theories around communities of practice and activity theory will be useful in informing this poster.

The process of creating this poster will itself be a collaborative one – it will be discussed, shaped, and edited by anyone interested in developing Wikiversity as a space, resource and/or community. In this sense, I intend this poster to be a cognitive resource for the Wikiversity community – both as a product and as a process. To as great an extent as possible, this process will include input from a wide pool of participants – from across its multiple language projects (currently English, French, German, and Spanish), and its diverse range of stakeholders (e.g. teachers, homeschoolers, learners, technologists, developers, researchers, etc.). However, this poster is also intended to be of relevance to any practitioners, developers and researchers around learning and technologies – particularly in building communities around learning and, of course, the use of wikis.

An idea for the visual nature of the poster is the presence or lack of boundaries and barriers between people, learning, and technology, as well as within these groups – however, as the process is inherently designed to be collaborative, there needs to be room for creative freedom.

1316 Poster

keywords: wikis / collaborative learning / open educational resources / communities of practice / participation

M-learning in action – a hands-on approach

Wednesday
14:30

Learning technology for the social network generation

Ms Ruth Catlow
Mr Remmert de Vroome
Mr Miles Metcalfe
Mr Roger Rees
Ravensbourne College of Design and Communication

M-Learning is an umbrella term for a range of concepts and practices. Some examples include: learning games on mobile phones, offline data to support learning or personal development such as podcasts on PDAs or portable audio players, WAP-enabled learning resources, and SMS-based study-space interaction or learning-experience rating systems. Mobility often described as "anywhere, anytime" learning is a given. Two more key features stand out: learners bring their own tools to the party, and the tools' usefulness for learning is an unexpected affordance. We believe these aspects are particularly important because they create opportunities for learning where learning would traditionally not have existed.

Practitioners are not always able to evaluate m-learning techniques because of difficulties setting up equipment, or the challenges of providing the infrastructure. These technical matters serve to undermine the highly available and fluid nature that is promised by m-learning. We present a simple m-learning scenario to break down the technical barriers practitioners face, to get through to informed reflection about m-learning, allowing participants to evaluate this kind of technology-enabled learning. We have been involved in a JISC-funded research project, Designs on Learning, which has considered blogging in practice-based education. One of the areas we have explored is moblogging blogging from mobile phones and other mobile devices such as PDAs. Mobile phones are not well suited to lengthy text-based reflection, though there are interesting possibilities in directed or semi-directed text production. However, modern smartphones have the ability to capture photographs, video, and audio, as well as create text, for uploading to a blog. This opens up interesting avenues for learning experiences. Best of all, this isn't difficult to do!

We have a configuration recipe for practitioners who wish to replicate, or experiment with, m-learning at their institution.

1322 Poster

keywords: mobile / m-learning / moblogging / netgen / social networks

Learning Object Award showcase

Wednesday
16:00

ALT strand

Mr Charles Duncan
Intrallect

This showcase will give conference delegates a chance to see the best entries to the 2007 Learning Object Award, sponsored by Intrallect. The prizes will be awarded at the Conference Dinner on Wednesday evening.

1371 Showcase

keywords: learning objects

Wiki-tivities

Wednesday
16:00

Designing learning spaces

Dr Alejandro Armellini
Dr Sylvia Jones
Prof Gilly Salmon
Ms Helen Whitehead
University of Leicester

This workshop is aimed at higher education practitioners with an interest in exploring practical applications of wiki environments in higher education teaching and learning.

Wikis - collaborative, universally editable websites - have received significant attention in recent years. There are several ongoing studies into their affordances in terms of educational gain. This workshop looks into the design and application of wiki-based online activities (or wiki-tivities) in higher education. Wiki-tivities go beyond the use of wikis for the collaborative production of text. Research conducted as part of the Adelie Project (www.le.ac.uk/adelie) suggests that the use of wikis as part of a set of online activities can serve a variety pedagogical purposes.

Wiki-tivities can be varied, attractive, cheap and effective in a range of HE contexts and disciplines. They are easy to integrate into existing systems such as VLEs and can play a central role in the process of embedding e-learning.

By the end of this workshop, participants will have:
- Explored wiki-tivities and their uses in online and blended learning settings;
- Discussed and critiqued lessons learned on wiki-tivities design and implementation;
- Shared experiences of wiki-tivities in their own teaching practice;
- Designed, rationalised and shared a wiki-tivity appropriate to their contexts.

Participants are expected to play an active role throughout this workshop. They will be given activities to undertake, both individually and in groups, including the design of a wiki-tivity. They will also have the opportunity to engage in a meaningful debate on the pedagogical efficacy of the designed wiki-tivities and their integration into other types of online work.

1155 Workshop

keywords: practical applications of wiki environments / online activities, e-tivities / online and blended learning settings / design for e-learning and embedding / teaching practice in higher education

Browser tools in support of formal learning

Wednesday
16:00

Designing learning spaces

Dr Peter Norvig
Google

Mr Dick Moore
Ufi learndirect

Entry to this workshop will be by ticket only, as space is limited. Please enquire at the EMCC help-desk.

All users of search engines are learners. Search engines are being augmented with tools that though primarily designed to support information discovery also support learning. One example of this is “Google Personalised Home Page”, which allows users to customise their Google home page by adding a range of tools and services, thereby creating a browser-based desktop that takes some of its content from the Internet in real time.

This workshop will help participants:
- Create and experiment with a personalised home page
- Explore and categorise the tools and features that might be valuable to support formal and informal learning;
- Examine the feasibility and practicality of the tools that are put forward in the workshop.

The session will be facilitated by Dick Moore, Director of Technology for Ufi learndirect, with input from Peter Norvig Director of Research at Google. Participants can work singly or in pairs but will need to bring along their own 802.11g wireless enabled laptop i.e. a "bouncer" will be needed on the door to ensure that each participant, or pair of participants has such a wireless enabled laptop at their disposal on arrival.

The workshop will cover the following:
- What do we mean by a personalised home page on a search engine?
- What categories of tools and services integrated into a user's personalised home page might support formal and informal learning?
- A discussion led by Peter Norvig on the taxonomy and practicality of the tools that emerge from the workshop.

Part one:
(20 mins) Demonstration
The goal is to look at the technology that underpins the tools that can be added to the Google personalised home page using either Firefox or Internet Explorer by creating and then modifying an existing Google home page. Having done this, Peter Norvig will discuss the technologies that underpin these tools, demonstrating his points using the tools themselves.
(10 mins) Activity
Workshop attendees will work alone or in pairs on their own laptops to create or modify a personalised home page.

Part two:
(15 mins) Activity
Workshop attendees will work either alone or in pairs to identify new or modified tools that in their opinion would support formal or informal learning. Each new tool would need to be named and have its "mission statement" on a 5" x 3" or 127 x 76 mm "PostIt" note.
(15 mins) Activity
Each tool will then be stuck on the wall followed by a group activity where the tools are arranged into categories or groups.
Each category of tools will need to be named, with a view to arriving at a loose taxonomy of such tools.

Part three:
(20 mins) Discussion
Peter Norvig will take a couple of the ideas and elaborate on the issues around developing and supporting such a tool, taking questions and contributions from amongst workshop participants.

1269 Workshop

Keywords: personalised home pages/ informal learning/ browser-based desktops

The future of IMS Learning Design: does it have one, and what will it be like?

Wednesday
16:00

Designing learning spaces

Mr David Griffiths
CETIS

Mark Barrett-Baxendale
Liverpool Hope University

Raymond Elferink
RayCom

The IMS Learning Design (IMS LD) specification was published in 2003, and it provides a modelling language which supports the use of a wide range of pedagogies in online learning. There has been a major ongoing effort to create the infrastructure necessary to make the specification useable, involving work by a range of institutions, projects and companies. The result has been a significant number of applications, including reference implementations such as the CopperCore Learning Design Engine and the Reload Learning Design Editor.

Dr Abelardo Pardo
University of Vienna

The specification is extensive and complex, and the technical environment in which it is being implemented is changing, for example with an increased importance of service oriented approaches. Moreover, the specification is used in a number of different areas:
- Interoperability: transmission of data between applications.
- Infrastructure: the applications which have been developed to work with IMS LD
- Modelling language: use of the specification to model pedagogic processes
- Modelling and e-learning methodology: the methodology which is used to create and use Units of Learning (UOLs)

These different functions and their associated user requirements create a highly complex environment for implementation and use of the specification. The participants in this seminar represent developers or pilot users of many of the key IMS LD implementation initiatives. These include:
- The Valkenburg and UNFOLD architectures
- The well established CopperCore, SLeD, and Reload LD Editor implementations
- The emerging TENCompetence LD tools, the opendocument.net repository, and the Prolix Learning Design tools.
They have a wide range of perspectives, including both SMEs and academic institutions, and both developers and end users.

All the members of the panel are currently involved in developing innovative applications of IMS LD. Their varied experience and perspectives will provide the basis for a debate on the future of IMS LD as an enabling technology for educators by structuring the discussion around three challenging statements:
1. The IMS LD specification is irreducibly complex, and this leads to an unbridgeable gap between technologists and teachers. Consequently it will never be possible for non-specialists to author Units of Learning.
2. An interoperability specification for Virtual Learning Environments which uses XML and zip files is an answer to yesterday's problems using yesterday's technology.
3. IMS LD is only useful in the context of large scale distance education where it originated. In addressing these statements the panel will assess the prospects for the IMS LD tool set, and provide an informed view of current trends in IMS LD implementation. They will briefly illustrate their points by showing running applications where appropriate. Participation by members of the audience will be welcomed and encouraged.

The participants at the symposium will
- Gain an understanding of the key challenges in the adoption and implementation of IMS LD
- Debate and assess the future prospects of IMS LD
- Learn about innovative applications and implementations of IMS LD currently underway, and the differing ways these seek to overcome barriers to adoption of the specification.

1278 Symposium

keywords: IMS learning design / interoperability / pedagogic modelling / tooling

Benchmarking e-learning in UK higher education, or “though this be madness, yet there is method in’t”

Wednesday
16:00

Veronica Adamson
Dr Jane Plenderleith
Glenaffric Ltd

Dr Barbara Newland
University of Bournemouth

Dr David O'Hare
University of Derby

Dr Virendra Mistry
University of Glamorgan

Maria Papaefthimiou
University of Reading

John Stratford
University of Sheffield

Dr Judith Kuit
University of Sunderland

Large-scale implementation

Benchmarking is a strategic management process in which organisations evaluate aspects of their activity in relation to best practice, usually within their own sector. Since 2005, the Higher Education Academy has been managing an e-learning benchmarking exercise on behalf of the higher education community. This is a key element in the implementation of the 2005 HEFCE e Learning Strategy with the overarching aim of embedding e-learning in mainstream learning and teaching processes over a ten-year period.

The Pilot phase of the benchmarking exercise ran from January to July 2006. Phase 1 started in October 2006, and Phase 2 in May 2007. By the end of the programme in July 2008, almost 80 higher education institutions will have undertaken an internal e-learning benchmarking exercise supported by the Academy, including some Welsh and Scottish institutions. There is also a parallel Scottish benchmarking initiative.

Five different benchmarking methodologies have been supported:
- ELTI (Embedding Learning Technologies Institutionally) – designed to inform the process of embedding e-learning technologies, and assist in developing organisational structures, cultures and expertise
- eMM (e-Learning Maturity Model) – based on the principle that an organisation’s processes mature as capability in e-learning is developed
- MIT90s – provides a framework for understanding the effect of evolutionary and revolutionary change through the development of the use of technology in educational organisations leading to a range of increasing potential benefits
- OBHE/ACU (Observatory for Borderless higher education/Association of Commonwealth Universities) – a collaborative benchmarking methodology which promotes the development of shared good practice statements
- Pick&Mix – based on a systematic review of other approaches to benchmarking e-learning, looking for commonalities of approach but also taking a fresh start

Institutions are invited to choose the particular methodology that best suits their needs and context, and have the services of a benchmarking consultant with particular expertise in that methodology to support them through the process.

This symposium will present an overview of the Benchmarking programme and its contribution to enhancing strategic understanding of e-learning in the sector. It will explore some of the key issues of benchmarking scholarship and relate these to the higher education sector, discussing the benefits and challenges for institutions that have engaged in benchmarking e-learning, with emphasis on the outcomes of the process and implications for future developments.

As a forum for debate, the symposium will also invite participants to consider the relative benefits and challenges of narrative, descriptive approaches and more prescriptive criterion-based methods, as well as strategic pan-institutional benchmarking in comparison with more focused departmental or subject-based approaches, or benchmarking a particular aspect of institutional provision.

Some fundamental and provocative questions about the overarching rationale for the benchmarking exercise and the process itself will be addressed. Participants will be invited to consider the extent to which the exercise provides an external benchmark against which other institutions are able to evaluate their progress and developments, and presents evidence to inform UK HE Funding Councils’ e-learning strategies and their measures of success.

keywords: benchmarking approaches and methodologies / HE academy benchmarking exercise / HEFCE e-learning strategy / embedding e-learning / organisational change

1100 Symposium

Are we ready for learners in control?

Wednesday
16:00

Large-scale implementation

Mr John Edmonstone
Cardonald College

Professor Terry Mayes
Glasgow Caledonian University

Ms Lou McGill
JISC

Mr David Beards
Scottish Funding Council

Dr David Ross
University of Paisley

Dr David Nicol
University of Strathclyde

The concept of student-centred learning has been around for decades, whether that means students having more choice in what, when and how they learn, being more active in their learning or, in a broader sense, shifting the balance of power between the student and the teacher. Alongside this, continuing developments in Information and Communications Technology (ICT), opened up significant potential to support student-centred approaches. Newer Web 2.0 technologies have even greater potential to empower learners if they choose to take ownership of these and utilise them for their formal learning experiences.

Despite both the pedagogical imperative and the technological possibilities the learner experience has not generally been significantly enhanced on a wide scale. Institutions continue to adopt a 'teacher in control' model, perpetuating the traditional knowledge delivery approach. Is the 'Learner in Control' model viable in today's institutions? Why hasn't this been adopted on a wide scale?

This discussion will examine issues for institutions around the concept of control from a variety of perspectives – with particular reference to quality, ownership, and standards.

The following focus areas will be discussed:
Institutional readiness:
- Are institutions prepared to effectively exploit the new ways students are using technology?
- Is there consensus on which aspects of learning and student support can be standardised to encourage efficiency gains?
- Do institutional culture and traditions allow innovation in teaching approaches and pedagogical change on a wide scale?

Staff readiness and capability:
- Are teaching teams and support teams confident to make the most effective use of new technologies to develop content and support learning activities?
- What do support staff need to transform their approaches to designing for autonomous learning?

Learner readiness:
- How can we support and encourage students to take responsibility for their own learning?

Examples will be used from the recent work of six e-learning Transformation Projects funded by the Scottish Funding Council, which aimed to implement significant changes in learning and teaching culture and practice. The projects, involving a wide range of colleges and universities, developed different models, as appropriate, to implement institutional change across several areas including pedagogy, staff development, e-assessment, PDP and e-portfolios, learning activities and content. More information can be found at: http://www.jisc.ac.uk/sfc_projects.html

Chaired by an SFC representative, each speaker will briefly offer their own perspective around the issues of control affecting the three areas:
- Institutional readiness
- Staff readiness
- Learner readiness

Speakers will then be given an opportunity to respond to each other and to identify any areas of consensus with particular reference to success factors,

barriers and evaluating the impact of transforming practice. The discussion will then be opened to the floor and managed by the chair. Audience questions and input to the discussion will be encouraged. The intended outcome of the symposium would be to demonstrate and discuss different issues around control resulting from a wide range of institutional, pedagogical and technological drivers which impact on the learner experience.

1300 Symposium

keywords: institutional transformation / learners in control / issues of control / learning and teaching / evaluating change models

Learning and teaching using integrated user-owned and institutionally-owned systems

Wednesday
16:00

Large-scale implementation

Mr Henry Blackman
Mrs Carol Comer
University of Chester

The JISC Capital Programme has enabled the University of Chester to build on lessons learned from participation in the HE Academy's eBenchmarking pilot and Pathfinder programmes. In this project, we examine the virtual learning environment, and the organisational readiness for technological enhancement of learning, particularly when looking to move beyond the controlled environment the VLE provides.

This 2 year project is now in its 6th month. At this stage, we have performed learner needs analysis and enabled an integration of many institutionally-owned systems using open protocols, with compliant user-owned technology. To achieve this we have extended the University's ubiquitous own virtual learning platform in such a way that it delivers learners the opportunity to use their own technologies, be they news feed readers, Bebo, or Blogger. Over the next 9 months the University will be using this distributed approach to deliver a work based blended learning programme, and evaluate at each stage what issues may arise with learners, staff and institutional systems.

We discuss the changes we have made to the University virtual learning environment, our user education programme and the effects on the pedagogic approaches we will be using to teach and enable learning in cohort of learners of varying ages, IT literacy and demographic backgrounds unfamiliar with the concept of personal learning environments.

We wish to highlight the particular limitations and affordances of the distributed approach from learner, institutional and technology perspectives including usability, user-education and facilitation issues. In particular we see this project acting as a pathfinder for institutions who wish to use this approach with their learners.

1187 Short Paper

keywords: PLE / social networks / blog / pedagogy of distributed learning / JISC capital programme

Putting our users first: 'Web 2.0' initiative at the University of Edinburgh

Wednesday
16:00
Dr Chris Adie
Dr Cuna Ekmekcioglu
University of Edinburgh

Large-scale implementation

This paper presents an investigation of institutional issues surrounding the employment of 'Web 2.0' technologies in learning, teaching, and research applications within the University of Edinburgh.

In the last two to three years the Web has entered a second phase (collectively known as 'Web 2.0') where new services and software have transformed it from being a predominantly "read only" medium to one where anyone can publish and share Web content.

In academia shifting the Web from being essentially a tool of reference to one of collaboration has provided both rich opportunities and challenges. The use of blogs, wikis, media-sharing services, and other social software, has been shown to empower students and create exciting new learning opportunities.

For instance, blogs have allowed students to share and reflect on learning, researchers to share knowledge, exchange ideas and easily publish work. Wikis have provided a collaborative, easy to use authoring tool for students, researchers and support staff. Social bookmarking services have introduced user defined tags, while virtual worlds like Second Life have introduced new possibilities for social networking among distance students, and unique opportunities for the development of innovative pedagogies.

However, the significant possibilities are matched by notable challenges. These relate to issues such as institutional politics, interoperability, security, IPR and copyright issues, etc. in the way to adopt these new developments in educational settings. Bearing this in mind, Information Services (IS) has initiated a bottom up approach with regard to adopting 'Web 2.0' technologies in teaching, learning, and research communities. A wide consultation across the University has been carried out to explore these issues, and to take on board the experience, expertise, intentions and concerns of those staff who are already making good use of these technologies as well as those who would like to do so, and to use these findings to inform service provision activities.

A qualitative approach has been adapted for the overall structure for our work which involved issue capture and analysis phases. The issue capture phase consisted of a series of focus group meetings for open discussion which were then followed up by semi-structured interviews with key innovators. Issues arising from these consultations were analysed in the light of the discussions held with stakeholders. This analysis contributed to the recommendations for University's strategic planning in establishing infrastructure and facilitating early adoption of 'Web 2.0' technologies in learning, teaching and research.

In this study we have identified and critically analysed institutional issues pertaining to the use of 'Web 2.0' technologies and risks associated with the two-way nature of these technologies, and established policies and guidelines. The study was useful in identifying not only expected requirements (such as a centrally-provided wiki service) but also less obvious needs - for instance the importance to the user community of clear guidelines on acceptable use of both centrally-provided and external 'Web 2.0' services.

However, the emphasis on teaching, learning and research activities has left the needs of supporting services (administrators etc) relatively unexplored. Thus, this study is expected to inform HE of the process of developing effective approaches to the institutional management of the use of service-oriented ('Web 2.0') technologies in educational settings, in particular, to provide information on how such technologies can inter-relate with university systems and policies to support effective practice.

1202 Short Paper

keywords: Web 2.0 / collaborative tools / institutional implementation

From control to collaboration: creating e-learning across a national consortium

Wednesday
16:00

Large-scale implementation

Mr Haydn Blackey
Prof Tony Toole
University of Glamorgan

This paper takes an ethnographic approach to the developing collaborative engagement of Higher Education Institutions (HEIs) and further education Colleges (FECs) in Wales to provide e-learning programmes for SMEs. It looks at the way social software can be used to break down the organisational constraints so as to achieve a collaboration which allows for free-flowing network interactions and not a control based development model.

The call for collaboration in developing e-learning is key to the governmental agendas for e-learning. HEFCE in its 'Strategy for e-learning' (2005) suggests that one of the measures of success for the embededness of e-learning is when 'due to more coherence and collaboration, technical issues have been addressed to give better value for money.' HEFCW makes the same point when, in even starker terms, it suggests 'Cost pressures can also drive collaboration on e-learning across institutions'. (HEFCW Statement of the position of e-learning in higher education in Wales 2007).

These governmental calls to action on collaboration have been clear, but less time has been spent recognising that collaboration is not necessarily the norm when engaging with academic institutions which often are in competition for students and/or resources. We explore how social software has been used to overcome some of the barriers of collaborative development.

Research into earlier attempts at such collaboration in Wales, for example the Enterprise College Wales (Cf. ECW Final Report 2004), has seen an initially collaborative approach becoming one of centralised control. This control developed because of the need to have one VLE or a centralised server. However, the project being reviewed in this paper has made use of social software including a Blog, a Wiki, instant messaging (in text, audio and video format) to emphasises the network nature of the interaction between the team.

Using such 'democratic' methods of interaction has allowed participants to feel ownership for the whole project and avoided the centralised control of one partner reasserting itself. The online resources developed by the programme have been influenced by the way the programme has been created. Participants already interacting in a Web 2.0 environment have been more likely to use this environment in creating learning resources. Currently we are using Google docs and spreadsheets, YouTube, Flicker and del.icio.us in constructing student interaction as part of the course.

This paper reports on a work in progress. Evaluation is built into the project at its various stages and our initial review indicates that we have made real steps towards new forms of interaction supporting collaborative learning design. Our research shows that some elements of the interaction were new to participants and this has been a limitation on initial development, however we can also evidence the success of such interaction.

The first year of the foundation degree programme has been created using the approaches we have outlined above. The next stages are to use these approaches to enhance the delivery of the programme. We hope to be back at ALT-C in future years to report on how the project develops.

1209 Short Paper

keywords: social software for collaborative course design / HE and FE / Web 2.0 / collaboration in large-scale e-learning / SMEs

e-learning in clinical skills: survey of undergraduate medical students experiences and attitudes

Wednesday
16:00

Large-scale implementation

Dr Ian Bickle
Ms Mairead Boohan
Dr Kate Collins
Dr Gerry Gormley
Mr Mark McCalmont
Dr Helen Wilson
Queen's University Belfast

There is mounting interest in the use of information technology (IT) and computer-assisted learning (CAL) to create a learning environment for medical curricula(1). However, the evidence is limited, particularly in the transfer of clinical skills from the virtual environment to the patients' bedside (2-3). Educationalists have been urged to evaluate the impact of CAL in the medical setting (4). In our institution we teach undergraduate medical students basic clinical skills in an Introductory Clinical Skills Program. Students have the opportunity to develop their skills in the controlled environment of a clinical skills laboratory, prior to practicing on patients in the clinical setting. Students also have access to a clinical skills e-learning resource – which provides online clinical skills learning material, self assessment exercises, clinical skills videos and moderated discussion forums.

This study aims to evaluate undergraduate medical students:
1. Accessibility to e-learning and IT resources
2. Perceived IT ability and experiences
3. Perceived impact of CAL on
   i) clinical skills learning
   ii) standardization of clinical skills teaching
   iii) transfer of clinical skills to the patients bedside
4. Attitudes towards CAL and other traditional methods of teaching

A self administered questionnaire was developed from a focus group of clinical skills teachers and medical students. Three hundred junior medical students, who attended our Introductory Clinical Skills Programme, were asked to complete the questionnaire. Scores in their recent clinical skills OSCE were also recorded. Logistic regression analysis will be used to determine the likelihood of student responses with their demographic and OSCE scores.

Results and discussion to be presented. The discussion will aim to highlight:
1. Reported levels of IT ability among our undergraduate medical students
2. Any inequity to the accessibility of IT
3. Student's perceptions on the impact of an e-learning resource on
   i) their learning of clinical skills
   ii) transfer of their clinical skills on to real patients.
   iii) the standardization of clinical skills teaching.
4. Any association between students perceptions and use of CAL - with performance in a clinical skills OSCE.

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4) Cook J. The role of virtual learning environments in UK medical Education. 2001; http://www.ltss.bris.ac.uk/jules/jtap-623.pdf

1149 Short Paper

keywords: student experience and attitude to e-learning

Recording lectures and the impact on student attendance

Wednesday
16:00

Large-scale implementation

Mr Michael Fardon
Ms Jocasta Williams
University of Western Australia

Recording university lectures has become a relatively common practice in recent years, attempting to make the lecture method more accessible and flexible for an increasingly diverse student population. Although numerous studies have been conducted into how the recording of lectures has impacted teaching and learning practices, the debate regarding student (non-)attendance at live lectures persists. Investigating the relationship between recording university lectures and attendance at live lectures was the focus of a study in 2006 at the University of Western Australia (UWA) where the practice of recording lectures is deeply embedded in the university's teaching and learning fabric.

The results from the 2006 UWA study confirm that lecture recordings are now a critical learning resource for many UWA students and most stated that, despite using lecture recordings, they still attend live lectures regularly. In reviewing the feedback from students, it became evident that they could be divided into two separate (although frequently overlapping) groups: those who use lecture recordings instead of attending live lectures (e.g. those with timetable clashes, work commitments and/or medical conditions), and those who use them as well as attending live lectures (e.g. to support revision and reviewing concepts and/or to overcome language barriers).

Out of the study, three main topics were highlighted for further consideration: firstly, the importance of advising students of the appropriate use of lecture recordings; secondly, the focus on student attendance at lectures should shift to a focus on student engagement with lecture material; finally, the need for lecturers to ensure effective support for students who have become highly dependent on recordings for their learning activities. The practice of recording lectures and its impact on lecture attendance is being widely-debated in higher education internationally and this presentation will offer a useful insight into the topic through sharing the findings from this study.

1064 Short Paper

keywords: recording university lectures / lecture attendance / attendance policies at universities

The testing and user evaluation of a video system for online authentication of assessment for remote learners

Wednesday
16:00

Large-scale implementation

Dr Trevor Barker
Prof Jill Hewitt
Ms Stella Lee
University of Hertfordshire

The increased use of online learning systems in education today has in most cases been a positive influence on the learning experience, for learners and teachers alike. The University of Hertfordshire's Managed Learning Environment (MLE), StudyNet is used within our university in a blended framework for learners both on and off campus since 2001. In 2003/4, 80% of staff and students were using StudyNet regularly with 3.62 million logins. In 2004/5, this figure had grown to over 95% of staff and students (4.85 million logins) including 51% of logins from locations off-campus.

In order to provide online studies that are equivalent to traditional university teaching and learning, it is important to provide online assessment that is secure, robust, and relevant. This must provide a good test of learning outcomes whilst meeting the need for a secure hand-in system with adequate authentication of the students. Currently, assessment methods for distance learners in this university and elsewhere are not ideal and none cater to the

flexibility and needs of the students, often relying on attendance at assessment centres at specified times.

The research reported in this paper represents one potential solution to the problem of online assessment, the development, testing and evaluation of an online video assessment authentication system, developed by the Departments of Computer Science and Criminal Justice, for use in online assessment. In stage one, expert evaluators used and tested the system in a pilot study. After modification in the light of recommendations, a full scale assessment session was undertaken in stage two, using video and a database of candidate authentication information. The paper presents student attitude to the assessment and measurements on the efficiency of the system. We discuss our findings and recommend improvements enabling implementation of the full system in the near future.

1203 Short Paper

keywords: online assessment / validation of student identity / video conferencing / integrated software development / evaluation

Learners in control: the TESEP project

Wednesday
16:00

Prof Terry Mayes
Glasgow Caledonian University

Liz Foulis
Lauder College, Dunfermline

Dr Keith Smyth
Napier University

Julie McCran
Telford College, Edinburgh

Andrew Comrie
The Interactive University

Learning technology for the social network generation

TESEP (Transforming and Enhancing the Student Experience through Pedagogy) is a two year project part-funded under the Scottish Funding Council's E-Learning Transformation Programme. The project started in April 2005 and is due to finish in July 2007. It is one of six projects in the e-learning transformation programme, all funded at a level of around Ł1M. This paper will present the key principles behind the project, briefly describe its activity, and summarise its achievements.

The project is led by Napier University, Edinburgh, and is partnered by Telford and Lauder Colleges. Its fundamental purpose is to achieve transformation through the empowerment of learners, both staff and students. A key assumption is that both kinds of learners need to take more responsibility for their own learning outcomes, and that skilled and confident use of e-learning will help to achieve that aim.

Further objectives of the project are:
- To cross the HE/FE gap in a genuinely collaborative development programme
- To develop pedagogies that encourage learner empowerment and control
- To position e-learning appropriately in a pedagogy-led transformation
- To develop a new cascading model of staff development
- To address the sustainability and embedding of the transformation

The project has been structured into three phases. In phase one a primary group consisting of practitioners from each institution was formed to establish the design principles. These were cascaded to the 13 phase two practitioners who have implemented a social-constructivist approach to their courses, across a wide range of subject matter, from conceptual learning in areas like law and psychology, to skills learning in figure drawing, and painting and decorating techniques. In each case there has been a strong focus on learner-led activity, peer discussion, and frequent feedback.

The role of e-learning varies across the various exemplars. An important dimension of the approach has been to encourage the learner-creation of subject matter content, as a way to engage learners from the start. Across the range of TESEP exemplars there is also an emphasis on formative assessment, on various kinds of discussion, and on the use of social software such as blogs and wikis. None of the practitioners are developing their own content directly, but are exploring ways of supporting their students to exploit and share existing Web resources with confidence.

The approach depends critically on engaging students at a new level of responsibility for their own learning. Such an approach depends also on a new level of institutional support for students to acquire the necessary digital literacy and confidence. Three separate sub-projects are developing TESEP approaches to induction: one is aimed at staff induction in FE, another is developing a new approach to student digital literacy, and the third is surveying current practice across Scotland's Colleges.

In the final phase each of the phase two practitioners is attempting to cascade the TESEP approach to their immediate colleagues. The project has also sought partners from other institutions and is now highlighting good examples of the approach across the sector. The intention is continue to work with agencies such as SFEU and the JISC Regional Support Centres to build and disseminate the approach over an extended period. This paper will summarise the project, provide some illustrations and consider the extent to which the ambitious goals of this project, and those of the programme in which it features, are being achieved.

1289 Short Paper

keywords: learner empowerment / locus of control / rethinking IT induction / social constructivism / institutional transformation

Devices, demands, and desires: tracing technology use in the daily life of Cambridge students

Wednesday
16:00

Dr Catherine Howell
Mr Matthew Riddle
University of Cambridge

Dr Michael Arnold
University of Melbourne

Learning technology for the social network generation

Recent studies have looked at the use of information and communications technologies (ICTs) by higher education students. For example, Haywood et. al. (2004) compared ICT skills among students across Europe, concluding that skills are adequate for the needs of university learning, and a survey report by the SPOT Plus Project (2005) reports on student perspectives of ICT use across 7 European higher education institutions. In the United States there has been the ECAR study (Kvavic & Caruso, 2005) and in Australia a report on the use of ICTs by first year students at the University of Melbourne (Kennedy et al, 2006). While some compare traditional methods to teaching with technology, these studies have tended to use technology as the axis of their investigation, rather than the broader student experience.

As one part of the Learning Landscape Project on learning and teaching at the University of Cambridge, the project reported in this paper aims to investigate the use of technology in students' everyday lives. At Cambridge, the distinction between home and study environment is notably blurred. This study investigates which technologies students are now using, and the extent and nature of their use. It provides a picture of the use of ICTs by Cambridge students in the context of their daily lives in order to contribute to a fuller understanding of the teaching and learning environment.

There are certain general principles that underpin the project method. Our focus is not on the technologies per se, but on the activities related to scholarly life that may or may not involve them. Experience of and with technology is thus comparable to experiences that do not involved technology, and alternative practices constitute a natural control for a technology assessment. By capturing daily life, the experience of those not using technologies in any given context has equal empirical standing. Evidence relating to non-use is as important as evidence relating to use, from both a technology assessment and an equity and access perspective. The methods are predominantly qualitative, and cast respondents in the role of co-researchers. The methods do not look to respondents as relatively passive sources of un-processed data, but as active sources of informed experience and analysis. The project sets out to enthuse and engage the respondents in stimulating and amusing ways, and make maximum use of their experience, intelligence, and insight.

In doing this, the project makes use of a number of innovative research techniques. We identify relevant demographic characteristics and technology-use combinations to produce a technology-use matrix. It employs a series of techniques including the 'experience sampling method' (Intille et al 2003), the 'day reconstruction method' (Kahneman et al 2004), methods inspired by the "cultural probe" approach (Gaver and Dunne, 1999, Arnold, 2004) – such as the 'cold turkey method', the 'very advanced technology method', and 'movers and shapers' focus groups. This paper presents the aims of the research, an account of the methods and their underlying rationale, and our initial findings.

1253 Short Paper

keywords: student / technology / ICTs / qualitative

Students in control: social networks of learners in e-learning development

Wednesday
16:00

Learning technology for the social network generation

Dr John Cook
Mr Andrew Mitchell
London Metropolitan University

Mr Stephen Curtis
University of Nottingham

Ms Dawn Leeder
Dr Raquel Morales
University of Cambridge

Mr Keith Couper
Dr Heather Wharrad
Dr Richard Windle
University of Nottingham

The learner's role in e-learning developments, although recognised as important, is often confined to the product evaluation process, in a way that remains in the control of the project managers. However, the HEFCE-funded Centres for Excellence in Teaching and Learning (CETL) initiatives are driving a new culture of substantive learner involvement across the HE sector. The CETL for reusable learning objects (RLO-CETL) has adopted, and is closely evaluating a community-of-practice based approach to e-learning development. Empowered learner involvement is seen as highly important to this approach, but its actual characteristics and benefits need clear mapping as the process evolves.

In this paper we discuss our initial observations and evaluations of learner involvement over the first 2 years of the project, with reference to previously published theoretical perspectives on Communities-of-Practice. Initial evaluation from community and network analyses suggests that learners have a clear and positive view of their participation within the RLO-CETL's communities. According to Wenger, the father of the Communities-of-Practice concept, participation implies both action and connection and empowered community participants have a degree of control over these elements. In terms of action, learners have taken on roles over and above those that were initially planned for them. Not only are learners contributing to product-development as part of teams headed by tutors, they are also actively seeking to lead in this process. Instances of high quality, learner-generated content, such as a family of learning objects in the area of mental health, are beginning to appear.

However, it is in the area of connections that the most unexpected benefits of learner-involvement are being observed. Learners appear to represent a nexus around which a variety of communities converge, both within and outside the RLO-CETL. Evaluation data suggests that learner-involvement may be an important driver for fostering reuse through peer-to-peer and peer-to-tutor communication. Within the CETL learners appear to be taking on an important role of brokerage between specific communities that organise around a boundary object or project output. In this way they act as knowledge and communication conduits and contribute to the cohesiveness of the project as a whole. The RLO-CETL is exploring ways to support, but not control these roles. A student network managed for and by the students is currently being developed and initial findings from the network will be reported.

1326 Short Paper

keywords: community of practice / reusable learning objects / user participation / learners / reuse

Integrating folksonomies and taxonomies when teaching with a social bookmarking application integrated within an online course environment

Wednesday
16:00

Learning technology for the social network generation

Mr John Morrison
Blackboard Inc.

Dr Deborah Everhart
Georgetown University

Social bookmarking can be understood as an individual tool, but is a challenge to understand as a teaching tool. The solution is to equip faculty to direct and structure the use of these tools within their courses. Understanding ways these tools could be used in teaching opens up the possibility of transforming social bookmarking into a course and discipline knowledge building and management tool. The challenge with social bookmarking is to understand why it would be used and understanding how it could be used in teaching. A social bookmarking application will be shown, chosen because of its integration with online course management software, thus facilitating the use of social bookmarking with courses and disciplines.

To help practitioners understand social bookmarking and its use in a course. Blackboard Scholar Web service and its use with Blackboard learning management systems. The workshop will be in a computer lab in order to allow hands-on activities.

Explanation of social bookmarking and how it can be used in teaching, highlighted with demonstrations of examples to bring out the essential characteristics of social bookmarking applications.
- Lessons learned from reviewing data on the use of social bookmarking applications.
- Lessons learned from early adopters of social bookmarking in education.
- Ways to indirectly and directly influence the choice of tags by students.
- A series of sample activities will be presented, to get participants thinking about the range of activities that can be done with a social bookmarking application.

After the above demonstration, participants will be setup at their computer in a computer lab with their own accounts on this system. Participants will be encouraged to set up an initial course social bookmarking site and to develop their own social bookmarking activity which they could use in a course. After participants have developed their own example, and to broaden the range of examples available to all participants, they will be asked to share their sample activities with other participants. It will be helpful, but not essential, if participants come with the course syllabus and initial course handouts for a course. Participants will be able to use these for designing a social bookmarking course site which could be used to teach a course with social bookmarking.

Interaction will involve participants using the material presented in order to setup their own social bookmarking course site, developing one or more activities for use with it and finally sharing these activities with other participants.

Learning outcomes:
An understanding of social bookmarking and why and how it can be used in teaching; the ability to think about the use of this class of tools in teaching.

1060 Workshop

keywords: resource building and sharing community / social bookmarking / integration with online course environment

Outcome based learning: A blend of technology and constructivism in student learning

Thursday
9:00

Designing learning spaces

Mr Timothy Hall
Dr Kevin Johnson
Mr Cathal McHugo
University of Limerick

The development of skills as a self-directed learner is highlighted as must for a successful career by industry and faculty leaders, but many graduates from third level education fail to grasp this. The lack of opportunity to understand and practice these skills is a shortcoming of third level education best addressed as early as possible in a student's programme of study; unfortunately junior year course material does not always afford such an opportunity. The foundation years of most engineering and science programmes are almost always coupled with the development of core material that is often theoretical in nature. Its relevance and importance to a future career is not recognised by students, they find it boring and loose interest. This in turn encourages shallow learning simply to pass exams. By adapting the techniques of Problem Based Learning (PBL) common in some academic areas and encouraging students to become active learners, we, in the Department of Electronic and Computer Engineering at the University of Limerick, have developed an innovative learning methodology entitled Outcome Based Learning laboratory (OBLL) which aims to combat the problems and inspire self-directed learning by students early in their studies.

The methodology offers a blend of scheduled laboratory experimentation, remote design, development and interaction. Where possible students adhere to industry processes and carry out the necessary steps prescribed by industry procedures and standards. Students work on real life problems and produce appropriate real life solutions. An essential core feature is the use of a Web based Learning Management System (LMS) augmented by remote tools to present the students with a unique opportunity to engage with course material. This approach allows flexible remote access to course resources free from time or geographical constraints. Our OBLL methodology has been refined by applying it to courses in Web programming, digital electronics and instrumentation for our undergraduate Bachelor of Science programmes in ICT and Electronic Systems.

This paper explains our implementation and evaluation of OBLL. The underlying theoretical framework and the collaborative student learning environment established in this learning methodology are presented. System architecture and structure of OBLL is reviewed. Customised elements employed in each of the trial courses are also outlined in detail. The self-directed learning skills developed by the students through this learning methodology are enumerated. Finally both student and tutor analysis and an evaluation of the technology enhanced learning (TEL) environment is presented and discussed.

1141 Short Paper

keywords: self-directed learning / technology enhanced learning / problem based learning

From copying to learning? How students use a databank of marked assignments to improve the quality of their assignments

Thursday
9:00

Designing learning spaces

Dr Karen Handley
Business School

Ms Lindsay Williams
Business School, Oxford Brookes University

The importance of feedback is widely recognised in the literature as a resource to help students develop their academic literacy skills. However, student dissatisfaction with feedback - as evidenced in the National Student Survey for the last two years - suggests that feedback practices are less effective than they might be. From the students' perspective, how can they learn from feedback when they find it confusing and erratic, or over-simplified by a reliance on stock phrases (such as 'more argument needed here') which has little meaning for them? (Chanock, 2000; Lillis and Turner, 2001). Furthermore, how can students be encouraged to participate in an academic discourse community if their relationship with markers is confined to single modules with no expectation of progression and an opportunity to respond to - and act on - the feedback by re-writing assignments?

In the absence of a personal tutorial system or assessment-linked modules, our research considers another option: the creation of a databank of previously-marked assignments annotated with feedback which can be read by later student cohorts. In the pilot study discussed in this paper, two cohorts of 2nd year undergraduate students (400 each semester) on a module called 'Methods of Enquiry' were given access via WebCT to four previously-marked pieces of coursework. The coursework examples were similar in structure to the assignment which students were about to complete. WebCT recorded over 1000 hits per assignment. Students could read the coursework and markers' comments, respond to self-test queries to develop their ability to critique the work, and post comments and questions to the WebCT Discussion Area.

This paper discusses students' views on the utility of the database. Views were collected using an anonymous survey (20% response rate) and interviews. Overall, students were very positive about the benefits of the exemplar database, giving an average rating of 4.5 out of a possible 5. However, analysis reveals a range of student responses, and a need for further development of the database facility. A few students 'merely copied'. This raises questions about whether 'model' exemplars facilitate plagiarism. Others transplanted into their own work phrases which had received positive feedback but without apparently grasping the reason for the feedback. Nevertheless, most students commented that the exemplars helped them decode assessment standards. To develop their abilities, students requested more examples but of varying grades: rather than 'merely copying', the latter students wanted to compare and contrast in order to elicit differences and thereby understand the underlying standards. This suggests the development of critical skills of self-assessment leading to deeper learning.

The research results are interpreted using a conceptual framework drawing on theories of identity and situated learning. A conventional argument in this literature is that students are on the periphery of an academic discourse community. We suggest that most of these undergraduate students were genuinely trying to decode the academic values and standards required for their assignment. Our concern is that if unable to do so, students declined to 'participate' in the classic apprenticeship approach by asking for clarification, either in the Discussion Area or with tutors face-to-face. We explore the extent to which this reflects a cognitive failure (i.e. an inability even to phrase an appropriate question) and/or a problem of identity where students feel marginalised rather than peripheral members of an academic community.

1156 Short Paper

keywords: learning from exemplars / formative assessment / feedback / WebCT

Promoting independent skills acquisition in practical allied health education

Thursday
9:00

Designing learning spaces

Ms Heidi Solheim
Mrs Nicky Wilson
University of Southampton

This action research study introduces a blended learning approach in the neuromusculoskeletal module of a first year BSc Hons physiotherapy programme. The primary focus of its development was the learning and retention of motor skills fundamental to the practice of neuromusculoskeletal physiotherapy. Previously these skills were delivered via a high ratio of tutor-led hands-on contact hours to self-study. By introducing a blended learning approach directly into the practical teaching space it was hoped to reduce the educational focus on strictly instructional practices and provide a shift towards more self study, peer interaction and learning and higher order thinking.

A number of changes were introduced into the delivery of the neuromusculoskeletal module to the year 1 physiotherapy students on the BSc Hons programme at the University of Southampton. These changes were in response to student views and opinions explored through discussion groups from two previous student cohorts. The blended resources had to make a significant contribution to the students learning process and so were built around a model of complementary practice. The thrust of this approach was to identify discipline-specific pedagogy and core practices and keep them in the traditional domain of face-to-face teaching and learning. Meanwhile, the online elements of the course sought to extend and enhance the students' engagement with the core material, as opposed to trying to replicate or recreate established practice online. Video clips, discussion boards, virtual patients, data base applications and online links with other modules and sites fully integrated into the course were included. Delivery was through the Blackboard learning system and accessed during practical sessions as well as remotely.

By re-organising and widening the educational approach, the aim is to emphasize not only the skills but also the application of these skills and the externalisation of performance patterns in situational contexts e.g. on clinical placement.

The blended learning approach and situated online learning introduced into this module will be evaluated in a number of ways following module completion. Student use of prescribed online resources and participation in activities will be tracked by the user statistics for on campus and remote access. It will then be possible to check for any relationship between online user activity and exam results. Preliminary findings after semester one mock examination suggest a positive relationship, which supports the view that the students' continuous engagement with the curriculum should ensure a more reflective and rounded performance in both theoretical and practical areas. Qualitative data will also be gathered from students via participation in end of module discussion groups exploring the student experience of the module.

This model if successful could be adopted by other health care modules that contain a significant proportion of practical skills, not just in physiotherapy. Sufficient resources along with mobile networked equipment introduced in the practical setting, has been fundamental to the success of this approach and enhanced learning spaces. This embedded blended approach combined with increased access has resulted in demand for similar implementation across allied health professions within our institution.

1183 Short Paper

keywords: blended learning / practical skill acquisition / neuromusculoskeletal physiotherapy / complementary practice / practical teaching spaces

Searching questions, informal modelling, and massively multiple choice

Thursday
9:00

Designing learning spaces

Mr William Billingsley
Professor Peter Robinson
Cambridge University

The Intelligent Book project aims to improve online education by designing materials that can model the subject matter they teach, in the manner of a Reactive Learning Environment. In earlier work, we developed mathematical proof exercises that used an automated theorem proof to model the student's proof. By observing human tutorial sessions, however, we find that this level of formal modelling is not necessary for many proof questions. In this paper, we investigate whether less formal modelling can still provide a useful Reactive Learning Environment. We constructed a system that uses search and informal reasoning about prewritten statements to ask questions for an undergraduate Discrete Mathematics course. When generalised and simplified, we find these search-based questions can also be used as a replacement for multiple choice questions, or to provide massively multiple choice questions.

1146 Research Paper

keywords: intelligent book / informal modelling / mathematical proof / massively multiple choice / MathsTiles

Learning and automatically assessing graph-based diagrams

Thursday
9:00

Designing learning spaces

Dr Neil Smith
Dr Pete Thomas
Dr Kevin Waugh
Open University

To date there has been very little work on the machine understanding of imprecise diagrams – diagrams drawn by students in response to assessment questions. While there have successful attempts at assessing text (essays) automatically, little success with diagrams has been reported. In this paper, we explain an approach to the automatic interpretation of graph-based diagrams based on a 5-stage framework. The paper reports on the evaluation of some experiments in automatically grading student diagrams produced under examination conditions which show good agreement with the performance of human markers. The paper also describes how the automatic marking algorithm is being used in a variety of teaching and learning tools.

1069 Research Paper

keywords: diagram interpretation / automatic assessment / learning tools

Online toolkits for learning design. Should we bother?

Thursday
9:00

Designing learning spaces

Mrs Karen Fill
Mr Paul Riddy
University of Southampton

Mr Mark Childs
Mr Graham Lewis
University of Warwick

Amongst the various aims of the JISC-funded Design for Learning Programme is the goal of promoting the development and implementation of tools and standards to support the process of design for learning. Evaluation of Design and Implementation Tools for Learning (EDIT4L), a project conducted by the Universities of Southampton and Warwick, is investigating various aspects of what is needed to achieve this goal.

Designs created using DPT can range from a single task to a complex learning activity, or a one-off workshop to a whole course. Activity sequences created within LAMS can be re-used in other LAMS systems and stored in learning objects repositories such as JORUM, the national, JISC funded repository. In Phoebe, users create learning designs by responding to a series of webpages which carry prompts. The responses to these prompts are entered

on a notepad, from which a design report is constructed. The tools have been evaluated as part of these workshops, and participants responses to related questions collated. More details are available at http://www.edit4l.soton.ac.uk

EDIT4L has engaged with educators within FE and HE through two different types of workshops. Some of these workshops have been part of staff development programmes; others have been for a national audience. In both types the DialogPlus Toolkit (DPT) and LAMS have been used as tools to explore, and develop, the concept of learning design with members of academic staff and trainee teachers. In some workshops the potential of Phoebe has also been explored. The workshop participants have all taken part in an evaluation of the toolkits, and also been asked their opinions of learning design and online development toolkits. Although limited in number, the responses raise questions with the potential to open up and inform the debate regarding the role and design of online toolkits and their future development. The status of these workshops within institutional programmes, and their incorporation into staff development provision has raised a number of issues. The presentation will also briefly explore our observations and what this reveals about the role of learning design and e-learning in staff development.

In summary, the purposes of this presentation and discussion are three-fold:
1) To share the findings of the project with the e-learning community
2) To spark debate regarding those findings, some of which we anticipate may be controversial
3) To gather feedback on our findings and further develop our research.

For these ends, your contributions to the debate will be central to our presentation.

1234 Short Paper

keywords: e-learning / design for learning / toolkits

ePioneers: A mentoring approach to technology adoption

Thursday
9:00

Designing learning spaces

Ms Elaine Arici
Dr Do Coyle
Mr Tony Fisher
Dr Gordon Joyes
Mr Matthew Nilan
Professor Mike Sharples
University of Nottingham

This paper presents the processes and outcomes involved in the ePioneers initiative at the University of Nottingham within the School of Education. The aim is to move the School from 'cottage industry' e-Learning practices to majority adoption through projects that:
a) Identify areas of particular e-learning need that enhance the learning experience of students;
b) Combine expertise of practitioners and educational technologists
c) Explore 'quick gain' solutions that bring clear educational benefits for relatively small amounts of development effort; and
d) Produce a bank of training materials (including individual case studies and 'how to' guides) that will support other departments across the University in their e-Learning implementation.

This 2-year project is supported by the University of Nottingham Learning and Teaching Initiative through HEFCE funding.

The ePioneers programme is a strategic intervention involving the trialling and implementation of appropriate and cost-effective e-learning approaches with a view to their wider adoption across the School. In creating groups of ePioneers the aim is to move from an 'early adopters' approach to the integration of e-learning across School practices to pave the way for majority adoption .

Support by the authors for the ePioneers forms part of an e-Learning change management strategy for the University. We aim to produce a bank of

training materials that are intended to be useful at the levels of both strategic planning and specific implementation of the change process.

Phase one of the programme was based on 10 ePioneer projects that implemented 'quick gain' e-learning approaches in participants' work areas. Each ePioneer project was supported by a mentor drawn from a staff pool familiar with the approaches in question, and the technologies concerned. The ePioneers were supported in working together with the strategic intention of growing a community of practice among themselves, and also for each ePioneer to have an impact on existing communities of practice in their own area of work.

SharePoint Services 3.0 was used to manage the collection of data utilising a project blog to capture progress through the action research cycle.

Evaluation of the programme was conducted by:
- A project steering group
- An external, advisory expert group

The Project Steering Group, comprising the School's e-learning Strategy Group designed and conducted formative 'life-cycle' evaluation with participants (including ePioneers, mentors, students and other staff as appropriate), in order to inform the development of the project. The success criteria were:
a) Successful adoption of innovative technology-based methods by each ePioneer;
b) Successful functioning of each mentor/ePioneer dyad;
c) Demonstrable transformation of research, learning and teaching, or administration by new patterns of learning, course coordination, or communication;
d) Dissemination of results through training materials and a training workshop open to all university staff.

The external expert advisory group, comprising a small number of external advisors drawn from Schools and departments across the University were invited to engage in an 'expert seminar/workshop' to ensure that the approaches and materials developed were relevant to a range of wider contexts across the University. This enabled support transferability and dissemination.

1071 Short Paper

keywords: e-learning change management strategy / mentoring for technology adoption / 'quick gain' educational solutions / communities of practice / majority adoption of e-learning practices

Benchmarking the design and approach of learning across HE disciplines

Thursday
9:00

Designing learning spaces

Dr Richard Parsons
University of Dundee

Mr Arthur Loughran
University of Paisley

Mr Simon Booth
University of Stirling

Teaching and learning in almost all disciplines is evolving to incorporate substantive components of online learning, alongside their own proven traditional techniques. We present a method for visualising and recording the pedagogic design and learning interactions utilised within a particular discipline. Data is collected on student study time that is engaged with a series of learning interactions, and plotted on independent / collaborative and offline / online axes. We will present data collected across three institutions using this method and make conclusions about the effectiveness and utility of this benchmarking approach. It permits instructive comparison between the learning and teaching approaches for a single discipline in different institutions and between disciplines within the same or different institutions.

The visualisation provides a mechanism for lecturers within a discipline to understand their pedagogy and develop their learning and teaching approaches in the context of both new and traditional techniques.

For each course or module to examined, a limited amount of data is required to be collected. A spreadsheet is used to list the individual learning interactions of the course and each learning interaction is categorised as predominantly offline or predominantly online. Similarly, each learning interaction is categorised as predominantly independent, or predominantly collaborative or interactive in nature. The final data required is the student study hours that are expected to be engaged with each learning interaction. This approach produces a set of typically 6 to 20 learning interactions for each course, and permits straightforward comparison between courses or modules.

The method permits the diagrammatic representation of the learning activities into the quadrants with the student study hours used as the scalar variable. This visualisation allows lecturers to understand their pedagogic approaches through a diagrammatic representation of their learning activities. This method has potential for making useful comparisons between different approaches to learning and teaching, for understanding alternative pedagogic models, and for permitting planning and development for existing courses. It is particularly useful for charting the development of blending learning approaches, and permits lecturers to understand how new learning interactions utilising e-learning approaches can be incorporated alongside proven traditional methods.

This work has been developed as an element of e-learning benchmarking research. It has focused on understanding how changes in the learning and teaching experience of students can be recorded and compared within disciplines, and over time. One strong aspect of the work is that it provides an evaluation method for learning activities as a whole, permitting the importance and development of e-learning approaches to be made alongside the importance and development of traditional learning approaches. The quality of the learning interactions is not judged, nor the pedagogic approaches questioned. It is acknowledged that both independent and collaborative interactions provide different strengths to student learning and development. Many courses may have a distinctly unbalanced visual presentation, and this can be justified by the pedagogic approaches deployed. However, it is interesting to note that a generally balanced presentation is favoured by users of the system, as they generally acknowledge the value of online, offline, independent and collaborative learning interactions.

1364 Short Paper

keywords: discipline-teaching / practice / bench-marking / student study hours / instructional design

Perceptions of academics and students using University of East London VLE

Thursday
9:00

Large-scale implementation

Dr Dina Vyortkina
University of East London

University of East London (UEL) started integrating a new Virtual Learning Environment System UEL Plus (a.k.a. BlackBoard Learning System) in September 2006. It is anticipated that by September 2008 UEL Plus will replace the current system, WebCT, engaging hundreds of students and academics.

Evaluation of pioneer staff and student experiences during this period is critical for ongoing successful implementation of UEL Plus in the University. We are currently evaluating student and staff experiences of UEL Plus. The primary goal of the project is to use findings for streamlining the UEL Plus implementation process for other academic staff and students, making their experiences more satisfying, enhancing the quality of teaching and providing additional support for students' learning.

There are few studies or reports across the higher education sector that describe analytically the use of a VLE similar to UEL Plus, the large scale implementation process, and perceptions and concerns of those carrying out the innovation. Systematic data collection activities involving students and academic staff via specifically designed questionnaires, focus groups, structured and semi-structured interviews, surveys, and document analysis are employed.

Comprehensive data regarding interaction with the Web-environment, student/staff satisfaction with their e-learning experiences, barriers, facilitating factors, perceptions, attitudes, and lessons learned by people involved in the innovation is used for developing actions to improve quality of student experiences, facilitate teaching, enhance learning, and promote research in the areas of using VLE in higher education, quality improvement, and staff development.

Therefore, the educational significance of this project is to synthesize and expand the knowledge base and identify the factors that influence UEL Plus implementation through removing the barriers and enhancing the facilitating factors with the overall goal to improve teaching and learning experiences. We envisage this project could have stimulating implications for practice and further research and are confident the results of this project will benefit the UEL community and colleagues in other institutions.

We are aiming:
1. To ensure that students are given opportunities to be actively involved in discussions regarding UEL Plus implementation and its effect on their learning.
2. To evaluate, through a staged process, full integration of UEL Plus into students' experiences.
3. To create evaluation instruments (questionnaires, surveys, interview protocols) to be used in the project. These instruments can be used not only for this study, but for further evaluations throughout the years, with modifications if necessary, thus adding value to the proposed work.
4. To conduct both qualitative (focus groups, semi-structured interviews, etc.) and quantitative evaluations (questionnaires, surveys, etc.) to gain a deep understanding of what has been occurring during student and staff UEL Plus use and to measure the level of satisfaction.

1058 Short Paper

keywords: VLE / e-learning barriers / support structure / staff development

Student and staff perceptions of Web-based lecture recording technologies

Thursday
9:00

Large-scale implementation

Dr Rob Phillips
Murdoch University

Some Australian universities have had a long tradition of capturing analogue recordings of lectures and providing these for distance students or storing them in libraries for students who may have missed a lecture. However the recent emergence of Web-based lecture recording technologies has heralded a growing use of digital lecture recordings by all students. This is pushing the boundaries of established practice and challenging the role of the face-to-face lecture as a prime teaching strategy.

Four Australian universities - Macquarie University, Murdoch University, Flinders University and the University of Newcastle - have been collaborating on a project funded by the Carrick Institute for Learning and Teaching in Higher Education. This project investigates the impact of Web-based lecture recording technologies on current and future practice in learning and teaching in higher education.

Studies to date on the use and uptake of Web-based lecture technologies have explored the technical and operational issues surrounding access and use. It is well documented that these technologies provide flexible access to lectures for students for a variety or reasons relating to students' personal circumstances and timetabling arrangements. However, there are changes in usage and attendance patterns which have not been investigated that are thought to impact on the learning environment. Some lecturers report poor attendance, loss of contact with students, disruptions to the continuity of the learning experience and poor results. Others have reported no apparent changes. This raises questions of: Why is this happening? What other changes are taking place in the environment, from both a teaching perspective and a student learning perspective? Are these changes having a negative or positive impact on learning?

This presentation reports on the first stages of this research, a survey of students and a survey of staff. The student survey investigates changes in lecture attendance; how lecture recordings are used; strategies for supporting learning; and perceptions of effectiveness in relation to learning and the achievement of better results. Significant differences were recorded across several variables for different cohorts: between net generation students and those born prior to 1980; between on-campus and distance students; and between surface and deep learners. The staff survey inquires into individual approaches to teaching, the role of lectures, the ways in which Web-based lecture technologies have been used, and their impact on teaching practice.

1360 Short Paper

keywords: Web-based lectures / recording lectures

Going beyond management by control to management by engagement - are FE staff ready to engage

Thursday
9:00

Large-scale implementation

Ms Alyson Dacey
Neath Port Talbot College

Mr Haydn Blackey
University of Glamorgan

This paper explores the underlying theory of e-learning uptake and staff perceptions of e-learning practice in a further education College. A nominal ontology has informed the research and we have used a mixed method approach within a phenomenological methodological framework. An e-delivered questionnaire was distributed to all teaching staff at the college, which is on eight sites; this was followed by a series of depth interviews with staff and managers.

The theoretical premise which informs this paper identifies the drivers and barriers for the take up of e-learning. The move from 'professor-centred education' (Yang and Cornelius 2005) to student centred learning is seen as requiring a high degree of interactivity and participation (Nordin et al, 2005). Styles (2003) and Divine (2003) have both argued, in the HE sector, that an engaged participant is a much greater strength in embedding e-learning than is the use of management control.

The HERI (1999 as quoted by Bower, 2001) research indicates that compulsion based on management control models are extremely stressful and de-motivating, rather than enabling. As McLean (2005) suggests technology holds great potential for enhancing teaching, but teaching staff must be willing and prepared to use it. Moving beyond control will involve managers taking the risk to move from compelling staff to take part, which while signifying commitment to e-learning can cause resistance and resentment, to showing staff the value of the development for themselves.

However managers will not be likely to take this leap of trust unless they understand their staff's intrinsic values with regard to e-learning. Given that the experience of the UK FE sector is that control is a more dominant model of management than is characteristic of HE, it seemed appropriate to design a piece of research which identifies the perception of practitioners within a college moving towards embedding e-learning. The key findings from the research indicate that staff at the college have a positive perception of e-learning. The opportunities for those who would otherwise be excluded from the education process is seen as a significant advantage. E-learning was seen as encouraging autonomous learning, self-direction and reflection skills the kind of skills required for HE and employment. Staff saw e-learning as something that would benefit their career in both intrinsic (personal satisfaction and increased quality of student experience) and extrinsic (reward and recognition). So in the case of this College management can safely go beyond control to engage their staff based on their own commitment to move forward.

It is clear that the limitations of this piece of research is that it is based in only one college, but the mix and make up of staff at the college could be argued to be representative of other institutions in the sector. Further research will build on this initial activity and apply the research instruments to other institutions in the sector to see if the trends identified at this college are represented more widely.

1210 Short Paper

keywords: e-learning practice in a further education college / management of institutional change / staff perceptions of e-learning / whole institution e-learning development / staff motivation

The vanguard courses at the College of Science and Engineering at the University of Edinburgh – a model for promoting responsible learning?

Thursday
9:00

Large-scale implementation

Mrs Daniela Gachago
University of Edinburgh

In October 2005 the College of Science and Technology at the University of Edinburgh developed a new Teaching and Learning Strategy, to promote the Scholarship of Teaching and Learning. Three working groups were then established by the College Undergraduate Studies Committee, which acts as the project board for the implementation of the Learning and Teaching Strategy, investigating into the three main areas of the Strategy: Personal Learning, the provision of Flexibility of Learning Styles and Methods of Assessment. In these working groups one central theme evolved: Responsible Learning. This involves establishing greater student self-responsibility for learning, diminishing cultures in which student participation is scrutinized and providing students with guidance, understanding and support that allows them to have a self-awareness of their own progression throughout the duration of a course.

As a model for implementing the Teaching and Learning Strategy, the Vanguard Course initiative was launched. Vanguard courses are existing courses, which were willing to review their methods of teaching and assessment to make Responsible Learning a central course element. Vanguard course organisers are being assisted by a colleague from the Teaching, Learning and Assessment Unit and a College-based e-learning advisor. The implementation of the vanguard courses is supported by appropriate learning technology to give students an effective tool for the management and self-assessment of their own progress. In the Academic Year 2006/2007 eight first year courses were selected to take part in the initiative, which cover a wide range of disciplines across the College. Some courses implemented substantial changes to the existing course design, e.g. the use of VLE to provide course focused resources and activities, the development of interactive online content for independent learning, modification of assessment structures including the provision of self-assessment, use of Personal Response Systems (PRS) in lectures for immediate feedback, the redesign of tutorials with emphasis on collaborative work and peer assessment using interactive teaching labs or the use of Web2.0 technologies like wikis, to promote student-generated content.

These courses are currently being evaluated to assess students' perception on their learning experience, using questionnaires and focus group discussions. This paper will present characteristics of existing vanguard courses and first findings on the impact of this model on the implementation of the College Teaching and Learning strategy.

1301 Short Paper

Keywords: responsible learning / learner autonomy / strategy implementation

Computer-assisted formative assessment: helping students to discover what they don't know and then take control of their own learning.

Thursday
9:00

Large-scale implementation

Dr Denise Whitelock
Open University

Over the last ten years, learning and teaching in higher education have benefited from advances in social constructivist and situated learning research. In contrast assessment has remained largely transmission orientated in both conception and in practice. (See Knight & Yorke, 2003). A Computer-assisted Formative Assessment (CAFA) project at the Open University was undertaken to address this problem and to pilot a series of formative assessments which have the potential to help shape learners as independent thinkers. It drew upon a social constructivist perspective for the design of electronic formative assessments for distance learners and this paper reports the findings from this project

An agile methods approach was adopted rather than a plan driven methodology since the former supports adaptation rather than prediction. This consideration was crucial since some of the strands of the project were piloting the use of Moodle for e-assessment and stretching it as far as it would go to achieve the desired pedagogical aims. Agile methods are less risky than a plan driven approach where it can be hard to adapt to necessary changes in project emphasis as the programme of work progresses.

The CAFA project consisted of three major strands. Strand 1 consisted of two software developments that could be implemented within the Moodle Virtual Learning Environment. One of these, known as the 'Open Comment' project produced a new question type for Moodle which would support free text entry for History students for a set of History formative assessments. Strand 2 consisted of a series of evaluations of current formative assessment innovations within the Open University, while the third strand developed and tested two tools which would support collaborative e-assessment known as BuddyFinder and SIMLINK.

It might appear in the short term that the technological pull is currently overtaking the pedagogical push in the e-assessment arena but this project has shown that a collection of open source applications have been explored by the CAFA project and serve as a way forward to redress the balance. Examples include a BuddySpace, BuddyFinder and SIMLINK combination, which can assist students working remotely to collaboratively make predications before they answer a series of formative assessments tasks, which focus around the use of a simulation. 'Open comment' is another application which has been shown to work within the Moodle environment and accommodates free text entry for formative assessment and forms part of the pedagogical push from the Arts faculty to build systems that help students decode feedback, internalise it and become more 'self–regulated learners.'

One of the major findings of the CAFA project is the creativity of staff, both academic and technical, to create formative e-assessments with feedback to the student. They have also built collaborative online tasks that empower students to become more reflective learners. The approach adopted here sits well within a constructivist paradigm which has often been less well served in the past through formal summative assessment which is not an integral part of the knowledge construction process.

1327 Short Paper

keywords: electronic assessment / formative / feedback / reflection / open-source

Accommodating multiple learning styles and abilities in a large-scale online learning resource

Thursday
9:00

Large-scale implementation

Dr Liz Falconer
Mr Manuel Frutos-Perez
University of the West of England, Bristol

This paper discusses and evaluates the technological and pedagogical implications of designing large-scale, online learning resources that can be offered to accommodate a variety of learning styles and abilities. The theory of online learning design and issues of cognitive ability are discussed, together with the concomitant issues of learning impairment and preferred learning styles. Multiple methods are used to evaluate the first version of such a learning resource (The Research Observatory) and then to research and design version 2. Version 2 is discussed in detail, focussing on the flexibility and robustness of the design. In the presentation we will demonstrate the resource and discuss the technical structure and its ability to deliver the pedagogic requirements arising from the research. The limitations of the study are discussed and then recommendations are made for possible future research.

1072 Research Paper

keywords: learning contexts / learning impairment / metaphor / IT systems design

A European virtual campus: from prototype to implementation

Thursday
9:00

Learning and internationalism

Dr Marc Dupuis
Universiteit Leiden

The e-LERU project, aiming at setting up a virtual campus, was finished early this year with the launch of the prototype of a portal offering a first set of online courses and other educational materials. During two years eight research intensive European universities, all of which are members of the League of European Research Universities (LERU), worked together in order to contribute to the realisation of the Bologna and Lisbon goals for European education. The present paper will address various issues and experiences that arose during the project.

First, we hope to demonstrate the added value of the new, jointly built online campus. In particular the paper will focus on the adoption of a peer-reviewing system and local accreditation. The former is used to enhance or explicitly confirm the high quality of the content made available through the portal. The latter is also required for a student to receive ECTS credits on successfully completing a course offered by, or originating form, another university. Second, we will address the gap between the set of highly strategic ambitions laid out in the Bologna declaration and later documents on the one hand and the operational aims for the individual teacher on the other hand. We will discuss the challenge we are facing when we attempt to connect both worlds. Third, we will look into some of the difficulties that unavoidably arise in a context of international (European) collaboration. As can be expected, differences in culture, methodology and social communication not only cannot be ignored; they have to be managed properly by all players in the field. We will share with our audience some of the lessons learnt. Fourth, we shall look ahead and provide a picture of a possible future for the new virtual campus in terms of functionality, extendibility and sustainability. Internationalism is a number one strategic goal for most higher education institutions. In retrospect, can we agree that the e-LERU project, which was supported by the e-learning programme of the European Commission, was the right initiative as regards Bologna and Lisbon? Also, we will discuss how we can best warrant the continuation of a joint European virtual campus after the project has finished and funding has dried up.

Over a period of two years eight European universities succeeded in delivering a prototype of a portal intended as the visible core of a high quality European virtual campus. The way towards a fully implemented operational campus serving large numbers of students is going to be an inevitably long one. Finally, therefore, we will address the question as to how realistic such a campus may be considered.

1239 Short Paper

keywords: virtual learning / Bologna process / distance learning / research based education / peer-reviewed courses

European unified framework for accessible lifelong learning

Thursday
9:00

Learning and internationalism

Martyn Cooper
Dr Christopher Douce
Andy Heath
Wendy Porch
Open University

This presentation introduces the European Unified Framework for Accessible Lifelong Learning project (EU4ALL). This project seeks to establish a Service Oriented Architecture (SOA) for delivery of accessible e-learning that meets the needs of all learners, including those with disabilities. The project differs from but compliments and supports product design-oriented approaches to accessibility such as the Web Accessibility Initiative's Web Content Accessibility Guidelines (WCAG). It provides an architecture for the delivery of content and services that are adapted for and matched to the functional requirements of the individual learner.

The project will demonstrate implementations based on several international standards with the Virtual Learning Environment (VLE) systems Moodle and dotLearn and also show how typical learning process specifications such as IMS Learning Design may be used to deliver accessible e-learning. Other candidate technical standards include ISO Individualized Adaptability and Accessibility for Learning Education and Training (the internationalization of the IMS AccessForAll specifications) and W3C's Composite Capabilities/Preference Profiles (CC/PP).

The working methodology of EU4ALL begins with the development of community specified use cases from focus groups and interviews with educational professionals and students. These are augmented by a study of learning support and psychological support services across Europe. The use cases are being used to inform the system design and architecture and its integration with each learning platform. The project's work includes work within the standards communities relevant to e-learning. Large-scale evaluations will be conducted and will be carried out over the final year of the project in two leading European distance learning universities to validate the approach, demonstrate the architecture's benefit for future implementations and inform the e-learning standards.

In pursuing its aims the project will provide support for learners, tutors, universities, vendors and many other stakeholders and show how accessibility can be delivered within and across architectures, organizations, systems and technologies, including static and mobile devices. The presentation will present the issues, principles and report on progress of the project since its start in October 2006.

1295 Short Paper

keywords: VLE / learning technology standards / accessibility / service-oriented architecture / evaluation

A benchmarking-aware learning and teaching enhancement strategy for the Arab Open University

Thursday
9:00

Learning and internationalism

Professor Paul Bacsich
Arab Open University

Although the majority of higher education institutions are required to have a learning and teaching strategy and there is a literature surrounding such strategies, there is very little guidance on how to develop such a strategy, and even less guidance in recent years oriented to doing this in an e-learning situation. In particular the higher education Academy Benchmarking Exercise has had a large impact on benchmarking and some impact on change (via Pathfinder) but as yet no visible impact on learning and teaching strategy formulation.

This paper gives a case study of how to develop such a strategy. A particular feature is that it is for a non-UK university yet one that uses UK content and UK-derived pedagogy and is subject to UK QAA quality guidelines. The strategy was developed for a large reaccredidation/revalidation event so is not a theoretical exercise. The role of e-learning imbues the document but it is not just an e-learning strategy.

The method for developing the strategy uses a modified version of the MIT90s analytic approach to analyse the problem and structure the document. There are cross-checks of coverage against both a well-known scheme for benchmarking e-learning and the HEFCE Measures of Success. There is a strong focus on existing self-assessment documents and processes and in particular on a comprehensive analysis of external examiner reports. In line with the latest thinking it reconceptualises Key Performance Indicators in terms of broader benchmarkable statements (i.e. more susceptible to comparison with other institutions).

The paper should be of interest to those charged with developing e-learning-imbued learning, teaching and assessment strategies in UK and UK-influenced HEIs in the next few years, especially to those interested in doing this in a way more aligned to ongoing institutional processes and less to leveraging on ad-hoc interventions. The international aspects should be of note as such issues now affect the majority of UK HEIs in one way or another. At a meta-level the work is best regarded as a contribution to an ongoing debate about the role of the MIT90s framework in IT-induced institutional analysis and transformation and whether modifications of the framework are needed to achieve better penetration.

There is often dogged resistance from MIT90s devotees to even small changes in the framework yet MIT90s is at a theoretical level merely one of a number of similar approaches to "transformation" and "maturity". There have been several efforts in the last few years to use modified MIT90s frameworks but they may have foundered because of being too different from core MIT90s for the familial relationship to be sustained. Minor modifications of the MIT90s framework and its use in a wider set of contexts (change, strategy formulation, etc) rather than just in benchmarking may be the way forward for the future health of MIT90s.

Scott Morton, (ed), The Corporation of the 1990s: Information Technology and Organizational Transformation, Oxford University Press, 1991.
Yetton et al., Managing the Introduction of Technology in the Delivery and Administration of Higher Education, DEETYA, 1997.

1165 Short Paper

keywords: learning and teaching strategy / MIT90s / benchmarking e-learning / Middle East / measures of success

Students aren't prepared for Web 2.0 learning, are they?

Thursday
9:00

Learning technology for the social network generation

Mr Neil Currant
Professor Peter Hartley
Mrs Ruth Whitfield
University of Bradford

This paper takes a phenomenological approach to the use of Web 2.0 tools on student learning. It reviews our experiences and evaluation of using Web 2.0 and e-portfolio tools with level one students. Psychology first-year undergraduates and undergraduates in combined studies have been using Web 2.0 tools, mainly wikis and blogs, in a variety of innovative ways as a means of supporting their learning, increasing their knowledge base and as forms of assessment.

Contrary to the hype sometimes surrounding these tools, we have found that it is unsafe to assume that students will immediately apply these technologies to their studies, regardless of their IT literacy in social situations. We run the danger of making assumptions about student readiness for this type of learning. Unless we review and revise our induction processes, we will continue to find that students are not prepared for Web 2.0 learning when they come to University.

Wikis, blogs and e-portfolios have been used to explore different ways of using Web 2.0 tools and to investigate how students use them to tell their story of learning. The student voice in their blogs and wikis has been supplemented with online questionnaires and interviews to further explore the capabilities of learners and their emotions at being content authors as well as just the recipients of content.

Our work has identified that, although many students are familiar with Web 2.0 tools in their social and informal contexts, this does not always translate into the formal environment. Various characteristics of Web 2.0 tools, such as their ongoing collaborative and reflective nature, are counter to the expectations that new students have about the learning that they will experience at university. Students often do not fully understand the nature of the new technology and have often used it in a very specific way in their informal contexts. Students are apprehensive about using these tools in a formal setting especially when they have not used them before in this way. Thus, the appropriate use of the technology depends on the students' acceptance of notions such as self-efficacy which underpin models of the 'self-regulated learner'. Unless we explicitly support such cognitive development in students, the Web tools will be under-used.

There are several key issues: student perceptions of their role; student independence and autonomy (or more often the feelings that arise from dependence and insecurities); and student self-confidence. These issues can surface in a variety of ways, e.g. in concerns about ownership of work which also relate to (possibly mixed) institutional messages on plagiarism. For example, students demonstrate a reluctance to share in a formal environment, which relates to assessment and institutional presence that is not there in the informal arena.

Our work demonstrates that new students need a very sophisticated induction into the educational assumptions and perspectives which must underpin the effective use and understanding of Web 2.0 tools.

1220 Short Paper

keywords: Web 2.0 tools for learning / wikis / blogs / e-portfolios / student perceptions

Web 2.0 and science education: beyond entertainment

Thursday
9:00

Learning technology for the social network generation

Dr AJ Cann
University of Leicester

I have investigated the problem of how to translate the success of my public blog and podcast (microbiologybytes.wordpress.com) into the design of learning objects which will be equally popular with my own students.

I have begun to investigate possible roles for audio and video podcasts as learning resources, in particular the value of the RSS subscription model for delivery of learning media
Using two cohorts consisting of ~150 first year and ~90 second year science students, I delivered additional supplementary support materials to these groups of students via an institutional VLE. The success of my public audio podcast did not translate direct to the student cohorts studied. However, short videos made available via the VLE without an RSS subscription model were much more acceptable to students.

Based on extensive data, I will discuss student's perceptions of these new media formats, and describe the outcomes of models I have tested for the use of RSS feeds for push delivery of learning materials to students, reporting on successes and failures. In both public and student cohort-specific arenas, the push delivery subscription model via RSS is a barrier to access. While a small minority of eager consumers are happy to subscribe, a participation inequality phenomenon is evident here as in other forms of online interactive media, e.g. blog comments. A large majority prefer the click and download model (pull rather than push) to access the learning objects to the subscription model. In the case of student cohorts accessing the materials via a VLE, this is a potential advantage rather than a problem, simplifying delivery of learning objects by eliminating multiple channels and the additional software necessary to access them (podcatchers, iTunes, etc).

- The runaway success of "viral" video sites such as YouTube provides a model for high levels of penetration into student populations which cannot be ignored in the design of learning materials, but considerable further research is necessary to determine both the effectiveness of these new formats and cost-benefit analysis of their production.
- Students have strong preconceived perceptions of these new formats, repeatedly commenting that they only listen to audio podcasts on computers because these are associated with "work", whereas personal mobile devices such as mp3 players and mobile phones are reserved for "entertainment". Students carve out a range of online spaces and are reluctant to let social and academic spaces overlap.
- Careful though needs to be put into the production of educational "viral" videos. Excessive informality may be less attractive to students who perceive themselves to be in an online "work" environment than a slightly more authoritative delivery. The apparent informality of the most successful "viral" videos can be deceptive – lonelygirl15, the most successful YouTube video blog, was in reality a carefully crafted product of skilful filmmakers.
- More widespread use of online video learning objects has implications in terms of staff resources and training. Traditional HE audiovisual departments are not ideally placed to produce this type of learning material.

1172 Short Paper

keywords: web2.0 / podcast / video / RSS

Losing control, or how I learned to love user generated content

Thursday
9:00

Learning technology for the social network generation

Mr David Donald
Mr Ewan MacPhee
Mr Iain Wallace
Glasgow Caledonian University

This paper reports on a digital learning project called the Spoken Word. The Spoken Word aims to 'plug in' to the expectations of 'the social networking generation'- the generation for which the Internet is a 'lifestyle accessory'. They are 'switched on' to websites such as Facebook and My Space making social and educational links on a global scale. Spoken Word is concerned to exploit the educational potential of the interests and activities of this social networking generation.

The five year, multi-million dollar project (funded by JISC, NSF and GCU) is based in the Saltire Centre at Glasgow Caledonian University. It is a partnership with two formal US partners the BBC and a widening group of UK, EU and North American associates. It has a unique 'legal deposit' agreement with the BBC that allows access to the broadcasting archives for educational use. Undergraduate students, their teachers, post graduate students and researchers can access our online repository for whatever their educational needs may be as long as they are within the parameters of our user license agreement. A central objective is to present resources in a highly flexible manner allowing users choices in relation to content, tools and pedagogy.

The social networking generation has injected new energy into the Internet and is constantly creating and recreating the 'living and breathing' Web 2.0. The imprint of Web 2.0 technologies is reflected in all of the Spoken Word tools. First is the 'front end' search and browse tool named Padova - an open source meta-linking finding aid for our 'back end' repository. Next is our lively blog that can be accessed via the website or by subscribing to RSS feeds which automatically update content searches. The project has joined the ranks of the podcasting revolution that is inextricably linked to the fresh faces of the social networking generation. Unparalleled BBC content distinguishes Spoken Word's podcasts from the crowd.

The Spoken Word has developed various technologies consonant with the ambience of Web 2.0 and social networking. These include tagging and citation systems, and audio, video and image annotation tools to harness user-generated content and contribute this back to the world of Scholarly Communication. Interoperability with external Web services is crucial e.g. we pass search queries seamlessly from our own system to Google Scholar or Wikipedia.

The Spoken Word Web site now has around 1000 registered users worldwide. The project is developing flexible content and tools capable of changing at a moment's notice, which mirrors certain trends of Web 2.0. Tag clouds are used for visualisation on our blog and the overall look of the website conveys the feeling that it is constantly alive. We actively encourage input from users to build their own collections and share with others.

Evaluation of the project is ongoing until mid 2008. Favourable and enthusiastic feedback has been received through the success stories related by users and collaborators. This audience is international. The metamorphosis of Web 2.0 is continuous: we always ask continually ask our team 'What next?'

1230 Short Paper

keywords: social networking software / Web 2.0 / audio and video / user generated content / annotation tools

Assessing the impact and potential of podcasts as pre-lectures

Thursday
9:00

Learning technology for the social network generation

Dr Simon Bates
University of Edinburgh

Podcasting in an educational context is now no longer a novelty; there has been a rapid rise in the number and variety of examples of its deployment to support learning. The path of least resistance seems to be to podcast whole lectures, but other approaches are also used. This paper describes the incorporation of podcasts as pre-lecture preparatory material for students taking a first year undergraduate course in Physics at Edinburgh. The podcasts were designed to provide advance exposure to conceptually difficult topics in mechanics, selected on the basis of a wealth of literature which details the misconceptions students bring to the study of the subject at University. We have used control groups of students to assess the effectiveness of exposure to such resources via in-lecture questions. Several days after exposure to the podcasts, we posed whole-class questions in lectures and collected and analysed data captured from personal response system handsets.
The exposure to the podcast prior to the questions has a small, yet consistent, positive influence on the proportion of students answering a series of concept questions correctly, though not statistically significantly so. We reflect on our experience and discuss the outlook for using such strategies in this context in the future.

1124 Research Paper

keywords: podcasts / electronic voting systems / undergraduate physics

Enhancing the learning experience of online learners through faculty interaction - fantasy or fact? A pilot study

Thursday
9:00

Learning technology for the social network generation

Mr Kanishka Bedi
Dr Helen Lange
Universitas 21 Global

The last decade has witnessed e-learning evolving as a major force in higher education. The role of faculty in e-learning is often debated. This paper reports the findings of a pilot study of the role of faculty interaction in a pedagogically rich e-learning environment, grounded in a constructivist model of learning.

The questions underlying the research outlined in this paper are:
- Does faculty interaction result in higher student satisfaction?
- Is faculty interaction correlated with student learning outcomes, as measured by student grades?
- Does faculty interaction lead to lower rates of student withdrawals from class?
- Whether the recommendations of Shank (2001) and Berge (1995) that tutor's contribution should be at least 10% and 25% respectively are supported?
- Whether institutional learning about online education may have improved faculty interaction and subsequent learning outcomes and satisfaction over time?

This pilot study uses data from a sample of 17 sections of subjects from the MBA program at U21Global. The subjects and sections are drawn at random over a two year period, 2005 and 2006. The sample represents approximately 10% of the sections offered by U21Global over the two years study. The sections chosen also span both quantitative and qualitative subjects in the MBA program.

Consequently, in addition to reviewing the sample as a whole, the research questions were observed across time (in 2005 and 2006), and across

qualitative management subjects versus quantitative subjects. To examine these questions, this pilot study uses simple correlations between various student outcome and satisfaction variables, against a number of measures of faculty interaction, to firstly, evaluate whether there is any likely impact, and secondly, to assess if further study is warranted. The study finds that faculty interaction in quantitative subjects may not be valued by students as highly as in qualitative subjects. Further it finds evidence that the value of faculty discussion activity, both perceived through student satisfaction, and real by way of student grades, is higher for qualitative relative to quantitative subjects.

Student withdrawals in the first few weeks of a section appear to be influenced by faculty logins, rather than interaction per se – and this is especially the case in quantitative subjects in our sample. The quantity of faculty interaction increased markedly from 2005 to 2006, and the significance of this to learner performance and satisfaction is worthy of further investigation. Finally, the study does not find any support for the propositions of either Shank (2001) or Berge (1995) that faculty interaction needs to be at least 10% and 25%, respectively. The study's findings support the notion that faculty interaction (i) adds value to learner satisfaction with the learning experience, (ii) reduces student withdrawals in the first few weeks of a section, and (iii) finally, may also add to the actual learning outcomes as measured by student grades, particularly in qualitative subjects. The results of this pilot study raise a number of questions, all of which are worthy of further investigation.

1136 Short Paper

keywords: e-learning / faculty interaction / learner satisfaction / learning outcomes

A portfolio-based approach to developing wiki and blog capabilities – from individuals to institution, one 'size' does not fit all

Thursday
9:00

Learning technology for the social network generation

Mr Roger Dence
Dr Richard Mobbs
University of Leicester

Challenges for institutional learning technology services are evident in many developments in social software, such as wikis and blogs, and pressures from a demanding, techno-literate clientele. With difficulties in forecasting the future direction, pace and impact of such trends, adopting a single system may constrain the ability to respond to evolving user needs and to subsequent developments.

At UoL, a 'deliberately emergent' approach has been adopted within the e-learning strategy, with a variety of wiki/blog initiatives now being pursued in different contexts in a portfolio approach. This has two benefits: firstly, to avoid any constraints inherent in a 'one size fits all' approach to managing evolving requirements; and second, to enhance the institutional capability to deploy wikis and blogs in a wider range of applications and academic contexts.

The approach has been informed by UoL participation in the JISC-funded, OU-led Prowe research project. Key lessons concerned the diverse nature and needs of campus-based and remote communities, as well as the role of 'soft' factors in shaping the adoption of new technologies. In parallel, an institutional Web content management system has been implemented based on the open source Plone® software, with the provision of wiki/blog tools as part of the configuration from the outset. From September 2005, initial facilities were provided for demonstration, experimental and developmental use, including wiki/blog tools to support collaborative working. Between July 2006 and February 2007, server capacity was increased twice more to cope

with growing usage and with further user features being provided. Developments to extend further the range of user features are in hand.

Early applications included:
- The creation of event and project repositories for dissemination purposes;
- Use of tools for collaborative work in small teaching and research communities;
- Use of wiki/blog features for developing courseware and collaborative student activities.

The wiki/blog (r)evolution has now been extended to other technical environments, including:
- An initial offline trial and now standard use of wiki/blog plug-ins for the UoL Blackboard VLE, allowing use by students who lack the Web authorisations for contributory use of some Plone sites;
- A Moodle-based project with built-in wiki/blog facilities, in a joint research project making use of PDAs and Pocket PCs supporting trainee teachers' school placements; and
- Standalone proprietary environments, such as the use of Blogger in a collaborative research project developing FE links and PmWiki in a course activity.

Plans for evaluation are at an early stage. Initial user needs research has formed part of the Prowe project. A first survey of Plone Web authors undertaken in May/June 2007 investigated early use and experience. Initial views suggest that users value the system's flexibility, and the ability to reconfigure and extend it as needs change and new opportunities arise. And also having a greater degree of direct control, rather than being dependent upon expert or dedicated support for everyday creation and input tasks.

This short paper will review the UoL approach in developing capacity and capability for wiki/blog deployment. It will illustrate use in different contexts and in different application areas. Early user research will be reported and further directions outlined.

1250 Short Paper

keywords: institutional capabilities / wikis and blogs / developing a portfolio / multiple pathways / addressing diverse stakeholder needs / early experience

Making seen the unseen: exteriorising pedagogy and subverting technology in learning object development for the historical disciplines

Thursday
9:00

Learning technology for the social network generation

Ms Dawn Leeder
RLO-CETL

Ms Cary MacMahon
Subject Centre for History, Classics & Archaeology

The Subject Centre for History, Classics and Archaeology (SC-HCA) is collaborating with the Centre for Excellence in Teaching and Learning in Reusable Learning Objects (RLO-CETL) on development of a Generative Learning Object (GLO) designed to encourage student engagement with and evaluation of multiple scholarly interpretations in the historical disciplines (funded by the JISC Sharing the LOAD Project). This GLO is an example of a powerful pedagogical pattern emanating from chalk-face practice with potential for use in multiple learning and interdisciplinary contexts.

In its learning design, the GLO draws upon Cognitive Flexibility Theory as applied within hypermedia environments. An 'artefact' (textual, visual or material) is presented for interpretation, by means of screens providing students with different disciplinary and sub-disciplinary perspectives presented in a variety of media. Learning is potentially non-linear, but can be scaffolded. Provision of a 'notepad' to students ensures reflective learning, and areas for community activity can be created. A simple tutor interface allows customisation according to local needs.

From the perspective of SC-HCA, the conceptual background to work on the GLO is a perceived loss of disciplinary control over teaching materials through adoption of technology-enabled teaching which has greatly concerned many academics within the historical disciplines and encouraged resistances to the embedding of such teaching strategies. These disciplinary environments are characterised by 'ill-structuredness' and competing narratives. The GLO demonstrates that this complexity and particularity can be captured and it is designed to tackle a pervasive pedagogical problem by encouraging students to explore and differentiate between methodologies and disciplinary approaches. This is therefore a subverting of technology, whereby an 'ill-structured' multiplicity of interpretations is introduced through a 'structured' learning object.

The GLO development work also presents an opportunity to further the scholarship of teaching and learning in the historical disciplines. The SC-HCA 2005/06 Scoping Survey of the use of e-resources in the historical disciplines in UK HE collected data on current usage and potential future trends. Analysis of the Survey data suggested that the provision of both subject-specific content and structuring pedagogical frameworks in a format accessible to users outside the institution of the resource creator was highly desirable. The capturing of the teaching process in electronic formats such as GLOs renders both subject-specific content and pedagogical structures accessible and adaptable by exteriorising the pedagogy, and can make a valuable contribution to the development of the scholarship of teaching and learning within and across disciplines.

This GLO therefore demonstrates to teachers in the historical disciplines that learning objects can be 'domesticated', and illustrates the creation of exemplars which can be transferred, modified and customised to suit specific local requirements. It is a concretisation of the theoretical premise that innovative learning technologies need no longer be imposed upon the historical disciplines by extra-disciplinary actors, but instead can be subverted to suit these disciplines' pedagogical requirements and to re-assert control over teaching materials.

1337 Short Paper

keywords: discipline-appropriate technology use / generative learning objects / learning design / scholarship of teaching and learning / sharing of pedagogy

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